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PT 510.01: Applied Clinical Anatomy

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PT-510 Handbook – Fall 2014

Alessander Danna dos Santos, PT PhD

8/29/2014

Welcome to PT 510 and the Anatomy Laboratory!

It is great to have you in this class and I hope you enjoy the semester!

This handbook was written to provide you with important information regarding to the organization of this class. It is very important you read it carefully and understand the dynamics of PT-510 **beforehand** so you can enjoy your time during the lectures and laboratory sessions. My main goal is to help you obtain a better general and clinical education by providing you with the most comprehensive material and the healthiest learning environment.

This handbook is organized in the following order. First, a description of the main objectives of PT-510 is described followed by a description of the two main components of this class (lecture and practical components). It is in these sections that you will find information about the nature of your lectures, dissection sessions, exams and possible quizzes. Then, descriptions of the anatomy laboratory rules of conduct as well as safety and health issues are presented. You will also find that your handbook brings a series of 20 dissection guide sheets that are intended to describe the anatomical structures you should dissect and study during your practice sessions as well as their related readings and learning aids. On the last session of this handbook you will find the proposed schedule for this.

Please read it carefully and do not hesitate contacting me if you have any questions.

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PT 510- Clinically Oriented Anatomy

Human anatomy is the term usually applied to the study of the structure of the human body by the method of dissection. Over time, technological advances have enabled scientists to study the development of individuals and the structure of tissues, cells, and cellular components. As a result, the field of anatomy has been subdivided, for convenience, into sub-disciplines. These include:

Gross Anatomy - the study of the macroscopic structure of the body, i.e., that which can be seen by the naked eye;

Histology - the study of tissues by means of a microscope;

Cytology or Cell biology - the study of the molecular organization of the cell and its sub-cellular components in a physiological, biochemical and histological context;

Neuroanatomy - the specialized study of the nervous system, both by gross anatomy and microscopically;

Embryology - the study of the prenatal development of the human organism.

In PT-510, you will study the elements of the Gross Anatomy. This is a 5 credit course with a total of 14 hours/week of instruction taught by Dr. Alex Santos with the main objectives of providing you the ability to:

- recognize clinically important details of the gross anatomy of the human muscle skeletal, pulmonary, and cardiac systems;
- communicate with other health care professionals using appropriate anatomical terminology of systems noted in the course description;
- identify on prosected material, models, skeletons, or in computer programs gross anatomical structures of the human body of systems noted in the course description;
- integrate knowledge of human anatomy with function;
- analyze the structural relationships of a region related to systems noted in the course description;
- identify and describe the segments studied in this course in relation to functions, component parts, surface anatomy, and relationship to other regions;
- identify normal human structure to enable comparison with pathological structures as related to systems noted in the course description;
- identify surface anatomy landmarks and assess need for particular palpations given selected patient problems related to systems noted in the course description;
- apply knowledge of anatomy to clinical evaluation of patients in relation to systems noted in the course description.

In order to achieve these objectives, the coursework is currently organized into a lecture component (8 hours/week) and a practical component (6 hours/week) and they are described next.

1.0 Lecture Component

Four 2hrs lectures will take place every week at Skaggs Building room number 025 (SB025) on the basement floor. These lectures are presented in powerpoint format and aided with the use of short videos of prosected human segments. Lecture contents are organized to be presented prior to their related practical dissections, however due to the presence of holidays and other observed days on our calendar, situations where a topic will be initiated in the laboratory will happen.

The contents of the lectures are organized in synchrony with similar topics discussed in other related courses that you will be studying in your first semester (e.g biomechanics) and due to the necessity of keeping this synchronization, some extra lecture meetings will be scheduled during the first half of the semester. Please look into the schedule presented at the end of this document for all dates of lectures.

It is very important to keep in mind that the amount of information to be covered in this class is large and although lectures are organized in a didactic way, they are introductory and **do not aim to provide a complete coverage of the subject**. Therefore, it is expected that you prepare by reading beforehand from our textbook the topic to be presented and, after class you revisit the topic by re-reading the chapter presented as well as your notes. **Make sure you keep yourself up-to-date with your readings** to avoid accumulation of material to be read prior to exams. You should discipline yourself to go over that day's lecture contents each evening, while the lecture is still fresh in your mind.

To facilitate retention of information presented in PT-510, it is intentional that all lectures, readings, and lecture exams are heavily based on information included on the textbook.

2.0 Practical Component

Since anatomy is a practical based subject, it is in the anatomy laboratory where most of the learning takes place. With this principle in mind, it is my intention to provide you with plenty of time to study and learn from the specimens available in our facility. Each student will be required to spend **at least 6 scheduled hours** a week performing group work on the dissection and study of the cadaveric specimens. In order to accommodate all the students, **two 6hrs sessions** of dissections are held every week.

SESSION 1 – Tuesdays 1-6(7) pm SB-050
SESSION 2 – Thursdays 1-6(7) pm SB-050

On the first day of lecture, all enrolled students will be organized in 8 groups of four or five students each. Four groups will attend the week's first session while the remaining four groups will attend the second session.

Currently, the anatomy laboratory has 4 intact cadaveric specimens to be studied and each of the groups participating in a given session will be assigned to a specific cadaveric specimen.

During your scheduled sessions, Dr Santos will be present as well as the teaching assistants assigned for the semester (if any). Dr Santos and the teaching assistants will be glad to provide all necessary assistance to you and your group however, you will be expected to:

- come to the Anatomy laboratory on time;
- work in your group to perform the assignments listed on your guide of dissections;
- follow the guidelines for each session (described on item 8.0 *Anatomy laboratory: Student guidelines for practical sessions*);
- follow the rules of safety and conduct;
- **perform their own dissections (all group members shall be enrolled in performing them)**. Do not expect or let Dr Santos or the TA's to do it for you;
- if not actually dissecting, keep focused on the subject by reading the dissector for the person dissecting or finding the appropriate illustrations in the atlas. Don't get detached from the subject (Be involved!).

To complement and enhance your practical study time, all enrolled students will be provided with access to the laboratory for study on non-scheduled sessions (please see section 6.0 '*Anatomy laboratory: Location, Access, and Laboratory hours*' of this handbook).

3.0 Required Items

It is required that all students have the following items on their first day of class:

3.1 For lecture sessions:

Textbook: Moore KL, AF Dalley and A.M.R. Agur. Clinically Oriented Anatomy, 7th Ed., Williams and Wilkins, Baltimore, MD, 2013.

3.2 For practical session:

Textbook: Tank, P. Grant's Dissector 14th ed. ISBN: 978-0-7817-7431-4 (This item is now provided by the laboratory)

General material: **Long, white, clean lab coat (scrubs are also acceptable);**

Eye protection

Nitrile or latex gloves are provided by the students along the ENTIRE semester.

4.0 Course assessment

Students are expected to prepare, and be present, for lecture and laboratory examinations on the scheduled dates, and at the scheduled time. In addition, make-up examinations are reserved for those students who are prevented from taking an examination on the originally scheduled date due to:

- a documented illness;
- documentation of participation in a University-sanctioned activity.

Documentation of participation in a University-sanctioned activity requires written communication from the University of Montana Office of Academic Advising. Student athletes must provide this documentation to Dr. Santos within the first week of classes.

In the case of a laboratory examination, you must notify Dr. Alex Santos at alex.santos@umontana.edu before the examination time in order to communicate the nature of the problem you feel precludes you from taking a test. Absolutely no make-up examinations will be scheduled if the student has not communicated with Dr. Alex Santos prior to the originally scheduled assessment. Also, please note that simply informing Dr. Alex Santos that you will be absent does not constitute an excused absence.

Under no circumstances will any additional assignments/projects be provided. For all students, the final grade for the course will be determined solely by performance on the evaluation methods mentioned along this handbook's section.

4.1 Lecture examination: A total of 4 lecture exams will be performed during the semester (see course schedule). These lecture exams are not cumulative and are heavily, but not exclusively, based on the textbook used in this class. Exams will be applied and they are similarly structured and may contain both multiple choices and open written questions. All exams will be worth 100 points and only Dr Santos will grade them.

In case of the presence of open questions, usually one week is the necessary time for grading exams. During the process of grading, students will be evaluated not only on their ability to provide a correct answer to the question but also on the use of correct anatomic terminology, textual coherence, and clarity of their answers. **In case of misspellings, the answer will only be considered as partial or incorrect.** The use of drawings as part of the answer is allowed but only those drawings with clear explanations about its contents will be considered.

Once exams are graded, the grades are posted on the anatomy laboratory door (inside the laboratory). To ensure the privacy of each student no names are listed. Exams are kept on UMPT's front office for students' review who will be allowed to review their tests anytime along the semester however, it is important to emphasize that any disputes regarding test items, or examination grades, must be communicated to Dr.Santos within five (5) class days after the examination/quiz has been graded. Under no circumstances will examination grades be reconsidered after this time. If a dispute should arise regarding the answer to a lecture examination item, Dr. Santo's judgment will be final.

4.2 Laboratory evaluation: Different from the lecture examinations, practical evaluations are performed during practical sessions along the entire semester (no specific dates are scheduled) where each group will be evaluated accordingly to the following criteria:

4.2.1 Completion of dissection assignments by the time stipulated in lectures:

0 points will be assigned for incomplete dissections

6 points will be assigned for complete dissections. (To be considered completed, the assignment performed resulted into dissection of all structures described on item 8.0)

4.2.2 Quality of dissections:

0 points will be assigned for dissections where main structures of interest are not exposed or difficult to visualize, or destroyed due to poor care of the segment during the procedures of dissection.

3 points will be assigned for dissections where main structures of interest are exposed but difficult to visualize due to poor care of the segment during the procedures of dissection.

8 points will be assigned for dissections where all structures of interest exposed and the segment has been handled properly during the procedures of dissection.

4.2.3 Quiz:

Students will be asked to present their assignments at any given session and during the presentation they will be asked a total of 4 questions. All students forming a group will be asked at least one question. Each correctly answered question will be worth 4 points and technical language is expected from all students during their examination. These questions may be related to one or more of the following topics:

- pointing a certain structure related to the assignment
- description of name or functions of a certain structure related to the assignment
- relation of a certain structure to its surroundings
- clinical relation of a certain structure related to the assignment

Similarly, to the lecture exams, grades from laboratory evaluations will be posted after the end of each study block and they will be found on the anatomy laboratory door. Evaluation sheets will be kept on Dr. Santos' office for students' review. Students will be allowed to review their evaluation sheets anytime along the semester however, it is important to emphasize that any disputes regarding to evaluation grades, will be resolved at the moment no later than a week after the postings. No grades will be reconsidered after this time. If a dispute should arise regarding the answer to a laboratory evaluation item, Dr. Santos' judgment will be final.

4.3 Laboratory general behavior and organization: After each laboratory examination, Dr Santos will add 1 point to the laboratory examination of those groups who have show followed the rules of conduct, safety, and guidelines for practical sessions of the Anatomy laboratory. On the other hand, disrespect to any these rules of conduct will be reprehended verbally and brought to the Academic Supervisor of the School of Physical Therapy. Students who are not in compliance with safety rules will not be allowed to participate in activities held in SB050.

4.4 Final Grade: Final grade will be based on the weighed total percentage of points obtained along the semester as follow:

3 Laboratory examinations (30 pts each)	= 90 points (23%)
3 Lecture examinations (100 points each)	= 300 points (77%)
Total course points	= 390 points (100%)

90 - 100% / 390 points	= A
87 - 89% / 390 points	= B+
83 - 86% / 390 points	= B
80 - 82% / 390 points	= B-
77 - 79% / 390 points	= C+
73 - 76% / 390 points	= C
70 - 72% / 390 points	= C-
67 - 69% / 390 points	= D+
63 - 66% / 390 points	= D
60 - 62% / 390 points	= D-
< 60% / 390 points	= F

4.5 Student Conduct: All students must demonstrate academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. As stated in The University of Montana Undergraduate Course Catalog 2010 - 11: *"The Student Conduct Code, embodying the ideals of academic honesty, integrity, human rights and responsible citizenship, governs all student conduct at The University of Montana-Missoula. Student enrollment presupposes a commitment to the principles and policies embodied in this Code."*

All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://life.umt.edu/vpsa/student_conduct.php.

5.0 Disabilities

It is also Dr Santos commitment to create an environment of equal access for students with and without disabilities. In an attempt to be fair to all students, we will adhere to the Americans with Disabilities Act and Section 504 of the Rehabilitation Act by only making accommodations based upon guidance received from the staff of the University of Montana Disability Services for Students (DSS) (<http://life.umt.edu/dss>). Before these accommodations can be suggested and granted, *"DSS requires comprehensive documentation of a disability and its impact on learning"*.

Please read the information at http://www.umt.edu/dss/current/expect_access/ldver.html to more fully understand how a disability may be verified.

6.0 Anatomy laboratory: Location, Access, and Laboratory hours:

The anatomy laboratory is located on Skaggs Building room number 050 (SB050) on the basement floor and in order to promote safety for all students, care for all the material and specimens housed by the laboratory, the following policies are enforced at all times:

- Access to the laboratory is restricted to students enrolled into the PT program of the University of Montana, its faculty, and authorized personnel **only**,
- Students are not allowed to grant access to the laboratory to any visitor (relatives, roommates, spouses, etc ...),
- Non-PT students authorizations have to be approved by the coordinator of the Anatomy laboratory and the presence of any visitor without previous consent from the coordinator **is prohibited at any time**,
- Access to the laboratory is granted only via the use your Grizz Card. Student authorizations are managed by the School of Physical Therapy via its Administrative Associate for Student, Faculty and Alumni Affairs (SB 140 or (406) 243-4027). If your card does not work on your first day of class, please contact this office,
- PT students are authorized to have access to the laboratory in the evenings, weekends and times when classes are not schedule for study of the cadaveric specimens. However, this access depends on access to the Skaggs Building. Please check building schedule in advance if you are planning to come after hours ,
- For your own safety, study sessions in the evenings, weekends and times when classes are not schedule are only allowed for groups of **2 or more** students.
- **Never come to the laboratory alone on any circumstance !**

7.0 Anatomy laboratory: Rules of Conduct:

In order to promote a healthy learning environment for all students and faculty, the conduct of students in the anatomy laboratory is heavily governed based on the Anatomy Act and the following policies are enforced:

- students should be suitably dressed, wear clean white long lab and/or scrubs. Staff will refuse admission to students who are not suitably dressed, who are, for instance, wearing shorts, skirts, sandals, and flip-flops;
- smoking, food, and/or drinks are not allowed in the Anatomy laboratory;
- use of cell phones or audible pagers is not allowed in the DR or during ANY timetabled class activity;
- the use of any recording device (picture and/or sound) is **prohibited at all times** unless authorized by faculty of the PT school and with previous knowledge of the coordinator of the Anatomy laboratory;
- treat all cadaveric specimens respectfully. No jokes, foul language or any type unsuitable commentary towards the cadaveric specimens will be tolerated by faculty or staff;
- no cadaveric tissue of any type shall be removed from the Anatomy laboratory;
- no apparatus, books, tools, models, or specimens shall be removed from the Anatomy laboratory
- when studying visual aids (bones, X-rays, models, prosections), do not use a pen or pencil as a pointer. Pens and pencils leave marks on these aids that are impossible to remove. Instead, use a wooden pointer (which we will provide) that won't leave marks;
- treat all your classmates and faculty respectfully.

8.0 Anatomy laboratory: Student guidelines for practical sessions**8.1 Before your practical session:**

- prepare yourself for the practical session. Read carefully the dissector and the procedures to be performed on that day,
- leave bulky articles (bags, parcels, outer clothing, etc.) in your lockers ,
- once in the lab, put your coat and gloves on,
- during group work sessions, it is required that all members of the groups perform. Make sure what is the group plan before you start,
- put together the dissection tools you will use on a tray,
- prepare your scalpel carefully, ask help for your first time,
- prepare a second tray for receiving dissected tissues,
- prepare your dissector and/or books to be used during the dissection,
- open the bay and only expose the cadaveric surfaces to be studied.

8.2 During your practical session:

- position your cadaver on position for the dissection,
- clean the area to be dissected with tissue paper,
- perform the procedures described on your dissector's guide,
- proceed with care and respect with your cadaveric specimens,
- keep your scalpel and any other tool **inside the tray** when they are not in use,
- all dissected tissues and organs that will not be used for further studies should be placed in the tissue container located underneath the dissection table (**only human tissue**, be careful to do not drop any type of blade wrappings, tools, paper tissue, plastic items, or gloves inside the bins).
- each bay has its own container and tissues from one specimen shall not be mixed with tissues from another (cadaver do not mix tissue from different cadaveric specimen),
- spray the wetting solution at least once every hour on the exposed area,
- if you have to leave the laboratory briefly during a session, please remove your gloves, coat before you leave. In addition, wash your hands on your way out and once you are back. Use a new pair of gloves for continuing your work.

8.3 At the end of the practical session:

- put atlases and dissectors on their appropriate shelves,
- put all remaining tissue and/or organs (even the smaller pieces) on the designated tissue container located underneath dissection tables,
- remaining fluid collected on the dissecting trays shall be dispensed on the main sink located in the south wall counter,
- **clean, wash and dry** all dissection tools and trays and put them back on their respective appropriate storage place,
- cover the cadaveric specimens' hands and feet with their designated gloves and socks,
- cover the cadaveric specimens,
- close and roll the dissecting table into their appropriate place,
- dispose used gloves on the designated trash can,
- dispose used blades on red container placed over the counter (**only blades**, be careful to do not drop blade wrappings, tools, paper tissue, plastic items, or gloves within the container),
- close all models you have used and put them back on their designated shelf,
- please hang your coat or place it inside one of the counter's drawers,
- before leaving, make sure everything is in order and the laboratory is clean and organized,
- turn off all lights if you are the last one to leave.

9.0 Anatomy laboratory: Healthy and Safety – Information and Emergency procedures

- leave bulky articles (bags, parcels, outer clothing, etc.) in lockers or other designated space. This helps keep rooms and passageways unobstructed for emergency exit.
- note the location of emergency exits, which are labeled with green and white signs. These exits are in addition to the main entrances to practical laboratories. The doors open outward by pushing on the bars, and lead to exit corridors or the outside.
- on hearing the emergency alarm, occupants must leave immediately by the nearest route unless there is an obvious reason for not doing so. Do not stop to get books or any equipment. Staff members will assist with evacuation procedures.
- avoid unnecessary contact with strong solutions. Bodies accepted for dissection are, as far as can be ascertained, free from harmful human pathogens. All human tissue is embalmed with a fluid that contains alcohol, formalin, and phenol. All are recognized antiseptics which denature proteins, so there is little or no danger from infection in the Dissecting Room.
- although formalin and phenol levels are within acceptable levels, excess inhalation of these chemicals will result in nausea, headache, short of breath and dizziness. In order to avoid excess inhalation of these chemicals, take a short 5 minutes break outside the lab every hour, inhale fresh air and hydrate yourself. However, if you feel the symptoms described above, please contact your study partner and/or your faculty in charge immediately. Put the tools you are using back on the tray and your study partner and or faculty member will help you to reach the lab exit. Fresh air will help you to make you feel better. If symptoms do not resolve, you will be sent to the medical facility in Campus.

- it is inadvisable to wear soft contact lenses while dissecting.
- if you get embalming fluid in your eyes, immediately ask for the eye rinse apparatus to thoroughly bathe your eyes. Eye rinse apparatus is located close to the exit door
- wearing latex or nitrile gloves is **mandatory** for all students and staff. Rarely some people have, or develop, an allergy to these gloves and thus get contact dermatitis on their hands. Persons who experience problems that they think might be related to procedure gloves are advised to contact their faculty member in charge of your class.
- clean laboratory coats and eye protection are required in the Anatomy laboratory at all times. These coats should be fastened to provide protection to clothing.
- if you have long hair, please keep it tied,
- if you cut yourself, ask your faculty in charge to assess the injury. Cuts should be washed in running water and encouraged to bleed freely. You will be sent to the medical facility in Campus for further evaluations.
- prior to leaving the Dissecting room at any time, remove your gloves and wash your hands. Adequate washing facilities are available in the Dissecting Room.
- first aid equipment are available **ON THE SOUTH WALL OVER THE EYE WASHING STATION.**
- **IN CASE OF ANY HARMFULL SITUATION DEVELOPS DURING AFTER HOURS STUDY (CUTS, SYMPTOMS OF EXCESSIVE INHALATION OF GASES), PLEASE COMMUNICATE IMMEDIATELY WITH YOUR PARTNER WHO WILL CALL 911. HE WILL RESPONSIBLE TO EXPLAIN THE SITUATION FOR THE CALLER ATTENDANT AND MAKE SURE TO GIVE YOUR EXACT LOCATION AND FOLLOW ATTENDANT'S INSTRUCTIONS:**

THE UNIVERSITY OF MONTANA
SKAGGS BUILDING, 32 CAMPUS DRIVE
BASEMENT FLOOR, ROOM 050

- all safety occurrences must be informed to the coordinator of the Anatomy laboratory after first aid procedures have been applied.
- **All telephone numbers for contact with the laboratory coordinator and medical facility in Campus are displayed on the white board of the Anatomy Lab:**

10.0 Teaching Staff and office hours:

Dr. Alex Santos, PT, PhD

Assistant Professor & Anatomy laboratory Director

Office: 106 Skaggs Building, 32 Campus Drive

Office phone: (406) 243-2530

alex.santos@umontana.edu

No office hours are formally established. Dr Santos will be available Monday-Friday 9am-5pm, except in time when classes are held. Please check his schedule on his office door.

Dr. Sambit Mohapatra, PT, PhD

Assistant Professor

Office: 110 Skaggs Building, 32 Campus Drive

Office phone: (406) 243-2429

sambit.mohapatra@mso.umt.edu

Office hours: by appointment

11.0 Activities guide:

Along the next pages you will find all the activities to be performed during our semester. All these activities have the main objectives of providing you the necessary training on the recognition of the surface anatomy of human body segment as well as the opportunity to study of the main muscles, innervations and vasculature of the human body through dissection of cadaveric specimens.

Surface anatomy: Before you proceed to any dissection you should study the surface anatomy of your specimen through the use of inspection and palpation. Keep in mind that some structures are easily palpated and others are not. The study of surface anatomy will help you to develop skills on identifying structures underlying the body's surface therefore enhancing your clinical skills. On the description of each lab activity you will find a list of structures to be studied. Palpable structures are described followed by the notation '(p)'. Structures that are not palpable (example; sciatic nerve) do not have any notation and their study will follow by relating their positioning to the skin surface.

Dissection: your experience with dissection will help you to understand the relation of the components of each segment studied as well as their function within the muscle-skeletal system. Keep in mind that all structures described should be dissected and studied thoroughly. In case of the study of a muscle, make sure to proceed with dissection of its entire structure (tendons, belly, and fascias), recall its attachments, functions, and innervation. In case you are dissecting a vessel or a nerve, make sure to know the area supplied by these structures as well as its main ramifications.

Keep in mind that the guide for each session is complemented by your textbook and your dissector's book. A list of readings is provided for each dissection topic and you are expected to **read in advance**. It is also important that you read the blue boxes of the textbook in order to relate the laboratory study to the most common healthy problems you will study on correlated disciplines.

Our study will include the main activities:

- ❖ STUDY OF LOWER LIMBS BONES
- ❖ ANTERIOR AND MEDIAL COMPARTMENTS OF THE THIGH
- ❖ GLUTEAL AND POSTERIOR COMPARTMENT OF THE THIGH
- ❖ POPLITEAL REGION AND POSTERIOR COMPARTMENT OF THE LEG
- ❖ ANTERIOR AND LATERAL COMPARTMENTS OF THE LEG
- ❖ DORSUM OF THE FOOT
- ❖ SOLE OF THE FOOT
- ❖ JOINTS OF LOWER LIMB
- ❖ STUDY OF UPPER LIMBS BONES
- ❖ PECTORAL AND AXILLARY REGIONS
- ❖ SCAPULAR REGION
- ❖ ANTERIOR COMPARTMENT OF ARM AND CUBITAL FOSSA
- ❖ POSTERIOR COMPARTMENT OF ARM
- ❖ ANTERIOR COMPARTMENT OF FOREARM
- ❖ POSTERIOR COMPARTMENT OF FOREARM
- ❖ PALM OF THE HAND AND WRIST
- ❖ DORSUM OF THE HAND AND WRIST
- ❖ JOINTS OF THE UPPER LIMB
- ❖ STUDY OF VERTEBRAL COLUMN BONES AND THORACIC CAGE
- ❖ THE BACK REGION
- ❖ ABDOMEN
- ❖ THORAX

STUDY OF LOWER LIMBS BONES

Preparation: Textbook readings: 508-532
 Dissector readings: 1-4
 Video aid:

1. Please recognize the following bones, their *in vivo* positioning, and their relation to each other

- | | | |
|------------|-------------|--------------------------------------|
| - Hip bone | -Talus | - Metatarsals (1st-5 th) |
| - Femur | - Calcaneus | - Phalanges |
| - Patella | - Navicular | |
| - Tibia | - Cuboid | |
| - Fibula | - Cuneiform | |

2. For the Hip Bone, please recognize the following features and landmarks:

- Ilium, Ischium and Pubis
- Iliac body
- Iliac crest
- Anterior Superior Iliac Spine
- Posterior Superior Iliac Spine
- External lip of the Iliac crest
- Guteal Lines
- Auricular Surface
- Body of the Ischium
- Ischiopubic Ramus
- Ischial Tuberosity
- Greater and Lesser Sciatic notches
- Obturator Foramen
- Pubic body
- Pubic Crest
- Symphysial Surface of the Pubis
- Acetabulum
- Acetabulum rim, fossa, and notch

3. For the Femur, please recognize the following feature and landmarks:

- Head of the Femur and fovea
- Neck of the Femur
- Angle of inclination and angle of torsion of the femur
- Lesser and Greater trochanters
- Intertrochanteric line
- Intertrochanteric Crest
- Femoral Lateral Condyle and Epicondyles
- Femoral Medial Condyle and Epicondyle
- Patellar Surface
- Adductor Tubercle
- Intercondylar Fossa
- Popliteal Surface

4. For the Tibia, please recognize the following features and landmarks:

- Tibial Plateau
- Medial Condyle
- Lateral Condyle
- Proximal Articular Surfaces
- Intercondilar eminence and tubercle

- Gerdy Tubercle
 - Tibial Tuberosity
 - Fibular articular facet on the Tibia
 - Anterior Border of the tibial shaft
 - Soleal Line
 - Medial Malleolus
 - Distal articular surfaces
 - Fibular notch
- 5. For the Fibula, please recognize the following features and landmarks:**
- Head
 - Shaft
 - Lateral Malleolus
 - Distal Articular Surface
- 6. For the talus, please recognize the following features and landmarks:**
- Trochlea
 - Head of the Talus
 - Articular Surfaces with Calcaneus and Navicular
- 7. For the Calcaneus, please recognize the following features and landmarks**
- Calcaneal Tuberosity
 - Sustentaculum Tali
 - Articular Surfaces with Talus and Cuboid
- 8. Other:**
- Longitudinal and transverse arches of the foot
 - Tuberosities of 1st and 5th metatarsal

ANTERIOR AND MEDIAL COMPARTMENTS OF THE THIGH

Preparation:	Textbook readings:	532-562
	Dissector readings:	148-159
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- Iliac crest (p) (p) = palpable
- Anterior superior iliac spine (p)
- Inguinal Ligament (p)
- Pubic tubercle (p)
- Sartorius
- Femoral triangle
- Quadriceps Femoris (Rectus femoris, Vastus Medialis, Vastus Lateralis, and Intermedius)
- Quadriceps Femoris Tendon
- Patella (p)
- Medial and lateral femoral epicondyles (p)
- Medial and lateral tibial condyles

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- great saphenous vein
- fascia lata
- saphenous opening
- femoral nerve, artery, and vein
- deep artery of the thigh
- lateral and medial circumflex femoral arteries
- adductor canal
- sartorius muscle
- all portions of quadriceps muscle
- quadriceps femoris tendon
- patellar ligament
- tensor fascia lata muscle
- iliotibial tract (IT band)
- gracilis muscle
- adductor longus muscle
- adductor brevis muscle
- perforating arteries (if possible)
- obturator nerve (anterior and posterior branches)
- adductor magnus muscle (adductor and extensor portion)
- adductor hiatus
- obturator externus muscle

GLUTEAL AND POSTERIOR COMPARTMENT OF THE THIGH

Preparation:	Textbook readings:	562-583
	Dissector readings:	159-165
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- posterior superior iliac spine (p) (p) = palpable
- iliac crest (p)
- posterior surface of sacrum (p)
- coccyx
- ischial tuberosity (p)
- sciatic nerve
- greater trochanter (p)
- gluteus maximus muscle (p)
- tensor fascia lata muscle (p)
- iliotibial tract (IT band) (p)
- biceps femoris muscle body and tendons (p)
- semitendinosus muscle and tendons (p)
- semimembranosus muscle and tendons (p)
- head of fibula (p)
- anterolateral tibial tubercle (p)
- pes anserinus (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

GLUTEAL REGION:

- gluteus maximus muscle
- fascia lata
- inferior gluteal artery, vein, and nerve
- gluteus medius muscle
- piriformis muscle
- superior gluteal artery, vein, and nerve
- sciatic nerve (tibial and common fibular division)
- posterior cutaneous nerve of the thigh
- obturator internus muscle
- superior and inferior gemelli muscles
- quadratus femoris muscle
- iliotibial tract (IT band)
- tensor fascia lata muscle
- ischial tuberosity
- sacrospinous ligament
- greater trochanter

POSTERIOR COMPARTMENT OF THE THIGH:

- fascia lata
- ischial tuberosity
- biceps femoris muscle (short and long heads)
- semimembranosus muscle
- semitendinosus muscle
- adductor magnus muscle (hamstrings portion)
- adductor muscles

- sciatic nerve (tibial and common fibular division)
- head of fibula
- pes anserinus

POPLITEAL REGION AND POSTERIOR COMPARTMENT OF THE LEG

Preparation:	Textbook readings:	584-587 ; 596-609
	Dissector readings:	165-172
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- biceps femoris muscle body and tendons (p)
- semitendinosus muscle and tendons (p)
- semimembranosus muscle and tendons (p)
- popliteal fossa
- head of fibula (p)
- gastrocnemius medialis and lateralis (p)
- pes anserinus (p)
- soleus
- calcaneal tendon (p)
- calcaneal tuberosity (p)
- medial and lateral malleoli (p)
- retromalleolar structures (fibularis longus and brevis; tibialis posterior, flexor digitorum longus, tibial nerve, flexor hallucis longus, tibial nerve, and posterior tibial artery) (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- biceps femoris muscle (short and long heads)
- head of fibula
- semimembranosus muscle
- semitendinosus muscle
- pes anserinus
- gastrocnemius medialis and lateralis
- flexor retinaculum
- sciatic nerve division
- tibial nerve
- common fibular nerve
- popliteal artery and vein
- superior lateral genicular artery
- superior medial genicular artery
- inferior lateral genicular artery
- inferior medial genicular artery
- soleus
- calcaneal tendon
- plantaris
- tibial nerve
- posterior tibial artery and vein
- anterior tibial artery
- fibular artery
- popliteus muscle
- tibialis posterior muscle
- flexor digitorum longus muscle
- medial and lateral malleoli
- retromalleolar structures (fibularis longus and brevis; tibialis posterior, flexor digitorum longus, tibial nerve, flexor hallucis longus, tibial nerve, and posterior tibial artery).

ANTERIOR AND LATERAL COMPARTMENTS OF THE LEG

Preparation:	Textbook readings:	587-596
	Dissector readings:	173-174 (until step 16)
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

LATERAL COMPARTMENT:

- gastrocnemius lateralis (p)
- biceps femoris distal tendon (p)
- head of fibula (p)
- fibularis longus muscle (p)
- fibularis brevis muscle (p)
- soleus
- calcaneal tendon (p)
- lateral malleoli (p)
- retromalleolar structures (fibularis longus and brevis) (p)

ANTERIOR COMPARTMENT:

- patellar tendon (p)
- tibial tuberosity (p)
- tibiofemoral interarticular joint line (p)
- lateral and medial condyles of tibia (p)
- anterior border of tibia (p)
- medial and lateral malleoli (p)
- tendon of tibialis anterior (p)
- tendon of extensor hallucis longus (p)
- tendon of extensor digitorum longus (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- fibular head
- crural fascia
- fibularis longus muscle
- fibularis brevis muscle
- medial and lateral malleolus
- retromalleolar structures (fibularis longus and brevis; tibialis posterior, flexor digitorum longus, tibial nerve, flexor hallucis longus, tibial nerve, and posterior tibial artery).
- medial and lateral tibial epicondyle
- tibial tuberosity
- anterior border of the tibia
- superior and inferior extensor retinacula
- tibialis anterior muscle
- extensor hallucis longus muscle
- anterior tibial artery
- deep fibular nerve
- extensor digitorum longus muscle
- fibularis tertius muscle
- dorsal pedis artery

DORSUM OF THE FOOT

Preparation:	Textbook readings:	609-626
	Dissector readings:	174 (from step 16) - 175
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- inferior extensor retinaculum
- tendon of tibialis anterior muscle (p)
- tendon of extensor hallucis longus muscle (p)
- tendons of extensor digitorum lumbus (p)
- anterior tibial artery
- dorsalis pedis artery
- extensor hallucis brevis
- extensor digitorum brevis
- dorsal venous arch
- talus, navicular cuboid, cuneiforms 1-2-3, metatarsals, phalanges (projections)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- inferior extensor retinaculum
- tendon of tibialis anterior muscle
- tendon of extensor hallucis longus muscle
- tendons of extensor digitorum lumbus
- anterior tibial artery
- dorsalis pedis artery
- extensor digitorum brevis muscle
- extensor hallucis brevis muscle
- arcuate artery
- dorsal metatarsal arteries
- deep fibular nerve
- dorsal digital branches of deep fibular nerve
- extensor expansion of digits of the foot

SOLE OF THE FOOT

Preparation:	Textbook readings:	609-626
	Dissector readings:	175-180
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- calcaneal tuberosity (p)
- heads of 1st and 5th metatarsals (p)
- transversal, and longitudinal arches of the foot (p)
- plantar aponeurosis

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- subcutaneous fat pads
- tuberosity of calcaneus
- plantar aponeurosis
- digital slips of plantar aponeurosis
- lateral plantar fascia
- medial plantar fascia
- superficial transverse metatarsal ligament
- flexor digitorum brevis muscles
- abductor hallucis muscle
- abductor digiti minimi muscle
- common digital nerves
- proper plantar digital nerves
- medial and lateral plantar arteries
- medial and lateral plantar nerves
- fibrous digital sheaths
- synovial digital sheaths
- flexor hallucis longus tendon
- flexor digitorum longus tendons
- quadrates plantaris muscle
- 3rd and 4th layers of structures are optional

JOINTS OF LOWER LIMB

Preparation:	Textbook readings:	626-669
	Dissector readings:	180-185
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

KNEE:

- quadriceps tendon
- patella's superior, medial, and lateral border (p)
- move patella medially and palpate its inferior medial articular surface. Also palpate anterior articular surface of lateral condyle of femur
- tibiofemoral interarticular joint line (p)
- patellar ligament (p)
- tibial tuberosity (p)
- medial and lateral epicondyles of femur (p)
- medial and lateral condyles of tibia (p)
- tibial and fibular collateral ligaments

ANKLE:

- medial and lateral malleoli (p)
- retromalleolar structures (fibularis longus and brevis; tibialis posterior, flexor digitorum longus, tibial nerve, flexor hallucis longus, tibial nerve, and posterior tibial artery). (p)
- talus
- sustentaculum tali
- medial and lateral ligaments of the ankle

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

KNEE:

- quadriceps tendon
- knee joint fibrous capsule
- tibial collateral ligament
- fibular collateral ligament
- oblique popliteal ligament (posterior)
- patellar retinaculum
- patellar ligament
- femoropatellar joint surfaces (inferior, superior, and middle patellar facets; patellar surface of femur)
- knee synovial membrane of joint capsule
- infrapatellar synovial fold
- lateral and medial alar folds
- infrapatellar fat pad
- articular cartilage
- suprapatellar bursa
- lateral meniscus
- medial meniscus
- coronary ligament
- anterior cruciate ligament
- posterior cruciate ligament

ANKLE:

- distal anterior portion of tibia
- medial and lateral malleoli
- talus and navicular bones

- deltoid ligament and its portions (posterior tibiotalar lig, tibiocalcaneal lig, tibionavicular lig, anterior tibiotalar lig)
- lateral ligament of ankle and its portions (posterior talofibular lig, calcaneofibular lig, anterior talofibular lig)

HIP: (optional)

- greater trochanter
- lesser trochanter
- iliopsoas tendon
- joint capsule
- neck of femur
- intertrochanteric line
- acetabulum labrum and rim
- femoral head
- fovea of femoral head
- articular surface of femur and acetabulum
- acetabulum fossa
- lunate surface of acetabulum

PECTORAL AND AXILLARY REGIONS

Preparation:	Textbook readings:	688-699; 707-731
	Dissector readings:	19-21; 24-32
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- jugular notch (p)
- sternocleidomastoid muscle (p)
- clavicle (sternal, middle, acromial portions) (p)
- infra-clavicular fossa (p)
- pectoralis major muscle (clavicular and sternocostal heads) (p)
- deltoid anterior muscle (anterior, middle, posterior portions) (p)
- deltopectoral groove (p)
- anterior axillary fold (p)
- posterior axillary fold (p)
- axillary fossa (p)
- head of humerus
- proximal brachial artery
- brachiocephalic trunk,
- subclavian artery
- brachial plexus
- digitations of serratus anterior muscle
- sternum (manubrium, body, sternal angle, xiphoid process) (p)
- costal margins (left, right) (p)
- costal cartilages (p)
- ribs 1-12 (p)
- subcostal angle (p)
- coracoid process of scapula (p)
- lesser tubercle of humerus (p)
- greater tubercle of humerus (p)
- acromion of scapula (p)
- intertubercular sulcus (p)
- proximal tendon long head of biceps (p)
- BREAST:
 - opening of lactiferous ducts (use magnifying glass for inspection)
 - nipple
 - areola
 - proceed with palpation of entire breast

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- In case of a female cadaveric specimen:
 - proceed with instructions given on pages 24 and 25 of your dissector
 - dissect and study the following structures of the breast
 - nipple
 - areola
 - opening of lactiferous ducts
 - lactiferous sinus
 - lactiferous ducts
 - suspensory ligaments
 - mammary gland lobes
 - retromammary space

- after breast have been studied, it shall be removed and you now can follow the instructions given for a male cadaveric specimen starting on page 20 of your dissector
- pectoral fascia
- deltopectoral groove
- deltoid muscle (anterior, middle, and posterior portions)
- sternoclavicular joint
- clavicle (sternal, middle, acromial portions)
- sternum (manubrium, body, angle of sternum, xiphoid process)
- pectoralis major muscle (clavicular and sternocostal heads)
- pectoralis major (inferior border)
- serratus anterior muscle
- clavipectoral fascia
- pectoralis minor muscle
- subclavius muscle
- medial pectoral nerve
- lateral pectoral nerve
- latissimus dorsi muscle
- teres major muscle
- subscapularis muscle
- MAIN ARTERIES OF AXILARY REGION:
 - at this point you should remove the middle section of clavicle by sawing it with cast saw
 - axillary sheath
 - subclavian artery and vein
 - axillary artery and vein
 - brachial artery and vein
 - thoracoacromial artery
 - superior thoracic artery
 - thoracoacromial artery
 - lateral thoracic artery
 - subscapular artery
 - posterior circumflex humeral artery
 - anterior circumflex humeral artery
- BRACHIAL PLEXUS:
 - superior, middle, and inferior trunks
 - anterior and posterior divisions of each trunk
 - lateral, medial and posterior cords
 - musculocutaneous nerve
 - median nerve
 - ulnar nerve
 - axillary nerve
 - radial nerve

SCAPULAR REGION

Preparation:	Textbook readings:	700-712
	Dissector readings:	5-11; 22-24
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- occipital prominence (p)
- nuchal ligament
- spinous processes of vertebrae C3-L5 (p)
- trapezius muscle (descending, middle, ascending portions) (p)
- deltoid muscle (anterior, middle, and posterior portions) (p)
- triangle of auscultation (p)
- latissimus dorsi muscle (superior and lateral border, proximal and distal attachments) (p)
- rhomboid major muscle
- rhomboid minor muscle
- teres major muscle (p)
- supraspinatus muscle (p)
- infraspinatus muscle (p)
- posterior axillary fold (p)
- spine of scapula (p)
- acromion of scapula (p)
- inferior angle of scapula (p)
- medial border of scapula (p)
- superior and lateral border of scapula
- greater tubercle of humerus (p)
- lesser tubercle of humerus (p)

DISSECTION: Start with instructions given on pages 8-10 of Grant's dissector and only then follow instructions described on pages 22-24. The following structures shall be recognized, dissected and studied:

- occipital prominence
- nuchal ligament
- spinous processes of vertebrae C3-L5
- trapezius muscle (descending, middle, and ascending portions)
- accessory nerve
- latissimus dorsi muscle
- thoracolumbar fascia
- triangle of auscultation
- lumbar triangle
- rhomboid minor muscle
- rhomboid major muscle
- levator scapulae muscle
- spine of scapula
- acromion of scapula
- medial border of scapula
- inferior angle of scapula
- deltoid muscle (posterior, middle, and anterior portions)
- axillary nerve
- teres minor muscle
- teres major muscle
- quadrangular space
- long head of triceps muscle
- infra spinatus muscle
- joint capsule of the shoulder joint

- greater tubercle of humerus
- lesser tubercle of humerus

ANTERIOR COMPARTMENT OF ARM AND CUBITAL FOSSA

Preparation: Textbook readings: 731-744
Dissector readings: 32-35;
Video aid: <http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm>

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- deltoid muscle (anterior, middle, and posterior portions) (p)
- acromion of scapula (p)
- coracoid process of scapula (p)
- head of the humerus (p)
- greater and lesser tubercles of humerus (p)
- intertubercular groove (p)
- proximal tendon of long head of biceps brachii(p)
- biceps brachii muscle (p)
- brachialis muscle
- cephalic vein of arm
- basilic vein of arm
- cubital fossa (p)
- median cubital vein
- medial and lateral epicondyle of humerus (p)
- median nerve
- musculocutaneous nerve
- ulnar nerve
- radial nerve
- brachial artery and veins
- biceps brachii distal tendon (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- basilic vein of arm
- cephalic vein of arm
- brachial fascia
- lateral and medial intermuscular septa
- biceps brachii muscle (long and short head bellies and tendons)
- bicipital aponeurosis
- intertubercular groove
- tranverse humeral ligament
- musculocutaneous nerve
- median nerve
- ulnar nerve
- brachial artery and veins
- deep artery of the arm
- superior and inferior ulnar collateral arteries
- cubital fossa floor (brachialis and supinator muscles)
- radial tuberosity

POSTERIOR COMPARTMENT OF ARM

Preparation: Textbook readings: 731-744
Dissector readings: 35-36
Video aid: <http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm>

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- deltoid muscle (anterior, middle, and posterior portions)
- acromion of scapula (p)
- head of the humerus (p)
- greater and lesser tubercles of humerus (p)
- tricipital brachii muscle (p)
- olecranon (p)
- axillary nerve (p)
- radial nerve
- anconeus muscle
- medial and lateral epicondyle of humerus (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- brachial fascia
- lateral and medial intermuscular septa
- triceps brachii muscle (long, lateral, and medial heads)
- radial nerve
- deep artery of the arm
- brachioradialis muscle
- anconeus muscle
- olecranon

ANTERIOR COMPARTMENT OF FOREARM

Preparation:	Textbook readings:	744-750; 757-771
	Dissector readings:	36-40
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- medial and lateral epicondyles of humerus (p)
- cubital fossa (p)
- brachial artery and veins (p)
- cephalic vein of forearm
- basilic vein of forearm
- median cubital vein
- radial head
- radial tuberosity
- radial shaft (p)
- distal radius and styloid process (p)
- proximal ulna
- ulnar shaft
- distal ulna and styloid process (p)
- flexor retinaculum (p)
- radial artery and veins
- ulnar artery and veins (p)
- pronator teres muscle
- flexor carpi radialis muscle
- palmaris longus muscle
- flexor carpi ulnaris muscle
- flexor digitorum superficialis muscle
- flexor digitorum profundus muscle
- pronator quadrates muscle
- flexor pollicis longus muscle
- radial nerve
- ulnar nerve
- median nerve

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- perforating veins of the forearm
- cephalic vein of forearm
- basilic vein of forearm
- antebrachial fascia
- flexor retinaculum
- pronator teres muscle
- flexor carpi radialis muscle
- palmaris longus muscle
- flexor carpi ulnaris muscle
- flexor digitorum superficialis muscle
- flexor digitorum profundus muscle
- pronator quadrates muscle
- flexor pollicis longus muscle
- abductor pollicis longus muscle
- brachialis and supinator muscles
- radial artery and veins

- ulnar artery and veins
- median nerve
- ulnar nerve
- brachioradialis muscle

POSTERIOR COMPARTMENT OF FOREARM

Preparation:	Textbook readings:	750-771
	Dissector readings:	47-49
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- medial and lateral epicondyle of humerus (p)
- olecranon (p)
- head of radius (p)
- posterior border of ulna (p)
- head and styloid process of ulna (p)
- styloid process of radius (p)
- cephalic vein of forearm
- basilic vein of forearm
- extensor retinaculum
- anatomical snuff box (p)
- extensor carpi ulnaris muscle
- extensor digitorum muscle
- extensor carpi radialis longus and brevis muscles
- abductor pollicis brevis muscle
- extensor pollicis brevis and longus muscles

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- cephalic vein of forearm
- basilic vein of forearm
- antebrachial fascia
- extensor retinaculum
- brachioradialis muscle
- lateral epicondyle of humerus
- extensor carpi ulnaris muscle
- extensor digitorum muscle
- extensor carpi radialis longus and brevis muscles
- abductor pollicis brevis muscle
- extensor pollicis brevis and longus muscles
- extensor digiti minimi muscle
- extensor indicis muscle
- supinator muscle
- anatomical snuff box
- radial artery
- synovial sheaths of tendons crossing extensor retinaculum

PALM OF THE HAND AND WRIST

Preparation:	Textbook readings:	771-793
	Dissector readings:	40-46
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- distal radius and styloid process (p)
- head of ulna and styloid process (p)
- flexor retinaculum (p)
- tubercle of scaphoid (p)
- pisiform
- tubercle of trapezium (p)
- hook of hamate
- median nerve
- flexor digitorum superficialis tendons
- flexor digitorum profundus tendons
- scaphoid bone (p)
- lunate bone
- triquetrum bone
- hamate bone
- capitate bone
- trapezoid bone
- trapezium bone
- metacarpals (p)
- phalanges (p)
- thenar eminence (p)
- hypothenar eminence (p)
- palmar aponeurosis

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- superficial venous palmar arch
- palmar aponeurosis
- longitudinal fibers of palmar aponeurosis
- transverse fibers of palmar aponeurosis
- thenar fascia
- hypothenar fascia
- flexor retinaculum
- palmaris longus tendon
- fibrous digital sheaths
- superficial branch of ulnar artery
- superficial palmar branch of radial artery
- superficial palmar arch
- common palmar digital arteries
- proper palmar arteries
- ulnar nerve
- common flexor sheath
- flexor pollicis longus synovial sheath
- CARPAL TUNNEL CONTENTS:
 - median nerve
 - flexor digitorum superficialis tendons
 - flexor digitorum profundus tendons

- flexor pollicis longus muscle tendon
- anular and cruciform portions of digital fibrous sheaths
- digital synovial sheath
- FDS and FDP tendons within fibrous sheaths
- tendinous chiasm
- lumbrical muscles
- abductor pollicis brevis
- recurrent branch of median nerve
- flexor pollicis brevis
- opponens pollicis
- abductor digiti minimi
- flexor digiti minimi brevis
- opponens digiti minimi
- deep branch of ulnar nerve
- deep palmar branch of ulnar artery
- deep palmar artery
- radial artery
- adductor pollicis muscle (oblique and transverse heads)
- palmar interosseus muscles

DORSUM OF THE HAND AND WRIST

Preparation: Textbook readings: 771-793
Dissector readings: 47-48
Video aid: <http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm>

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- distal radius and styloid process (p)
- head of ulna and styloid process (p)
- extensor retinaculum (p)
- scaphoid bone (p)
- lunate bone
- triquetrum bone
- hamate bone
- capitate bone
- trapezoid bone
- trapezium bone
- metacarpals (p)
- phalanges (p)
- dorsal venous network
- tendons of extensor digitorum muscle
- dorsal interosseous muscles 1-4 (p)
- tendon of abductor pollicis longus muscle (p)
- tendon of extensor pollicis longus muscle (p)
- anatomical snuff box (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- distal radius and styloid process
- head of ulna and styloid process
- extensor retinaculum
- dorsal venous network
- superficial venous palmar arch
- dorsal fascia of the hand
- dorsal carpal arch
- dorsal carpal branch of ulnar artery
- dorsal metacarpal arteries
- dorsal digital arteries
- extensor carpi ulnaris tendon
- extensor carpi radialis brevis tendon
- extensor carpi radialis longus tendon
- digital dorsal extensor expansion
- scaphoid bone
- metacarpals
- phalanges
- tendons of extensor digitorum muscle
- dorsal interosseous muscles 1-4
- ANATOMICAL SNUFF BOX:
 - radial artery
 - tendon of abductor pollicis longus muscle
 - tendon of extensor pollicis longus muscle
- tendon of extensor pollicis brevis muscle

JOINTS OF THE UPPER LIMB

Preparation:	Textbook readings:	793-819
	Dissector readings:	49-53
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

STERNOCLAVICULAR JOINT:

- clavicular notch of manubrium
- anterior sternoclavicular ligament
- costoclavicular ligament
- articular disc

ACROMIOCLAVICULAR JOINT:

- acromion of scapula
- coracoids process of scapula
- acromial portion of clavicle
- coracoclavicular ligament (conoid and trapezoid portions)

GLENOHUMERAL JOINT:

- joint capsule
- anatomical neck of humerus
- surgical neck of humerus
- subacromial space
- greater and lesser tubercle of humerus
- coracoacromial ligament
- subacromial bursa
- subscapular bursa
- tendon of long head of biceps brachii muscle
- tranverse humeral ligament
- tendon of supraspinatus muscle
- tendon of infraspinatus muscle
- tendon of subscapularis muscle
- tendon of teres minor muscle
- glenoid cavity
- head of humerus
- articular surface of glenoid
- articular surface of humeral head

ELBOW AND PROXIMAL RADIOULNAR JOINTS:

- joint capsule
- head of radius
- coronoid process of ulna
- trochlea and capitulum of humerus
- articular surfaces of radius, ulna, and humerus
- ulnar collateral ligament (anterior, posterior, and oblique bands)
- radial collateral ligament
- anular ligament
- radial, ulnar, and median nerves
- radial tuberosity

INTERMEDIATE AND DISTAL RADIOULNAR JOINTS:

- interosseus membrane
- radio carpal ligament

- articular disc

METACARPOPHALANGEAL AND INTERPHALANGEAL JOINTS:

- joint capsule
- palmar ligament (plate)
- collateral ligament

THE BACK REGION

Preparation:	Textbook readings:	440-482 (bones and joints); 482-507
	Dissector readings:	5-18
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- occipital prominence (p)
- mastoid process (p)
- nuchal ligament
- spinous processes of vertebrae C3-L5 (p)
- sacrum posterior surface (p)
- posterior superior iliac spine (p)
- iliac crest (p)
- sacroiliac joint
- thoracolumbar fascia (p)
- trapezius muscle (descending, middle, ascending portions) (p)
- deltoid muscle (anterior, middle, and posterior portions) (p)
- triangle of auscultation (p)
- latissimus dorsi muscle (superior and lateral border, proximal and distal attachments) (p)
- rhomboid major muscle
- rhomboid minor muscle
- teres major muscle (p)
- supraspinatus muscle (p)
- infraspinatus muscle (p)
- posterior axillary fold (p)
- spine of scapula (p)
- acromion of scapula (p)
- inferior angle of scapula (p)
- medial border of scapula (p)
- superior and lateral border of scapula
- greater tubercle of humerus (p)
- lesser tubercle of humerus (p)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

- spinous processes of vertebrae C3-L5
- trapezius muscle (descending, middle, and ascending portions)
- accessory nerve
- latissimus dorsi muscle
- thoracolumbar fascia
- triangle of auscultation
- lumbar triangle
- rhomboid minor muscle
- rhomboid major muscle
- levator scapulae muscle
- spine of scapula
- acromion of scapula
- medial border of scapula
- inferior angle of scapula
- deltoid muscle (posterior, middle, and anterior portions)
- axillary nerve
- serratus posterior superior muscle
- serratus posterior inferior muscle
- splenius capitis muscle
- splenius cervicis muscle

- thoracolumbar fascia
- tendinous common origin of erector spinae muscles
- spinalis muscle
- longissimus muscle
- iliocostalis muscle
- transversospinal group of muscles
- semispinalis capitis muscle
- VERTEBRAL CANAL, SPINAL CORD, AND MENINGES:
 - You will now perform a laminectomy to expose the vertebral canal and its contents
 - supraspinous ligament
 - interspinous ligament
 - ligamenta flava
 - dural sac
 - duramater
 - arachnoid mater
 - subarachnoid space
 - spinal cord
 - lumbar enlargement
 - conus medularis
 - cauda equine
 - filum terminale
 - denticulate ligaments
 - dorsal and ventral roots of spinal nerves
 - posterior paired spinal arteries
 - anterior spinal artery
 - gray matter of spinal cord
 - white matter of spinal cord
 - spinal nerve
 - dorsal ramus of spinal nerve
 - spinal ganglion

ABDOMEN

Preparation:	Textbook readings:	181-202 ; 217-228; 306-325
	Dissector readings:	78-91; 103; 109-112
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- sternum (manubrium, body, sterna angle, xiphoid process) (p)
- costal margins (left, right) (p)
- costal cartilages (p)
- ribs 1-12 (p)
- subcostal angle (p)
- intercostal spaces (p)
- diaphragm muscle
- pubic symphysis (p)
- pubic crest (p)
- iliac crest (p)
- four abdominal quadrants (make sure you correlate the main abdominal structures within each quadrant)
- nine abdominal regions (make sure you correlate the main abdominal structures within each region)

DISSECTION: Proceed with instructions given on Grant's Dissector and the following structures shall be recognized, dissected and studied:

ANTEROLATERAL ABDOMINAL WALL:

- external oblique muscle
- internal oblique muscle
- transverses oblique muscle
- rectus abdominis sheath
- tendinous intersection of rectus abdominis muscle
- linea alba
- rectus abdominis muscle
- parietal peritoneum
- greater omentum

ABDOMINAL CAVITY:

- proceed by studying the placement of the organs and their relationship
- remove one organ at a time
- inspect and grossly dissect each of the organs
- full dissection of abdominal organs is optional
- liver
- gallbladder
- stomach
- spleen
- pancreas
- small intestine (duodenum, jejunum, and ileum portions)
- large intestine (cecum, appendix, ascending colon, transverse colon, descending colon, sigmoid colon, rectum)
- mesenteries
- superior and inferior mesenteric arteries
- RETROPERITONEAL SPACE:
 - kidneys
 - suprarenal glands
 - ureters
 - urinary bladder (pelvic cavity)
 - abdominal aorta
 - inferior vena cava

- common iliac arteries and veins
- internal iliac arteries and veins
- external iliac arteries and veins

POSTERIOR ABDOMINAL WALL:

- psoas major muscle
- psoas minor muscle
- quadrates lumborum
- LUMBAR PLEXUS:
 - subcostal nerve
 - genitofemoral nerve
 - iliohypogastric and ilioinguinal nerves
 - lateral cutaneous nerve of the thigh
 - femoral nerve
 - obturator nerve
 - lumbosacral trunk

DIAPHRAGM MUSCLE:

- central tendon
- sternal portion
- costal portion
- lumbar portion
- vena cava foramen
- esophageal hiatus
- aortic hiatus

THORAX

Preparation:	Textbook readings:	71-160
	Dissector readings:	54-72
	Video aid:	http://www.lawrencegaltman.com/Naugbio/CADAVER/GALLERY.htm

SURFACE ANATOMY: Please recognize the following landmarks and structure projections on the cadaver specimens

- jugular notch (p)
- sternocleidomastoid muscle (p)
- clavicle (sternal, middle, acromial portions) (p)
- infra-clavicular fossa (p)
- pectoralis major muscle (clavicular and sternocostal heads) (p)
- sternum (manubrium, body, sternal angle, xiphoid process) (p)
- costal margins (left, right) (p)
- costal cartilages (p)
- ribs 1-12 (p)
- intercostal spaces (p)
- subcostal angle (p)
- diaphragm muscle
- heart
- lungs
- trachea
- carina
- costodiaphragmatic recesses (left, right)
- arch of the aorta

DISSECTION: If you did not dissect the pectoral muscles of the upper limb, please start with that dissection. Otherwise, proceed with instructions given on Grant's Dissector for the dissection of the thorax and the following structures shall be recognized, dissected and studied:

- clavicle (sternal, middle, acromial portions)
- infra-clavicular fossa
- sternum (manubrium, body, sternal angle, xiphoid process)
- costal margins (left, right)
- costal cartilages
- ribs 1-12
- intercostal spaces
- external intercostal muscles
- internal intercostal muscles
- innermost intercostal muscles
- intercostal artery, nerve, and vein
- parietal pleura
- diaphragm muscle
- costodiaphragmatic recesses
- left and right pleural cavities
- mediastinum
- pericardium

LUNGS IN SITU:

- visceral pleura
- base and apex
- superior, inferior, and middle lobes
- lingula
- inferior and anterior borders
- oblique and horizontal fissures

- roots of the lungs

EXTRACTED LUNGS:

- visceral pleura
- base and apex
- superior, inferior, and middle lobes
- lingula
- inferior, anterior, posterior borders
- oblique and horizontal fissures
- costal, mediastinal, and diaphragmatic surfaces
- impressions (cardiac, aortic, esophagic)
- cardiac notch
- roots of the lungs and hilum
- pulmonary ligament
- superior and inferior pulmonary veins
- pulmonary artery
- bronchial artery(ies)
- main (primary) bronchus

HEART IN SITU:

- pericardium
- phrenic nerves
- superior and inferior vena cava
- ascending and arch of the aorta
- pulmonary trunk
- pulmonary veins
- left vagus nerve
- apex and base of the heart
- borders (inferior, superior, left, right)
- surfaces (anterior, inferior, right pulmonary, left pulmonary)
- coronary sulcus
- anterior interventricular (IV) groove
- right atrium
- right auricle
- left auricle
- right ventricle
- left ventricle
- coronary arteries (left and right)
- marginal branch of right coronary
- anterior interventricular branch of left coronary
- circumflex branch of left coronary
- marginal branch of left coronary
- great cardiac vein
- small cardiac vein
- anterior cardiac vein

EXTRACTED HEART:

- superior and inferior vena cava
- ascending and arch of the aorta
- pulmonary trunk
- pulmonary veins
- apex and base of the heart
- borders (inferior, superior, left, right)
- surfaces (anterior, inferior, right pulmonary, left pulmonary)
- coronary sulcus
- anterior interventricular (IV) groove
- posterior interventricular groove
- crux of the heart

- interatrial sulcus
- right atrium
- right auricle
- left atrium
- left auricle
- right ventricle
- left ventricle
- coronary arteries (left and right)
- marginal branch of right coronary
- anterior interventricular branch of left coronary
- circumflex branch of left coronary
- marginal branch of left coronary
- posterior interventricular branch of right coronary
- great cardiac vein
- small cardiac vein
- anterior cardiac vein
- left marginal vein
- left posterior ventricular vein
- middle cardiac vein
- coronary sinus
- atrial veins

INTERNAL STRUCTURES OF THE HEART:

- myocardium walls of all 4 chambers
- semilunar valves (aortic and pulmonary)
- pectinate muscles of both atria
- fossa ovalis
- interatrial septum
- coronary sinus opening
- atrioventricular valves (tricuspid and mitral)
- interventricular septum
- papillary muscles of both ventricles
- tendinous cords (chordae tendinae) of both ventricles
- trabecula carnae of both ventricles
- septomarginal trabeculae
- inflow and outflow walls of both ventricles

TRUNK AND LOWER EXTREMITY

Dermatomes redrawn from
Keegan and Garrett Anat Rec 102: 409, 437, 1948
Cutaneous Distribution of peripheral nerves
redrawn from Gray's *Anatomy of the Human Body*, 28th ed

MUSCLE INNERVATION CHART – NECK, DIAPHRAGM, AND UPPER LIMBS

NECK, DIAPHRAGM, AND UPPER EXTREMITY

Name	Date
MUSCLE STRENGTH GRADE	
MUSCLE	
Cervical nerves	
Brachial Plexus	
Musculo-spiral	
Radial	
Median	
Ulnar	
PERIPHERAL NERVES	
KEY → D. = Dorsal Prim. Ramus V. = Vent. Prim. Ramus P.R. = Plexus Root S.T. = Superior Trunk P. = Posterior Cord L. = Lateral Cord M. = Medial Cord	
SPINAL SEGMENT	
C1 C2 C3 C4 C5 C6 C7 C8 T1	
HEAD & NECK EXTENSORS	
INFRAHYOID MUSCLES	
RECTUS CAP ANT. & LAT.	
LONGUS CAPITIS	
LONGUS COLLI	
LEVATOR SCAPULAE	
SCALENI (A. M. P.)	
STERNOCLEIDOMASTOID	
TRAPEZIUS (U. M. L.)	
DIAPHRAGM	
SERRATUS ANTERIOR	
RHOMBOIDS MAJ & MIN	
SUBCLAVIUS	
SUPRASPINATUS	
INFRASPINATUS	
SUBSCAPULARIS	
LATISSIMUS DORSI	
TERES MAJOR	
PECTORALIS MAJ (UPPER)	
PECTORALIS MAJ (LOWER)	
PECTORALIS MINOR	
TERES MINOR	
DELTOID	
CORACOBrachIALIS	
BICEPS	
BRACHIALIS	
TRICEPS	
ANCONEUR	
BRACHIALIS (SMALL PART)	
BRACHIORADIALIS	
EXT CARPI RAD L	
EXT CARPI RAD B	
SUPINATOR	
EXT DIGITORUM	
EXT DIGITI MINIMI	
EXT CARPI ULNARIS	
ABD POLLICIS LONGUS	
EXT POLLICIS BREVIS	
EXT POLLICIS LONGUS	
EXT INDICIS	
PRONATOR TERES	
FLEX CARPI RADIALIS	
PALMARIS LONGUS	
FLEX DIGIT SUPERFICIALIS	
FLEX DIGIT PROF I & II	
FLEX POLLICIS LONGUS	
PRONATOR QUADRATUS	
ABD POLLICIS BREVIS	
OPPONENS POLLICIS	
FLEX POLL BREV (SUP. H)	
LUMBRICALES I & II	
FLEX CARPI ULNARIS	
FLEX DIGIT. PROF. III & IV	
PALMARIS BREVIS	
ABD DIGITI MINIMI	
OPPONENS DIGITI MINIMI	
FLEX DIGITI MINIMI	
PALMAR INTEROSSEI	
DORSAL INTEROSSEI	
LUMBRICALES III & IV	
ADDUCTOR POLLICIS	
FLEX POLL. BREV. (DEEP H.)	

Supraclavicular

Axillary

Dorsal antebrachial cutan.

Lat. antebrachial cutan.

Medial antebrachial cutan.

Ulnar

Median

Radial

Inter-cubital, and post. brach. cutan.

Supra-clavicular

Axillary

Dorsal antebrach. cutan.

Lat. antebrach. cutan.

Medial antebrach. cutan.

Ulnar

Radial

Median

Dermatomes redrawn from Keegan and Garrett Anal Rec. 102, 499, 437, 1948
Cutaneous Distribution of peripheral nerves redrawn from Gray's Anatomy of the Human Body, 26th ed

12.0 Proposed Schedule:

	DATE			TIME	CLASSROOM	LECTURE	LAB SESSION	LAB GROUP	TOPIC	READINGS
L O W E R E X T R E M I T Y	AUG	25	M	10AM-12PM	SB025	X			Lower extremity - overview and osteology	508-536 / 659-669
	AUG	26	T	10AM-12PM	SB025	X			Anterior and medial compartments of the Thigh / Hip Joint	545-562 / 626-634
	AUG	26	T	1-6 PM	SB050		X	1		
	AUG	27	W	10AM-12PM	SB025	X			Gluteal and Posterior Thigh regions	562-583
	AUG	28	TH	1-6 PM	SB050		X	2		
	AUG	29	FR	10AM-12PM	SB025	X			Popliteal fossa and Knee joint	584-587 / 634-645
	SEPT	1	M	10AM-12PM	SB025	X			Anterior and Lateral compartments of the Leg	587-596
	SEPT	2	T	10AM-12PM	SB025	X			Posterior Compartment of the Leg and ankle joint	596-608 / 645-650
	SEPT	2	T	1-6 PM	SB050		X	1		
	SEPT	3	W	10AM-12PM	SB025	X			Posterior Compartment of the Leg (cont)	596-608
	SEPT	4	TH	1-6 PM	SB050		X	2		
	SEPT	5	FR	10AM-12PM	SB025	X			Foot	609-626 / 650-658
U P P E R E X T R E M I T Y	SEPT	8	M	10AM-12PM	SB025	X			Upper extremity - overview and osteology	671-688
	SEPT	9	T	10AM-12PM	SB025	X			Joints of the upper extremity	793-819
	SEPT	9	T	1-6 PM	SB050		X	1		
	SEPT	10	W	10AM-12PM	SB025	X			Exam #1 - Lower extremity	
	SEPT	11	TH	1-6 PM	SB050		X	2		
	SEPT	12	FR	10AM-12PM	SB025	X			Pectoral, Scapular, and Deltoid regions	697-712
	SEPT	15	M	10AM-12PM	SB025	X			Axillary fossa	713-731
	SEPT	16	T	10AM-12PM	SB025	X			Arm/Forearm	731-771
	SEPT	16	T	1-6 PM	SB050		X	1		
	SEPT	17	W	10AM-12PM	SB025	X			Arm/Forearm (cont)	731-771 (cont)
	SEPT	18	TH	1-6 PM	SB050		X	2		
	SEPT	19	FR	10AM-12PM	SB025	X			Hand	771-793
	SEPT	22	M	10AM-12PM	SB025	X			Hand (cont)	771-793 (cont)
T R U N K	SEPT	23	T	10AM-12PM	SB025	X			TMJ	916-928
	SEPT	23	T	1-6 PM	SB050		X	1		
	SEPT	24	W	10AM-12PM	SB025	X			Vertebral column - overview and osteology	439-496
	SEPT	25	TH	1-6 PM	SB050		X	2		
	SEPT	26	FR	10AM-12PM	SB025	X			Vertebral column - liggs and vasculature	439-496 (cont)
	SEPT	29	M	10AM-12PM	SB025	X			Vertebral column - muscles	439-496 (cont)
	SEPT	30	T	10AM-12PM	SB025	X			Exam #2 Upper extremity	
	SEPT	30	T	1-6 PM	SB050		X	1		
	OCT	1	W	10AM-12PM	SB025	X			Spinal canal contents - spinal cord, nerves, and plexuses	496-507
	OCT	2	TH	1-6 PM	SB050		X	2		
	OCT	3	FR	10AM-12PM	SB025	X			Abdominal walls	181-202
	OCT	6	M	10AM-12PM	SB025	X			Thorax and respiratory muscles	71-97
	OCT	7	T	10AM-12PM	SB025	X			Airways and Lungs	106-127
	OCT	7	T	1-6 PM	SB050		X	1		
	OCT	8	W	10AM-12PM	SB025	X			Heart	127-160
LAST WEEK	OCT	9	TH	1-6 PM	SB050		X	2		
	OCT	10	FR	10AM-12PM	SB025	X			Pelvis and Pelvic Floor	338-349
	OCT	13	M	10AM-12PM	SB050		X		lab check	
	OCT	13	M	1-3 PM	SB114	X			EXAM #3 - Trunk	

13.0 Glossary of anatomical terms (by Prof M.A. Arnold):Reference: [http://www.med.unsw.edu.au/somsweb.nsf/resources/histology02/\\$file/AnatomyGlossary2004_V2.pdf](http://www.med.unsw.edu.au/somsweb.nsf/resources/histology02/$file/AnatomyGlossary2004_V2.pdf)

Notes: Each entry is related to its Latin (L.) or Greek (G.) derivation. Adjectives and participles functioning as adjectives are noted as adjectives. Vertebrae and cranial nerves are designated by Roman numbers.

Abbreviations used:

a./aa. artery, arteries
adj. adjective
adv. adverb
cf. compare
e.g. for example
G. Greek
L. Latin
lig./ligg. ligament(s)
m./mm. muscle(s)
n./nn. nerve(s)
n. noun
pl. plural
v./vv. vein(s)
v. verb
vx. vessels

- * abdomen: Latin abdomen = the belly, the part of the trunk between thorax and the perineum, adjective - abdominal.
- * abducent: Latin ab = from, and ducens = led, hence, moving from, or effecting separation.
- * abduction: Latin ab = from, and ductum = led, hence, movement from; verb - abduct.
- * aberrant: Latin ab = from, and errare = to wander, hence, deviating from normal.
- * accessory: adjective, Latin accessum = added, hence, supplementary.
- * accommodation: Latin ad = to, and modus = measure, hence, adaptation of the optical power (focussing) of the eye for shorter distances.
- * acetabulum: Latin acetum = vinegar (cf. acetic), and abulum = small receptacle, hence, a vinegar cup, hence, the socket for the head of the femur, adjective - acetabular.
- * acoustic: adjective, Greek akoustikos, related to hearing.
- * acromion: Greek akros = summit (cf. Acropolis) and omos = shoulder, hence, the tip of the shoulder.
- * adduction: Latin ad = to, and ductum = led, hence, movement towards; verb - adduct.
- * adenoid: Greek aden = a gland, eidos = shape or form.
- * adhesion: Latin ad = to, and haesus = stuck, hence, stuck to, e.g., interthalamic adhesion - variable and functionally insignificant.
- * adipose: Latin adeps = fat, hence fatty
- * aditus: Latin ad = to, towards, iter = a way, hence an opening or entrance.
- * adrenal: Latin ad = towards, at, ren = kidney, hence situated near the kidney (see suprarenal)
- * adrenergic: adjective, Latin ad = at, ren = kidney, and Greek ergon = work, hence, stimuli which cause the adrenal (suprarenal) gland to produce adrenaline. Used to specify neurons or pathways which use adrenaline as a transmitter.
- * afferent: adjective, Latin ad = to, and ferent = carrying (cf. ferry), hence, carrying to, e.g., axons carrying information from retina to lateral geniculate nucleus are afferents to that nucleus.
- * agger nasi: Latin = eminence of the nose.
- * agonist: Greek agonistes = rival, hence, a muscle in apparent contest with another. Used for a prime mover.
- * ala: Latin wing, hence a wing-like process; plural - alae.
- * alaeque: Latin ala = wing (ala of nose), suffix -que = and, hence levator labii superioris alaeque nasi muscles = lifter of the upper lip and ala of nose.
- * alba: Latin albus = white
- * albicans: Latin = becoming white; albus = white
- * albuginea: Latin albus = white, Greek gen = form, hence, like boiled white of an egg.
- * alimentary: adjective, Latin alimentum = food, e.g., alimentary canal.
- * allantois: Greek allantos = sausage, eidos = like, form.
- * allocortex: Greek allos = other (than usual), and Latin cortex = bark, hence non-laminated external grey matter. It refers to paleo- or archi-cortex, as distinct from neocortex.
- * alveolus: Latin a basin, hence any small hollow. Plural - alveoli, adjective - alveolar.
- * alveus: Latin = tray. The allusion is unclear. The alveus is a layer of fibres on the free surface of the hippocampus.
- * ambiguus: adjective, Latin = doubtful (nucleus ambiguus).
- * ampulla: Latin = a two-handed flask, a local dilatation of a tube.
- * amygdaloid: adjective, Greek amygdala = almond, and eidos = shape or form, hence, amygdaloid body is an almond-shaped mass.
- * amylacea: Greek amylon = starch, hence, starchy.
- * anaesthesia: Greek an = negative, and aisthesis = sensation, hence, loss of sensation; adjective - anaesthetic.
- * analgesia: Greek an = negative, and algesis = pain, hence insensibility to pain; adjective - analgesic.
- * analogous: Greek ana = up, apart, towards, and logos = word. A part with similar function through different morphology e.g., fish gills and mammalian lungs (c.f. homologous).
- * anastomosis: Greek ana = of each, and stoma = mouth, hence the end-to-end continuity of 2 vessels; adjective - anastomotic.
- * anatomy: Greek ana = up, and tome = a cutting, hence cutting up of a body (c.f. dissection).
- * anconeus: Greek ancon = elbow, hence the muscle attached to the (lateral surface of the) olecranon.
- * aneurysm: Greek angeion = blood vessel, and eury = wide, hence a pathological dilatation of a blood vessel.
- * angiography: Greek angeion (v.s.) and graphe = a record, hence a picture of a blood vessel which has been injected with a dye or radiopaque material.
- * anhidrosis: (anhidrosis, anidrosis) Greek an = negative, and hidros = sweat, hence absence of sweating, typical of skin deprived of its sympathetic innervation.
- * ankle: the region between the leg and the foot.
- * annulus: diminutive of Latin anus = ring, hence little ring.
- * ansa: Latin a handle or loop. Applicable to nerves.
- * anserinus: Latin anser = a goose, hence like a goose, plural - anserina.
- * antagonist: Greek anti = against, and agonistes = rival, hence a muscle which may oppose an agonist.
- * anteflexion: Latin ante = before, and flexere = to bend, hence anterior angulation between the body and cervix of the uterus.
- * anterior: comparative of Latin ante = before, in front.
- * anteversion: Latin ante = before, and versum = turned, hence, the anterior angulation between cervix uteri and the vagina.
- * antidromic: adjective, Greek a = negative, and dromos = current, hence conducting in the opposite direction to the usual.
- * antrum: Greek antron = cave, hence a space in a bone or organ.
- * anulus: diminutive of Latin anus = ring, hence little ring.
- * anus: Latin = ring, adjective - anal.
- * aponeurosis: Greek apo = from, and neuron = tendon (later applied to nerve cell and its fibres), used for sheet-like tendons. Adjective - aponeurotic.
- * apophysis: Greek apo = from, and physis = growth, hence, a bony process - reserved for the articular process of a vertebra; adjective - apophysial.
- * appendage: Latin appendere = to hang on, supplement.
- * appendix: Latin appendere = to hang on, supplement.
- * apposition: Latin appositus = placed at, hence, in contact, in juxtaposition.
- * aqueduct: Latin aqua = water, and ductus = drawn or led off, hence a channel for conducting fluid, e.g. the cerebral aqueduct of the midbrain, which transmits fluid from the 3rd to the 4th ventricle.
- * arachnoid: adjective, Greek arachne = spider, and eidos = shape or form, hence like a spiders web. This middle layer of the three meninges is spread web-like over the brain when the dura has been removed.
- * arbor vitae: Latin arbor = tree, and vita = life, hence, resembling the tree of life. This colourful term is used to describe the pattern of cerebellar folia seen in a median section.
- * archaocerebellum: Greek archi = first, hence the oldest part of the cerebellum, which is the flocculonodular lobe.
- * archaepallium: Greek archi = first, and pallium = cloak, hence the cortex which developed first in vertebrates. Often synonymous with hippocampal formation.
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- * archipallium: Greek archi = first, and pallium = cloak, hence the cortex which developed first in vertebrates. Often synonymous with hippocampal formation.
- * archistriatum: Greek archi = first, and Latin striatum = streaked or fluted.
- * arcuate: Latin arcuatum = curved or arched.
- * arcus: Latin an arch, Latin arcuatum = curved or arched.
- * area: a part of a surface.
- * areola: Latin small, open space.
- * arm: the upper limb, between shoulder and elbow.
- * arrector: Latin adrectus = raised, hence, arrector pili = a hair-raising muscle.
- * artery: Latin arteria (which originally meant air- or wind-pipe, and later a blood vessel carrying blood away from the heart).
- * articulation: Latin artus = joint, hence, articulate - to form a joint.
- * arytenoid: Greek arytaina = pitcher, and eidos = shape or form, hence the arytenoid cartilage because it curves like a spout.
- * aspect: a view of more than one surface.
- * aspera: Latin rough.
- * asterion: Greek asterios = starry.
- * astrocyte: Greek astron = star, and kytos = cell, hence a star-shaped (neuroglial) cell.
- * ataxia:; Greek a = negative, and taxis = order, hence inability to co-ordinate the voluntary muscles.
- * atlas: Greek atlao = I sustain. Atlas was a mythical god who sustained the globe on his shoulders. The 1st vertebra sustains the skull, and its upper surface bears 2 concavities which suggest Atlas' palms, not shoulders.
- * atresia: Greek a = negative, and tresis = a hole, hence an absence or closure of a body orifice or tubular organ
- * atrium: Latin = entrance hall, adjective - atrial.
- * atrophy: Greek a = negative, and trophe = food, hence wasting from starvation.
- * auditory: Latin audire = to hear, hence, pertaining to the ear.
- * auricle: Latin auricula = a little ear.
- * auscultate: Latin ausculto = to listen to, hence, auscultation, the act of listening to a bodily activity.
- * autonomic: adjective, Greek auto = self, and nomos = law, hence self-regulating.
- * axilla: Latin armpit.
- * axis: Latin axis = the central line of a body or part thereof, especially the imaginary line around which rotation takes place.
- * axon: Latin axis = axis, hence the main process of a neuron conducting impulses away from the cell body.
- * azygos: adjective, Greek a = negative, and zygos = paired, hence, unpaired.
- * basilar: adjective, Latin basis = base.
- * basilic: adjective, Greek basilikos = royal (king-sized).
- * biceps: Latin bis = double, and caput = head, hence 2-headed, adjective - bicipital.
- * bifid: adjective, Latin bis = double, and findo = to split.
- * bifurcate: Latin bis = double, and furco = fork, hence to divide into two.
- * bilateral: Latin bi = two, lateral = side, hence, pertaining to two (both) sides.
- * bipennate: adjective, Latin bis = double, and pinna = feather, hence converging from 2 sides.
- * body: the main part.
- * border: see margin.
- * brachiocephalic: Latin brachium = arm, and Greek kephale = head, hence a blood vessel related to the upper limb and head.
- * brachium: Latin = arm, adjective - brachial.
- * branchia: Greek = gills, adjective - branchial.
- * bregma: from a Greek word implying moist, referring to the site of the anterior fontanelle (q.v.), a little fountain, the site of junction of the coronal and sagittal sutures, where the brain can be felt pulsating in infancy.
- * brevis: Latin = short - cf. brief.
- * bronchiole: diminutive of bronchus, hence a small bronchus (bronchi have cartilage in their walls, bronchioles have no cartilage).
- * bronchus: derivation unhelpful - a branch of the trachea, adjective - bronchial.
- * buccal: adjective, Latin bucca = cheek.
- * buccinator: Latin = trumpeter - hence the muscle which blows air out from the cheek under pressure.
- * bulbous: Latin = bulb or onion.
- * bulla: Latin = bubble.
- * bursa: Greek = a purse, hence a flattened sac containing a film of fluid.
- * caecum: Latin = blind.
- * calcaneus: Latin calx = heel, hence the bone of the heel.
- * calcar: Latin = a spur.
- * calcar avis: Latin the spur of a bird, hence a spur-like elevation.
- * calcarine: Latin calcar = spur, hence spur-shaped.
- * calf: the soft tissue swelling at the back of the leg.
- * calix: Latin = a wine-cup (plural - calices).
- * callosum: Latin callum = hard.
- * calvaria: Latin calva = bald head, hence the part of the skull containing the brain - i.e. cranium minus the facial skeleton.
- * calyx: Latin = a wine-cup (plural - calyces).
- * canal: Latin canalis = a water-pipe or canal.
- * canaliculus: diminutive of canal.
- * cancellous: adjective, Latin cancelli = grating or lattice.
- * canine: adjective, Latin canis = dog.
- * canthus: Greek kanthos - used at first for rim of eye, then angle between ends of rims.
- * capillary: Latin capillaris = hair-like, hence a very thin blood vessel.
- * capitate: adjective, having a caput from Latin capitis = of a head (q.v.).
- * capitulum: diminutive of caput, Latin = head.
- * capsule: Latin capsula = box, hence an enclosing sheet.
- * caput: Latin = head. Capitis - of a head, adjective - capitate = having a head (cf. decapitate).
- * caput medusae: Latin caput = head, Medusa = Greek mythical female with snake like hair.
- * cardiac: adjective, Greek kardia = heart.
- * cardinal: Latin cardinalis = principal, of primary importance.
- * carina: Latin = a keel.
- * carnea: Latin carnea = fleshy.
- * carotid: Greek karoo, to put to sleep (heavy sleep), because compression of the common or internal carotid artery may cause coma.
- * carpus: Greek = wrist, adjective - carpal.
- * cartilage: Latin = gristle; adjective - cartilaginous.
- * caruncle: diminutive of Latin caro = flesh, hence, a small fleshy elevation.
- * cauda: Latin = tail, adjective - caudate - having a tail.
- * cauda equina: Latin = a horse's tail.
- * caudal: Latin cauda = tail, hence toward the tail, inferior (in human anatomy).
- * caudate: Latin cauda = tail, hence having a tail.
- * cava: Latin cavum = cave, hollow.
- * cavernous: Latin containing caverns or cave-like spaces.
- * cavity: Latin cavitas = a hollow.
- * cavum: Latin = cave.
- * cecum: Latin = blind.
- * celiac: adjective, Greek koilia = belly.
- * celom: Greek koilos = a hollow
- * central: adjective, Latin centrum = centre.
- * centrum: Latin = centre.
- * cephalic: adjective, Greek kephale = head.
- * cerebellum: diminutive of Latin cerebrum = brain.
- * cerebrum: Latin = brain, adjective - cerebral.

- * cerumen: Latin cera = wax.
- * cervical: adjective, Latin cervix = neck, hence, pertaining to the neck.
- * cervix: Latin = neck, adjective - cervical.
- * chiasma: Greek kiasma = cross. (The Greek letter chi = c).
- * choana: Greek = funnel, plural - choanae.
- * chondral: adjective, Greek chondros = cartilage.
- * chorda: Latin = cord.
- * choroid: adjective, Greek chorion = skin and eidos = shape or form, hence, like a membrane.
- * chyle: Greek = juice.
- * chyli: Greek = juice.
- * ciliary: adjective, Latin cilia = eyelashes.
- * cilium: Latin = eyelid, hence, an eyelash; adjective - ciliary, or ciliated.
- * cinereum: Latin cineris = of ashes.
- * cingulum: Latin girdle or belt, adjective - cingulate.
- * circumflex: verb and adjective, Latin circum = around, and flexere = to bend, hence, bend or bent around.
- * cisterna: Latin = a cistern.
- * claustrum: Latin clausum = closed, hence a barrier.
- * clavicle: diminutive of Latin clavis = key - old Roman key was S-shaped.
- * cleido: Greek, cleis = key, a combining form denoting relationship to the clavicle.
- * clinoid: adjective, Greek kline = bed, eidos = shape or form, hence, like a bed-post.
- * clivus: Latin = slope (cf. declivity).
- * cloaca: Latin = a drain, sewer; common opening for intestinal, urinary and genital tracts in lower vertebrates, it is a transitory structure in human embryological development.
- * coccyx: Greek kokyx = cuckoo, whose bill the coccyx resembles.
- * cochlea: Latin = snail, hence the spiral cochlea, adjective - cochlear.
- * coeliac: adjective, Greek koilia = belly.
- * coeruleus: adjective, Latin = blue, hence, locus coeruleus, a group of nerve cells in the rostral pons coloured blue or black by melanin.
- * coli: Latin = of the colon.
- * collateral: adjective, Latin con = together, and latus = side, hence, alongside.
- * colli: genitive (possessive case) of collum, Latin = neck
- * colliculus: diminutive of Latin collis = hill.
- * collum: Latin = neck (cf. collar).
- * colon: Greek kolon = large intestine.
- * columna: Latin = column, or pillar.
- * comitans: adjective, Latin = accompanying.
- * commissure: Latin con = together, and missum = sent, hence fibres which cross between symmetrical parts.
- * communicans: adjective, Latin = communicating.
- * concha: Latin = shell.
- * condyle: Greek kondylos = knuckle.
- * confluens: Latin con = together, and fluens = flowing, hence the meeting of more than one stream.
- * conjunctiva: Latin con = with, and junctus = joined (cf. junction), hence the continuous bulbar and palpebral lining membrane.
- * conoid: Greek konooides = resembling a cone, cone shape
- * constrictor: Latin con = together, and strictum = drawn tight, hence, producing narrowing.
- * contour: Greek tornos = lathe, hence a line which turns - an outline.
- * contralateral: Latin contra = against, latus = side, hence, the opposite side (as opposed to ipsilateral)
- * conus: Latin = cone, conus medullaris - the lower end of the spinal cord.
- * coracoid: adjective, Greek korax = a crow, and eidos = shape or form, hence, like a crow's beak.
- * cornea: Latin cornu = horn, hence, the dense tissue forming the front of the eyeball.
- * corniculate: Latin = shaped like a small horn.
- * cornu: Latin = horn.
- * corona: Latin = crown. adjective - coronary or coronal; hence a coronal plane is parallel to the main arch of a crown which passes from ear to ear (cf. coronal suture).
- * coronal: Latin corona = crown; hence a coronal plane is parallel to the main arch of a crown which passes from ear to ear (cf. coronal suture).
- * coronary: adjective, Latin = crown, hence, encircling like a crown.
- * coronoid: adjective, Greek korone = a crown, eidos = shape or form, hence, shaped like a crown.
- * corpus: Latin = body, plural - corpora.
- * corpuscle: Latin = a little body.
- * corrugator: Latin con = together, and ruga = wrinkle, hence a muscle that produces wrinkles.
- * cortex: Latin = bark, adjective, cortical.
- * costa: Latin = rib. adjective - costal.
- * coxa: Latin = hip, hence os coxae = the hip bone.
- * cranium: Greek kranion = skull. (In anthropology = skull minus mandible) adjective - cranial.
- * cremaster: Greek = suspender, hence the muscle which suspends the testis.
- * cribriform: adjective, Latin cribrum = sieve, hence, sieve-like.
- * cricoid: adjective, Greek krikos = ring, and eidos = shape or form, hence, ring-like, i.e. circular.
- * crista: Latin = crest, crista galli = the (median) crest of a cock.
- * cruciate: adjective, Latin crux = cross, hence, crossed like the letter X.
- * crus: Latin = leg, plural - crura.
- * cubital: adjective, Latin cubitus = elbow.
- * cuboid: adjective, Greek kuboides = cube-shaped.
- * culmen: Latin = summit (cf. culminate).
- * cuneate: adjective, Latin = a wedge.
- * cuneiform: adjective, Latin cuneus = wedge, hence wedge-shaped.
- * cuneus: Latin = a wedge, adjective - cuneate.
- * cupola: Latin = little dome.
- * cupula: Latin = little dome.
- * cusp: Latin cuspis = a pointed elevation.
- * cutaneous: adjective, Latin cutis = skin.
- * cyst: Greek kystis = bladder, adjective - cystic.
- * dartos: Greek = flayed or skinned.
- * declive: Latin declivitas = slope (cf. clivus).
- * decussation: Latin decussatus = crossed like the letter X.
- * deep: further from the surface.
- * deferens: adjective, Latin = carrying down.
- * deglutition: Latin deglutire = to swallow, hence the act of swallowing.
- * dehiscence: Latin de = away, hiscere = to gape, hence, a separation, a splitting away.
- * deltoid: adjective, Greek delta (D). The capital has a triangular shape (cf. the delta of the Nile river).
- * dendrite: or dendron, Greek = a tree, hence like the branches of a tree.
- * dens: Latin = tooth (cf. dentist), adjective - dental.
- * dentate: Latin dens = tooth, hence, having a toothed margin.
- * denticulate: Latin dens = tooth, hence, having small tooth-like projections.
- * dentine: from Latin dens = tooth; the substance of the tooth surrounding the pulp.
- * depress: Latin de = prefix implying descent, and pressum = pressed, hence to press down, and depression = downward movement or a concavity on a surface.
- * dermatome: Greek derma = skin, tome = a cutting or division, hence a segment of skin supplied by a single spinal ganglion.
- * dermis: Greek = skin, adjective - dermal.
- * detrusor: Latin detrusio = thrust away.

- * diaphragm: Greek dia = across, and phragma = wall, hence, a partition, adjective - diaphragmatic (see also phrenic).
- * diaphysis: Greek dia = apart, and physis = growth, hence, the body of a long bone between the growing regions near the ends.
- * diastole: Greek dia = apart, and stellein = sending, hence sending the walls of the heart apart, i.e. relaxation or dilatation. Adjective - diastolic.
- * diencephalon: Greek dia = between, and enkephalos = brain, hence in general the structures surrounding the 3rd ventricle. adjective - diencephalic.
- * digastric: adjective, Greek dia = double, and gaster = belly, hence, 2-bellied.
- * digit: Latin digitus = a finger or toe, usually excepting the pollex (thumb) or hallux (big toe), adjective - digital.
- * diplopia: Greek diploos = double, and opis = vision, hence double vision.
- * diploë: Greek = fold, hence the cancellous bone between the inner and outer tables of the skull, adjective - diploic.
- * discus: Latin = disc.
- * dissection: Latin dissecare = to cut up, from dis = apart, sectum = cut (c.f. anatomy).
- * distal: adjective, Latin di = apart, and stans = standing, hence, standing apart, implying farther from a given point, usually the root of a limb.
- * diverticulum: Latin = by-road, hence a blind tubular process or sac.
- * dorsal: adjective, Latin dorsum = back.
- * dorsum: Latin = back.
- * ductus: Latin = duct.
- * duodenum: Latin duodenarius = twelve, because it is 12 fingerbreadths long.
- * dura: adjective, Latin = hard (cf. durable); dura mater, the tough covering membrane of the central nervous system.
- * dysphagia: Greek dys = difficult, and phagein = to eat, hence, difficulty in swallowing.
- * ectoderm: Greek ekto = outside, and derm = skin, hence, the outermost germ layer of the embryo.
- * ectopic: Greek ek = out, and topos = place, hence out of place.
- * edge: border or margin of a surface.
- * efferent: adjective, Latin ex = out, and ferens = carrying, hence, conducting from.
- * ejaculatory: Latin ex = out, and jacere = to throw, hence throwing out.
- * elbow: the junction between arm and forearm.
- * elevate: Latin elevatus = raised up, hence, to raise up, and elevation = a raised part.
- * emboliformis: adjective, Greek embolus = wedge or blocking matter.
- * embryo: Greek en = within, and bryein = to swell or grow, hence the early stage of intrauterine development.
- * eminence: Latin eminens = projecting, hence, a projection (usually smooth).
- * emissary: adjective, Latin e = out, and emissum = sent out; emissary vein, one connecting intra- with extra-cranial venous channels.
- * encephalon: Greek en = within, and kephalos = head, hence, the brain.
- * endocardium: Greek endo = within, and kardia = heart, hence, the endothelial lining of the chambers of the heart.
- * endocranium: Greek endo = within, and kranion = skull, hence, the outer endostial layer of the dura mater.
- * endocrine: Greek endo = within, and krinein = to separate, hence, the organs that ductlessly secrete their products into the bloodstream.
- * endoderm: Greek endo = within, and derm = skin, hence, the germ layer of the embryo that gives rise to epithelium of the gastrointestinal and respiratory tracts.
- * endolymph: Greek endo = within, and Latin lymph = clear water, hence the fluid within the membranous labyrinth of the internal ear.
- * endometrium: Greek endo = within, and metra = uterus, hence the mucosal lining of the uterine cavity.
- * endothelium: Greek endo = within, and thele = the nipple; the squamous epithelium lining the heart and blood vessels.
- * ependyma: Greek = an upper garment. It may refer to a vest or singlet, i.e. an under-garment, hence, the lining membrane of the ventricles of the brain and central canal of the spinal cord.
- * epicanthus: Greek epi = upon, and kanthos = corner, hence, the fold of skin over the inner angle of the upper eyelid, a normal characteristic in certain races, and a congenital anomaly in others.
- * epicardium: Greek epi = upon, and kardia = heart, hence, the visceral layer of serous pericardium which covers the heart.
- * epicondyle: Greek epi = upon, and kondylos = knuckle, hence a prominence on a condyle of the humerus or femur.
- * epicranial: adjective, Greek epi = upon, and kranion = skull, hence, the epicranial aponeurosis (galea) connecting frontalis to occipitalis muscles.
- * epidermis: Greek epi = upon, and derm = skin, hence, the most external layer of the skin.
- * epididymis: Greek epi = upon, and didymos = testis, hence, the organ perched posterosuperior to the testis.
- * epidural: adjective, Greek epi = upon, Latin dura = tough, hence, external to dura mater.
- * epigastrium: Greek epi = upon, and gaster = belly, hence, the upper median zone of the abdomen.
- * epiglottis: Greek epi = upon, and glottis = larynx, hence the uppermost part of the larynx.
- * epimysium: Greek epi = upon, and mys = muscle, hence the connective tissue surrounding an entire muscle.
- * epiphysis: Greek epi = upon, and physis = growth, hence, the end of a long bone beyond the cartilaginous growth disc, adjective - epiphysial.
- * epiploic: adjective, Greek epiploon = a net, which the greater omentum resembles with fat entangled in it.
- * epithelium: Greek epi = upon, and thele = the nipple; the cell layer lining the internal and external surfaces of the body.
- * erector: Latin erectus = straight or upright.
- * erigentes: plural, Latin erigere = to erect.
- * ethmoid: adjective, Greek ethmos = sieve, and eidos = shape or form, hence, like a sieve; an unpaired skull bone.
- * eversion: Latin e = out, and versum = turned, hence turned outwards.
- * exophthalmos: Greek exo = out, and ophthalmos = eye, hence, prominent eyeball.
- * extend: Latin extendo = extend or stretch out, hence, extension = extended or straightened; the position opposite to the flexed or bent.
- * external: adjective, Latin externus = outward, hence, further from the inside.
- * extraperitoneal: adjective, Latin extra = outside, Greek peri = around and teinein = stretched, hence outside the serous membrane stretched around the inside of the abdominal wall and around the viscera.
- * extrapyramidal: Latin extra = outside, and pyramidal (q.v.), hence descending nerve tracts that do not traverse the pyramids of the medulla.
- * extrinsic: Latin extrinsecus = from without, hence (usually) a muscle (usually) originating outside the part on which it acts.
- * fabella: diminutive of Latin faba = a bean, hence, a sesamoid bone found in the lateral head of gastrocnemius.
- * facet: Latin facies = face, hence a small smooth bony surface, either coated with articular cartilage or the site of a tendinous attachment (cf. a facet on a diamond).
- * facilitate: Latin facilis = easy, hence, to make easy.
- * falciform: adjective, Latin falx = a sickle, and forma = form, hence, shaped like a sickle.
- * falx: Latin = sickle, hence, the sickle-shaped falx cerebri and falx cerebelli, adjective - falciform.
- * fascia: Latin = band or bandage, hence the fibrous wrapping of muscles - deep fascia, or the subcutaneous layer of fatty connective tissue - superficial fascia, adjective, fascial.
- * fasciculus: diminutive of Latin fascis = bundle, hence, a bundle of nerve or muscle fibres.
- * fastigium: Latin fastigium = summit, hence the peak of the 4th ventricle, adjective - fastigial.
- * fauces: Latin = throat, adjective - faucial.
- * femur: Latin = thigh, adjective - femoral.
- * fenestra: Latin = window.
- * fetus: the developing mammal in utero; in Man, after the 2nd month in utero, adjective - foetal or fetal.
- * fibre: Latin fibra = a fibre, adjective, Latin fibrosus = fibrous.
- * fibril: diminutive of Latin fibra = a fibre.
- * fibula: Latin = brooch, which the tibia and fibula resemble, the fibula representing the movable pin, adjective - fibular.
- * filament: Latin filamentum = a delicate fibre, adjective - filamentous.
- * filum: Latin = a thread. Filum terminale - a thread of pia continuous with the lower end of the spinal cord.
- * fimbria: Latin = a fringe, hence, fimbria hippocampi, a scalloped band of fibres alongside the hippocampus.
- * fissure: Latin = a cleft.
- * fixator: Latin fixus = fixed, hence, a muscle which fixes a part.
- * flaccid: adjective, Latin flaccidus = weak or slack.
- * flavum: adjective, Latin flavus = yellow.
- * flex: Latin flexum = bent, hence, flexor, a muscle which bends a part of the body, and flexion = the act of flexing.
- * flexure: Latin flexura = a bending.
- * flocculus: diminutive of Latin floccus, a tuft. Hence resembling a picture of a little cloud, with a woolly top and a flat base, as in flocculus cerebelli.
- * foetus: the developing mammal in utero; in Man, after the 2nd month in utero, adjective - foetal or fetal.
- * folia: plural of Latin folium = leaf.
- * follicle: Latin folliculus = a little bag, adjective - follicular.
- * fontanelle: French diminutive of Latin fons = fountain, associated with the palpable pulsation of the brain in the anterior fontanelle of an infant.
- * foramen: Latin = hole.
- * forceps: Latin = tongs.
- * forearm: the upper limb between the elbow and the wrist.
- * fornix: Latin = arch (hence fornication, because the Roman prostitutes plied their profession beneath the arches of the bridges over the river Tiber).

- * fossa: Latin = a ditch or trench, hence a concavity in bone, or an organ, or on a lining surface.
- * fovea: Latin = a pit (usually smaller than a fossa).
- * foveola: diminutive of fovea.
- * frenulum: diminutive of frenum.
- * frenum: Latin = bridle or curb.
- * frontal: adjective, Latin frontis = of the forehead, or coronal.
- * fundiform: adjective, Latin fundus = bottom or base (cf. fundamental), hence, sling-shaped.
- * fundus: Latin = bottom or base. (But note that the fundus of the stomach and uterus are at the top, and the fundus of the eye and of the bladder are posterior!).
- * funiculus: diminutive of Latin funis = cord (used usually for bundles of nerve fibres).
- * fusiform: adjective, Latin fusus = spindle, hence, spindle-shaped.
- * galea: Latin = helmet, hence, galea aponeurotica - the aponeurosis of occipitofrontalis muscle.
- * galli: genitive (possessive case) of Latin = cock, hence, crista galli, the cock's comb.
- * gallus: Latin = cock, hence, crista galli, the cock's comb.
- * gamma: the 3rd letter of the Greek alphabet, typically used in a naming sequence - alpha, beta, gamma, delta, etc.
- * ganglion: Greek = swelling, referring to a peripheral collection of nerve cells, adjective - ganglionic.
- * gastric: Greek gaster = belly or stomach.
- * gastro: Greek gaster = belly or stomach.
- * gastrocnemius: Greek gaster = belly, and kneme = leg, hence, the bulging muscle of the calf.
- * gelatinosa: Latin gelatus = frozen.
- * gemellus: Latin diminutive of geminus = twin.
- * genial: adjective, Greek geneion = chin.
- * geniculate: Latin geniculare = to flex the knee, hence, a bent knee.
- * geniculum: Latin geniculare = to flex the knee, hence, a bent knee.
- * genital: adjective, Latin genitalis = reproductive, hence, genitalia, the sexual organs.
- * genu: Latin = knee.
- * gingiva: Latin = gum (of tooth).
- * girdle: a ring of bones which may be complete or incomplete.
- * glabella: diminutive of Latin glaber = bald, hence a smooth bony prominence between the eyebrows.
- * gladiolus: diminutive of Latin gladius = a sword, hence, hence a small sword, term applied to the body of the sternum.
- * gland: Latin glans = an acorn, adjective - glandular; a secreting organ.
- * glandula: diminutive of Latin glans = acorn.
- * glans: Latin = acorn.
- * glenoid: adjective, Greek glene = socket, and eidos = shape or form.
- * glia: Greek = glue, hence, an adhesive connective tissue.
- * globus: Latin = a globe.
- * glomerulus: Latin glomerare = to roll up, from glomus = a ball of thread (cf. conglomeration).
- * glossal: adjective, Greek glossa = tongue.
- * glottic: adjective, Greek = larynx.
- * glottis: Greek = larynx, hence, the boundaries of rima glottidis.
- * gluteal: adjective, Greek gloutos = rump or buttock.
- * gluteus: Greek gluteos = rump or buttock. One of 3 muscles of the buttock, adjective - gluteal.
- * gonad: Greek = reproduction, hence a gland producing gametes - ovary or testis, adjective - gonadal.
- * gracile: adjective, Latin gracilis = slender.
- * gracilis: adjective, Latin = slender.
- * granulation: diminutive of Latin granum = a grain.
- * gravid: adjective, Latin gravis = pregnant.
- * griseum: adjective, Latin griseus = bluish or pearly grey.
- * gubernaculum: Latin something which governs or directs, like a rudder (cf. gubernatorial).
- * gustatory: adjective, Latin gustatio = taste, hence, pertaining to the sense of taste.
- * gyrus: Greek gyros = circle, hence a coil of brain cortex.
- * habenua: diminutive of Latin habena = rein.
- * haemorrhoid: Greek haima = blood, and rhoia = to flow, hence likely to bleed.
- * hallux: Latin hallex = great toe (hallucis = of the great toe).
- * hamate: adjective, Latin hamus = a hook, hence, hooked.
- * hamstrings: the tendons of the muscles of the ham - i.e. of the back of the thigh - felt behind the knee when the leg is flexed against resistance (semimembranosus, semitendinosus and biceps femoris).
- * hamulus: diminutive of Latin hamus = hook.
- * haustula: Latin = saccules.
- * helicine: Greek helix = a coil, spiral.
- * helicotrema: Greek helix = a coil, and trema = hole, hence the aperture at the apex of the bony cochlea whereby scala vestibuli communicates with scala tympani.
- * helix: Greek = coil.
- * hemianopia: Greek hemi = half, an = negative, opsia = vision, hence loss of half of the field of vision.
- * hemianopsia: Greek hemi = half, an = negative, opsia = vision, hence loss of half of the field of vision.
- * hemiparesis: Greek hemi = half, paresis = paralysis, used usually to denote weakness rather than paralysis.
- * hemiplegia: Greek hemi = half, plegia = stroke, hence, paralysis of one half of the body.
- * hemisphere: Greek hemi = half, sphaira = ball, hence, half of a sphere.
- * hepar: Greek = liver, adjective - hepatic.
- * hepatic: adjective, Greek hepar = the liver.
- * hernia: Latin = a protrusion, adjective - hernial.
- * hiatus: Latin = a gap (like that between some people's ears).
- * hilum: Latin = the point of attachment of a seed, hence the part of an organ where the vessels and nerves are attached; adjective - hilar.
- * hindbrain: the part of the brain below tentorium cerebelli, comprising medulla oblongata, pons and cerebellum.
- * hip: the lateral prominence of the hip bone and greater trochanter.
- * hippocampus: Greek hippokampus = a sea-horse, hence, the curled shape of the hippocampus in coronal section; adjective - hippocampal.
- * homologous: adjective, Greek homos = same, and logos = word, hence a part with similar morphology but different function.
- * horizontal: adjective - parallel to the horizon.
- * horn: a projection, often pointed.
- * humerus: Latin = the arm-bone.
- * humour: Latin humor = liquid, hence the aqueous and vitreous humour of the eyeball.
- * hyaline: adjective, Greek hyalos = glassy.
- * hydrocephalus: Greek hydor = water, koilos = head. (cf. cephalic).
- * hymen: Greek = membrane; across the vaginal vagina.
- * hyoid: adjective, Greek = U-shaped.
- * hyperacusis: Greek hyper = over, and akousis = hearing, hence excessive sensitivity to sound.
- * hypoglossal: adjective, Greek hypo = under, and glossa = tongue.
- * hypophysis: Greek hypo = down, physis = growth, hence, a downgrowth (from the brain). However, this is not the whole truth. Part is an upgrowth from the pharynx, adjective - hypophysial.
- * hypothalamus: Greek hypo = under, and thalamus (q.v.), refers to part of diencephalon.
- * ileum: Greek eilein = twisted. adjective - ileal.
- * ilium: Latin the bone of the flank, adjective - iliac.
- * ima: adjective, Latin = lowest, hence artery thyroidea ima.
- * impar: Latin = unpaired.
- * incisor: Latin incisum = cut up.
- * incisura: Latin = notch.
- * incus: Latin = anvil, hence the anvil-shaped ossicle of the middle ear.
- * index: Latin = a pointer, hence, the fore-finger.

- * indicis: genitive of Latin index = a pointer, hence, of the fore-finger.
- * indusium: Latin = tunic.
- * inferior: adjective, Latin = lower down, hence, farther from the head end.
- * infra: Latin = below.
- * infundibulum: Latin = funnel.
- * inguinal: adjective, Latin inguen = groin.
- * inhibition: Latin inhibitus = restrained, hence, reduction of the excitability of a synapse.
- * innervate: Latin in = into, and nervus = nerve, hence, to supply a nerve to a part.
- * innominate: Latin in = not, and nomen = name, hence, without a name.
- * insert: Latin insertio = to join into, implant, hence, to attach; noun - insertion.
- * inspection: Latin inspectus = examined, hence, visual examination.
- * insula: Latin = island.
- * integument: Latin in = on, tegmen = roof, hence the skin coat.
- * intercalated: adjective, Latin inter = between, and calatum = inserted, hence interposed.
- * interdigitate: Latin inter = between, and digitus = a digit. Hence, to interlock like fingers.
- * internal: adjective, Latin internus = inward, hence, nearer the inside.
- * internuncial: adjective, Latin inter = between, nuncius = messenger.
- * interstitial: adjective, Latin inter = between, and sistum = set, hence, set between.
- * intestine: Latin intestinum = the digestive tube beyond the stomach.
- * intima: Latin = innermost.
- * intra: Latin = within.
- * intrafusil: adjective, Latin intra = within, fusus = spindle.
- * intrinsic: adjective, Latin = on the inside.
- * introitus: Latin intro = within, and ire = to go, hence, an orifice or point of entry to a cavity or space.
- * inversion: Latin in = in, and vertere = to turn, hence to turn inward, inside out, upside down.
- * ipsilateral: Latin ipsi = self, the same, and latus = side, hence on the same side.
- * iris: Latin = a rainbow.
- * ischium: Greek ischion = socket, because the ischium contributes more than either the ilium or pubis to the acetabulum.
- * iso: Greek = equal.
- * isthmus: Greek isthmos - a narrow passage.
- * jejunum: Latin jejunos = empty, adjective - jejunal.
- * joint: the meeting of 2 or more bones or cartilages, at which movement is possible.
- * jugular: adjective, Latin jugulum = neck.
- * jugum: Latin = yoke (cf. conjugal).
- * juxta: Latin = near.
- * keratin: Greek keras = horn.
- * kinocilium: Greek kineo = to move (cf. kinetic), and cilium Latin = eyelash, hence protoplasmic thread of hair process in cupula of crista ampullaris of a semicircular duct.
- * knee: the junction of the thigh and the leg.
- * koniocortex: Greek konis = dust, and Latin cortex = bark, hence, sensory cortex containing mostly granular layers.
- * kyphosis: Greek kyphos = bent or bowed forward.
- * labium: Latin = lip (plural labia), adjective - labial.
- * labrum: Latin = rim.
- * labyrinth: Greek labyrinthos = maze, adjective - labyrinthine.
- * lacerum: Latin lacer = mangled, hence, lacerated, torn.
- * lacrimal: adjective, Latin lacrima = a tear (drop).
- * lactation: Latin lactans = suckling. Hence, the act of secreting milk.
- * lacteal: adjective, Latin lac = milk, hence, resembling milk.
- * lactic: adjective, Latin lac = milk.
- * lactiferous: adjective, Latin lac = milk, and ferre = to carry.
- * lacuna: Latin lacus = lake, hence, a small pond or gap, adjective, lacunar.
- * lambda: Greek letter representing a capital 'L' and written as an inverted V.
- * lambdoid: adjective, Greek lambda, representing a capital 'L' and written as an inverted V; hence, like that letter.
- * lamella: diminutive of Latin lamina = plate; hence, a small plate.
- * lamina: Latin = plate, either a layer of nervous tissue, like the laminae of the lateral geniculate body, or a connective tissue membrane, like lamina cribrosa sclerae, or of bone, as in vertebral laminae; hence, laminectomy = lamina + Greek ektome = excision - excision of the vertebral laminae to give access to the spinal cord; adjective - laminar.
- * lanugo: Latin lana = wool, hence, the fine downy hair on the skin of the foetus, or cheeks.
- * larynx: Greek = voice-box, adjective - laryngeal.
- * lata: Latin latus = side.
- * lateral: adjective, Latin latus = side, hence, nearer the side.
- * latissimus: superlative of adjective, Latin latus = wide, hence, latissimus dorsi muscle, the widest muscle of the back; earlier name was anitensor - wiper of the anus.
- * leg: the lower limb between the knee and the ankle.
- * lemniscus: Greek lemniskos = a band or ribbon (applied to nerve fibres).
- * lens: Latin = lentil - a transparent body with one or both surfaces curved to re-direct light rays, adjective - lentiform or lenticular.
- * lentiform: adjective, Latin lens = lentil, and forma = shape, hence, lentil-shaped.
- * leptomeninx: Greek leptos = delicate, and meninx = membrane. Usually refers to pia and arachnoid. Plural leptomeninges.
- * levator: Latin = elevator.
- * lien: Latin = spleen, adjective - lienal.
- * ligament: Latin ligamentum = bandage, usually tying parts to each other, adjective - ligamentous.
- * limbic: adjective, Latin limbus = a margin, usually curved.
- * limbus: Latin = a margin, usually curved, hence, limbus of cornea, its circular junction with the sclera, adjective - limbic; limbic lobe of the brain comprises structures which encircle the junction of the diencephalon and telencephalon.
- * limen: Latin = a threshold, hence, subliminal - below threshold.
- * linea: Latin = line.
- * lingua: Latin = tongue, adjective, lingual.
- * lingula: diminutive of lingua, hence, a little tongue, adjective - lingular.
- * lissencephalic: adjective, Greek lissos = smooth, hence, a cerebrum lacking sulci.
- * lobule: diminutive of lobus.
- * lobulus: Latin diminutive of lobus, hence, a lobule.
- * lobus: Greek lobos = lobe, adjective - lobar.
- * locus: Latin a place (cf. location, locate, dislocate).
- * loin: Latin lumbus - the part of the back between the ribs and the hip bone.
- * longissimus: superlative of Latin longus = long, hence, the longest.
- * longitudinal: adjective, Latin longitudo = length, hence, lengthwise.
- * longus: adjective, Latin = long, hence, longissimus (superlative) = the longest.
- * lucidum: Latin lucidus = clear.
- * lumbar: adjective - see loin.
- * lumbrical: Latin lumbricus = worm, hence worm-shaped muscles of the palm.
- * lumen: Latin = opening, hence the space within a tube.
- * lunate: adjective, Latin luna = moon, hence, crescentic.
- * luteum: adjective, Latin = yellow.
- * lymph: Latin lymph - clear spring water.
- * lymphatic: a vessel carrying lymph.
- * macroscopic: adjective, Greek makros = large, and skopein = to examine; hence, large enough to be seen with the naked eye, e.g., pertaining to gross anatomy.
- * macula: Latin = spot (cf. immaculate - spotless); adjective - macular.

- * magna: Latin = great.
- * malleolus: diminutive of Latin malleus = hammer, adjective - malleolar.
- * malleus: Latin = a hammer.
- * mamma: Latin = breast; adjective - mammary.
- * mamilla: diminutive of mamma; adjective - mammillary.
- * mandible: Latin mandere = to chew; hence, the movable lower jaw; adjective - mandibular.
- * manubrium: Latin = handle; adjective - manubrial.
- * manus: Latin = hand (cf. manual).
- * margin: the edge or border of a surface; adjective - marginal.
- * masseter: Greek = chewer; adjective - masseteric.
- * mastication: Latin masticere = to chew.
- * mastoid: adjective, Greek mastos = breast or teat, and eidos = shape or form.
- * matrix: Latin = a female animal used for breeding, womb; refers to ground substance of connective tissue, and nail bed.
- * maxilla: Latin = jaw-bone; now used only for the upper jaw; adjective - maxillary.
- * meatus: Latin = passage; adjective - meatal.
- * medial: adjective, Latin medius = middle; hence, nearer the median plane.
- * median: Latin medianus = in the middle.
- * mediastinum: derivation doubtful, but possibly from Latin medius = middle, and stans = standing; hence, a median vertical partition, adjective - mediastinal.
- * medius: Latin = middle.
- * medulla: Latin = marrow; applied to part of an organ deep to its cortex, and to the spinal cord and adjoining part of brain stem, which may have been thought to be the marrow of the vertebral column, adjective - medullary pertains to the medulla of an organ or medulla oblongata.
- * membrane: Latin membrana = a thin sheet; adjective - membranous.
- * meninges: plural of Greek meninx = a membrane; adjective - meningeal.
- * meniscus: Latin menis - a small crescent.
- * mental: adjective - Latin mentum = chin; or Latin mens = mind.
- * mesencephalon: Greek mesos = middle, and enkephalos = brain; adjective - mesencephalic.
- * mesenchyme: Greek mesos = middle, and chymos = juice; the embryonic connective tissue of the mesoderm.
- * mesentery: Greek mesos = middle, and enteron = intestine; hence, the peritoneal fold which tethers the centrally situated small intestine; adjective - mesenteric.
- * mesial: adjective - medial, used in dental anatomy.
- * mesoderm: Greek mesos = middle, and derma = skin; the middle germ layer of the embryo.
- * mesosalpinx: Greek mesos = middle, and salpinx = tube; hence, the intermediate part of the broad ligament.
- * metacarpus: Greek meta = after, and karpus = wrist; adjective - metacarpal.
- * metaphysis: Greek meta = after, and physis = growth; hence, the end of the shaft of a bone alongside the epiphysial or growth cartilage; adjective - metaphysial.
- * metatarsus: Greek meta = after, and tarsos = ankle; hence, the bones beyond the tarsus, adjective - metatarsal.
- * metencephalon: Greek meta = beside, behind, or after, and enkephalos = brain; hence the parts of the hindbrain immediately caudal to the fore- and midbrain, namely the pons and cerebellum.
- * metopic: adjective, Greek metopon = forehead.
- * micturition: Latin micturare = to desire to pass urine.
- * minimus: Latin = smallest.
- * miosis: Greek meiosis = lessening; hence, pupillary constriction; adjective - miotic.
- * modality: Latin modus = mode; hence, a form of sensation - e.g. touch, pain, sight.
- * modiolus: Latin a cylindrical borer with a serrated edge; hence, like a screw; the central stem of the bony cochlea.
- * molar: adjective, Latin mola = mill.
- * mons: Latin = mountain; mons pubis, the soft tissue bulge over the female pubes.
- * morphology: Greek morphos = form, and logos = word or relation; hence, study of pattern of structure; adjective - morphological.
- * multifidus: Latin multus = much, and findere = to split.
- * muscle: Latin musculus, diminutive of Greek mus = mouse, the body and head of which represent the main belly of a muscle, and the tail, the tendon.
- * mydriasis: Greek = dilatation of the pupil.
- * myelencephalon: Greek myelos = marrow (= Latin medulla), and enkephalos = brain; hence the medulla oblongata. See also medulla.
- * myelin: Greek myelos = marrow; hence, white fatty sheath of an axis cylinder; adjective - myelinated.
- * myenteric: Greek mys = muscle, and enteron = intestine, hence, pertaining to the muscle of the gut.
- * mylohyoid: Greek mylo = molar, and hyooides = U-shaped.
- * myocardium: Greek mys = muscle, and kardia = heart, adjective - myocardial.
- * myotome: Greek mys = muscle, and tome = a cutting or division; hence, a group of muscles innervated by a single spinal segment.
- * nares: plural, Latin naris = nostril.
- * naris: Latin = nostril, plural - nares.
- * nasal: adjective, Latin nasus = nose; hence, pertaining to the nose.
- * natal: adjective, Latin natus = born; hence, relating to birth.
- * navicular: adjective, Latin navicula = a little ship (cf. naval); hence, the tarsal bone which is concave posteriorly, resembling a boat.
- * neo-: Greek prefix - neos = new.
- * neonatal: adjective, Greek neos = new, and Latin natos = born; hence, new-born.
- * neopallium: Greek neos = new, and Latin pallium = cloak; hence, the cerebral cortex which developed more recently than the archipallium or olfactory cortex.
- * nerve: Latin nervus = tendon; later reserved for a peripheral bundle of fibres which conduct impulses from or to the central nervous system.
- * neural: adjective, Greek neuron = nerve.
- * neuroglia: Greek neuron = nerve, and gloia = glue; hence, the connective tissue of the central nervous system; adjective - neuroglial.
- * neurohypophysis: or posterior lobe of hypophysis - Greek hypo = down, and physis = growth; hence, the posterior part of the hypophysis evaginated downwards from the diencephalon, and its stalk.
- * neurolemma: Greek neuron = nerve, and lemma = peel or rind; hence, the covering layer of a nerve.
- * neuron: Greek = nerve; refers to the nerve cell body, with its axon and dendrites; adjective - neuronal.
- * nigra: Latin niger = black, dark.
- * node: Latin nodus = knot.
- * nodule: diminutive of Latin nodus = knot, hence, a little knot.
- * norma: Latin = pattern or rule, or aspect; adjective, normal - according to rule.
- * notch: an indentation in the margin of a structure. Etymology uncertain.
- * notochord: Greek notos = back, and chorde = cord; hence, the primitive axial skeleton around which the vertebrae develop, parts persisting in the nuclei pulposi.
- * nucha: French nuque = nape or back of the neck; adjective - nuchal.
- * nucleus: Latin = kernel or nut; may refer to the vital centre of a cell body, or to a cluster of neuron cells in the central nervous system; adjective - nuclear.
- * nystagmus: Greek = drowsiness, to nod, hence, involuntary, rapid, rhythmic eye movements.
- * obex: Latin = barrier; hence, the coronal fold of ependyma over the lower angle of the 4th ventricle.
- * oblique: adjective, Latin obliquus; slanting, or deviating from the perpendicular or the horizontal.
- * oblongata: Latin oblongus = oblong; medulla oblongata.
- * obturator: Latin obturatus = stopped up; hence, a structure which closes a hole.
- * occiput: Latin ob = prominent (cf. obvious), and caput = head; hence, the prominent convexity of the back of the head; adjective - occipital.
- * occlusion: Latin occlusum = closed up; hence, apposition of reciprocal teeth, or the blocking of any tubular structure; adjective - occlusal.
- * oculomotor: Latin oculus = eye, and movere = to move, hence, pertaining to moving the eye.
- * oculus: Latin = eye.
- * odontoid: Greek odous = tooth, and eidos = form, shape, hence, tooth-like.
- * oesophagus: Greek = gullet (passage from pharynx to stomach); adjective - oesophageal.
- * olecranon: Greek olene = ulna, and kranion = upper part of head; hence, the upper end of the ulna.
- * olfactory: adjective, Latin olfacto = smell.
- * olive: Latin oliva - the oval fruit of the olive tree; oval eminence on medulla oblongata; adjective - olivary.
- * omentum: Latin = apron; adjective - omental.
- * omohyoid: Greek omos = shoulder; hence, a muscle attached to the scapula and hyoid.
- * operculum: Latin = lid or cover; hence, operculum insulae, the cerebral cortex covering and hiding the insula (the 5th lobe of cerebral cortex).
- * ophthalmic: adjective, Greek ophthalmos = eye.
- * opponens: Latin = placing against, opposing.

- * oppose: Latin *oppositum* = put against; hence, to resist or place in contact with, and *opposition* - the action of opposing.
- * optic: adjective, Greek *optos* = seen; hence, pertaining to sight.
- * ora: Latin *ora* = margin or edge.
- * ora serrata: Latin *ora* = margin, and *serra* = saw; hence, the serrated anterior edge of the functional part of the retina.
- * oral: Latin *oris* = a mouth, hence, pertaining to the mouth.
- * orbit: Latin *orbis* = circle; the name given to the bony socket in which the eyeball rotates; adjective - orbital.
- * orifice: Latin *orificium* = opening.
- * os, oris: Latin *os* = mouth; plural - *ora*, adjective - oral.
- * os, ossis: Latin *os* = bone; plural - *ossa*, adjective - osseous.
- * ossicle: Latin *ossiculus*, diminutive of *os* = bone.
- * ossify: Latin *os* = bone, and *facio* = make; hence, to form bone; and ossification, the process of bone formation.
- * osteology: Greek *osteon* = bone, and *logos* = a field of study.
- * ostium: Latin = a door, an opening, an orifice.
- * otic: adjective, Greek *otos* = ear.
- * otolith: Greek *otos* = ear, and *lithos* = stone; hence, calcareous particles in the utricle and saccule of the membranous labyrinth.
- * ovary: Latin *ovum* = egg; hence, the organ containing ova (the largest cells in the female).
- * ovum: Latin = egg, plural - ova.
- * pachymeninx: Greek *pachys* = thick, and *meninx* = membrane; hence, the thick membrane covering the central nervous system, i.e., *dura mater*.
- * palaeo: Greek *palaios* = old; hence, *palaeocerebellum*, the earliest stage in the evolution of the cerebellum.
- * palate: Latin *palatum* = palate, adjective - palatal or palatine.
- * paleo: Greek *palaios* = old; hence, *paleocerebellum*, the earliest stage in the evolution of the cerebellum.
- * pallidus: adjective, Latin = pale.
- * pallium: Latin = cloak; hence, the cerebral cortex forming the outer covering of the cerebral hemisphere.
- * palma: Latin *palma* = palm; adjective, *palmar* - Latin *palmaris*.
- * palpate: Latin *palpare* = to touch, and *palpatus* = touched; hence, to examine by feeling, and palpation, such an examination.
- * palpebra: Latin = eyelid, probably from *palpitare* = to flutter.
- * pampiniform: adjective, Latin *pampinus* = tendril, and *forma* = shape.
- * pancreas: Greek = sweetbread, derived from Greek *pan* = all, and *kreas* = flesh; adjective - pancreatic.
- * panniculus: diminutive of Latin *pannus* = cloth.
- * papilla: Latin = nipple or teat; adjective - papillary.
- * paradydymis: Greek *para* = beside of near, and *dydymis* = twinned or paired, refers to testes; hence the collection of convoluted tubules in the spermatic cord, above the head of the epididymis.
- * paraesthesia: Greek *para* = beside, and *aesthesia* = sensation; hence, abnormal sensation, usually burning or pricking.
- * paralysis: Greek *para* = beside, near, *lyein* = to loosen; hence loss or impairment of muscle function.
- * parametrium: Greek *para* = beside, and *metra* = womb; hence, connective tissue alongside the body of the uterus, within the broad ligament.
- * paraplegia: Greek *para* = beside, and *plege* = a stroke; hence, paralysis of the lower limbs.
- * pararenal: adjective, Greek *para* = beside, Latin *ren* = kidney; hence, beside the kidney, e.g., *pararenal fat*, the fatty capsule of the kidney.
- * parasternal: adjective, Greek *para* = beside, and *sternon* = chest; hence, the parasternal line is a vertical line about midway between the sternal edge and the midclavicular line.
- * parasympathetic: adjective, Greek *para* = beside, *syn* = with, and *pathos* = feeling; hence, the division of the autonomic nervous system complementary to the sympathetic system.
- * parathyroid: adjective, Greek *para* = beside, and *thyroid*; hence, beside the thyroid gland.
- * parenchyma: Greek *para* = beside or near, *en* = in, and *chein* = to pour; hence a general term to designate the functional elements of an organ, as opposed to the framework or stroma.
- * paresis: Greek = relaxation, but has come to mean partial paralysis.
- * parietal: adjective, Latin *parietalis*, pertaining to *paries* = wall.
- * parotid: adjective, Greek *para* = beside, and *otos* = of the ear; hence, beside the ear.
- * parous: adjective, Latin *pario* = I bear (children); hence, adjective, applied to woman who has borne one or more children (cf. *nulliparous*, *multiparous*).
- * pars: Latin = part.
- * patella: Latin a small pan; adjective - *patellar*.
- * pecten: Latin = comb.
- * pectinate: adjective, from Latin *pecten* = a comb; applied to structures having the appearance of parallel teeth arising from a straight back (*musculi pectinati*), or the sellar appearance of the superior pubic ramus, which may have resembled the body of antique combs.
- * pectineal: adjective, from Latin *pecten* = a comb; applied to structures having the appearance of parallel teeth arising from a straight back (*musculi pectinati*), or the sellar appearance of the superior pubic ramus, which may have resembled the body of antique combs.
- * pectineus: Latin, *pecten* = a comb; hence the muscle attaching to the pecten (pectineal line) of the pubic bone.
- * pectoral: adjective, Latin *pectoris* = of the front of the chest.
- * pectoralis: adjective, Latin *pectoris* = of the front of the chest.
- * pedicle: diminutive of Latin *pedis* = of the foot.
- * pedis: Latin = of the foot.
- * peduncle: variation of pedicle.
- * pellucidum: adjective, Latin *per* = through, and *lucere* = to shine; hence, translucent.
- * pelvis: Latin = basin, adjective - pelvic.
- * penis: Latin = tail, the male organ of copulation (cf. *appendix*, *appendage*).
- * pennate: Latin *penna* = feather; hence, a muscle whose fibres approach the tendon from one direction is *unipennate*; from two, *bipennate*, and from more than two, *multipennate*.
- * pennatus: (pinnate) - adjective, Latin *penna* = feather; hence, a muscle whose fibres approach the tendon from one direction is *unipennate*; from two, *bipennate*, and from more than two, *multipennate*.
- * perianal: adjective, Greek *peri* = around, and Latin *anus* = lower opening of alimentary canal.
- * pericardium: Greek *peri* = around, and *kardia* = heart; hence, the membranes enclosing the heart.
- * perichondrium: Greek *peri* = around, and *chondros* = cartilage; hence, the membrane covering cartilage.
- * pericranium: Greek *peri* = around, and *kranion* = skull; hence, the external periosteum of the skull.
- * perilymph: Greek *peri* = around, and *lymph* - Latin = clear water; hence, the fluid in the bony labyrinth surrounding the membranous labyrinth (and continuous with the cerebrospinal fluid).
- * perineum: Greek the caudal aspect of the trunk between the thighs, or, the region of the trunk below the pelvic diaphragm; adjective - perineal.
- * periodontal: adjective, Greek *peri* = around, and *odont* = tooth.
- * periosteum: Greek *peri* = around, and *osteon* = bone; hence, the membrane around a bone.
- * peripheral: adjective, Greek *peri* = around and *phero* = carry; hence, away from the centre (cf. *periphery*).
- * peristalsis: Greek *peri* = around, and *stellein* - to constrict; hence, a circular constriction passing as a wave along a tube; adjective - peristaltic.
- * peritoneum: Greek *periteino* = to stretch around; hence, the membrane stretched around the internal surface of the walls and the external aspect of some of the contents of the abdomen; adjective - peritoneal.
- * peroneal: adjective, Greek *perone* = clasp, brooch - see *fibula*.
- * pes: Latin = foot.
- * petrosal: adjective, Latin *petrosus* = rocky.
- * petrous: adjective, Latin *petrosus* = rocky.
- * phalanx: Latin = row of soldiers; hence, one of the small bones of a digit, plural - *phalanges*, adjective - *phalangeal*.
- * phallus: Greek *phallos* = penis.
- * pharynx: Greek = throat; adjective - *pharyngeal*.
- * philtrum: Greek *philtro* - the median sulcus of the upper lip. Derivation doubtful.
- * phonation: Greek *phone* = sound or voice; hence, the production of either.
- * phrenic: Greek *phren* = diaphragm or mind; hence, *diaphragmatic* (cf. *schizophrenic*).
- * pia: Latin = faithful, hence, the membrane which faithfully follows the contour of the brain and spinal cord.
- * pilomotor: Latin *pilus* = a hair, and *movere* = to move; hence the action of the *arrectores pilorum* muscles.
- * pilus: Latin = a hair.
- * pineal: adjective, Latin *pine* = a pine cone; hence, the pineal gland which is cone-shaped.
- * piriform: adjective, Latin *pirum* = a pear; hence, pear-shaped.
- * pisiform: adjective, Latin *pisum* = a pea; hence, pea-shaped.
- * pituitary: Latin *pituita* = mucous or phlegm, the gland was thought to produce mucous that discharged through the nose.
- * placenta: Latin = a flat, round cake.
- * placode: Greek *plax* = plate or flat, and *eidōs* = shape or form.
- * plane: Latin *planus* = flat; hence, a real or imaginary flat surface.
- * planta: Latin the sole of the foot; adjective - *plantar* or *plantaris*.

- * plantar: adjective, Latin planta = the sole of the foot.
- * platysma: Greek = flat object; hence, the flat subcutaneous muscle extending from below the clavicle to the mouth.
- * pleura: Greek = a rib. Later used to name the serous membrane lining the chest walls and the lung on each side.
- * plexus: Latin = a network or plait.
- * plica: Latin plicare = to fold; hence, a fold.
- * pneumon: Greek pneuma = air.
- * pollex: Latin = thumb.
- * pollicis: genitive (possessive case) of Latin pollex = thumb; hence of the thumb.
- * pons: Latin = bridge; adjective - pontine; part of the brain stem.
- * popliteus: Latin poples = the ham or thigh, and sometimes, the knee; adjective, popliteal, referring to the fossa behind the knee or its contents.
- * porta: Latin = a gate, also Latin portare = to carry; hence, the portal system carries venous blood from the alimentary tract to the porta hepatis; adjective - portal.
- * porus: Latin a pore or foramen; hence, the openings of the acoustic meatuses.
- * posterior: adjective, Latin post = behind (in place or time).
- * posture: Latin positus = placed; hence, the position of the body as a whole at a given moment, e.g. erect, recumbent, prone, supine, sitting, kneeling.
- * precuneus: Latin pre = before, and cuneus = wedge; hence, the parietal lobule anterior to the cuneus.
- * prepuce: Latin praeputium = foreskin (of penis or clitoris).
- * princeps: Latin primus = chief, and capere = to take; hence chief or principal.
- * procerus: Latin = slender, elongated; hence, the vertical slip of muscle between the medial part of frontalis and the root of the nose.
- * process: Latin = going forwards, used to indicate growing out, i.e., an outgrowth, usually of bone, e.g., the zygomatic process of the temporal.
- * processus: Latin going forwards, used to indicate growing out, i.e., an outgrowth, usually of bone, e.g., the zygomatic process of the temporal.
- * profundus: Latin pro = before, and fundus = bottom; hence profundus = deep.
- * prominens: Latin = projecting.
- * promontory: Latin promontorium = a headland, i.e., part of land jutting into the sea - used for a bony prominence.
- * pronate: Latin pronatus = bent forwards; hence to pronate = to turn the hand so that the palm faces posteriorly.
- * prone: Latin pronatus = bent forwards; hence, recumbent face-down posture.
- * proprioceptive: Latin proprius = one's own, and captum = taken; hence, sensory impulses received by the joints and muscles within one's own body.
- * prosection: Latin pro = before, and sectum = cut. A dissection prepared for demonstration of anatomic structures.
- * prosector: Latin pro = before, and sectum = cut. One who prepares a dissection for demonstration.
- * prosencephalon: Latin pro = in front, and Greek enkephalos = brain; hence, the part of the brain rostral to the midbrain.
- * prostate: Greek pro = before, and Latin = statum = stood; hence, something which stands before - the prostate stands before the urinary bladder.
- * protract: Latin protractus = drawn out; hence, to put forwards (e.g., shoulder or mandible). Protraction - the act of protracting.
- * protrude: Latin protrudo = thrust forwards, e.g. the tongue; protrusion - the act of protruding.
- * protuberance: Latin protubero = I bulge out; hence, a bulging bony feature (see tuber).
- * proximal: adjective, Latin proxime = nearest; hence, nearer to the root of a limb.
- * psoas: Greek = loin.
- * pterion: Greek pteron = wing; hence, the region where the tip of the greater wing of the sphenoid meets or is close to the parietal, separating the frontal from the squamous temporal; alternatively the region where these 4 bones meet.
- * pterygoid: adjective, Greek pteryx = wing, and eidos = shape; hence, wing-shaped.
- * ptosis: Greek = fall; hence, drooping of an eyelid, or descent of an internal organ.
- * puberty: Latin puber = adult; hence, the time when hair appears in the pubic region - i.e., near the pubis - as a secondary sexual characteristic.
- * pubes: Latin = adult or signs of manhood, hence the lower abdominal secondary sexual hair.
- * pudendal: adjective, Latin pudendus = shameful; hence, pertaining to the external genitalia.
- * pulmonary: adjective, Latin pulmo = lung.
- * pulp: Latin pulpa = a soft part of the body or tooth.
- * pulposus: Latin pulpa = a soft part of the body or tooth, hence pulpy or soft.
- * pulvinar: Latin pulvinus = rounded cushion; the posterior end of the thalamus.
- * punctum: Latin = a sharp point; hence a very small point or orifice.
- * pupil: Latin pupilla = the central black orifice in the iris; adjective - pupillary.
- * putamen: Latin = peel, husk or shell of fruit or seed (the external part of the lentiform nucleus).
- * pyelogram: Greek pyelos = basin, and gramma = diagram; hence, radiograph of the renal pelvis (and usually of the ureter) after filling with contrast medium.
- * pylorus: Greek = gate-keeper; hence, the part of the pyloric canal containing the sphincter, which guards the opening into the duodenum; adjective - pyloric.
- * pyramid: Greek pyramis = a pyramid (solid with 3- or more-sided base, and flat sides meeting at the apex), adjective - pyramidal.
- * quadrangular: Latin quadri = four and angulus = angle; hence square or rectangular.
- * quadratus: Latin = square or rectangular.
- * quadriceps: Latin quadri = four, and caput = head; hence, a 4-headed muscle.
- * quadrigeminus: Latin quadri = four, and gemini = paired or twinned; hence four-fold.
- * radiation: Latin radiatus = radiant; hence, divergence from a common centre (cf. radius).
- * radicle: diminutive of Latin radix = root; hence a small root, adjective - radicular.
- * radius: Latin = spoke of a wheel, which rotates around the hub; hence, the lateral bone of the forearm, which rotates (though around an almost vertical axis); adjective - radial.
- * radix: Latin = root.
- * ramify: Latin ramus = a branch; and facere = to make; hence, to branch.
- * ramus: Latin = branch; hence, a branch of a nerve.
- * raphe: Greek a seam; hence, the line of junction of the edges of 2 muscles or areas of skin.
- * recess: Latin recessus = a secluded area or pocket; hence, a small cavity set apart from a main cavity.
- * rectum: adjective, Latin rectus = straight. (The rectum was named in animals where it is straight - which it is not in Man).
- * rectus: Latin rectus = straight.
- * recurrent: Latin re = back, and currere = to run; hence a structure that bends, and runs back toward its source.
- * reflex: an involuntary response - muscular or secretory - to a stimulus mediated by the central nervous system.
- * renal: adjective, Latin ren = kidney.
- * rete: Latin = a net; hence, a network of veins or tubules.
- * reticular: adjective, Latin reticulum = small net; hence having a network.
- * reticulum: diminutive of Latin rete = net; adjective - reticular.
- * retina: derivation uncertain - the innermost of the 3 layers of the eyeball.
- * retinaculum: Latin = a tether; hence, a thickened band of deep fascia which retains tendons or the patella.
- * retract: Latin re = back, and tractum = pulled; hence, to pull something back, and retraction - the act of retracting.
- * retro: prefix - Latin = backwards.
- * retroflexion: Latin retro = backwards, and flexion = bent; hence, the position of being bent backwards, applied to the angulation of the body of the uterus on the cervix.
- * retroversion: Latin retro = backwards, and version = turned; hence, the position of being turned backwards, applied to the angulation of the cervix uteri on the vagina.
- * rhinencephalon: Greek rhinion = nostril, and enkephalos = brain; hence, the part of the brain concerned with smell (relatively large in lower animals).
- * rhombencephalon: Greek rhombos = rhomboid, and enkephalos = brain; hence, the hind-brain - the medulla oblongata, pons and cerebellum, which enclose the rhomboid fossa (the floor of the 4th ventricle).
- * rhomboid: Greek rhombus = a figure with 4 equal sides, not at right angles, and eidos = shape or form, hence, the shape of a rhombus.
- * rima: Latin = chink; hence, e.g., rima palpebrarum = the chink between the free edges of the eyelids.
- * risorius: Latin risor = scoff; hence, muscle risorius is the facial muscle which expresses laughter by drawing the corner of the mouth laterally.
- * rostral: adjective, Latin rostrum = beak, implying nearness to the corpus callosum.
- * rostrum: Latin beak, which decorated the Roman orator's platform; hence, a platform or beak-like structure; adjective - rostral.
- * rotate: Latin rota = wheel; hence, to turn, and rotation, the act of turning.
- * rotundum: Latin rotnudus = round.
- * rubro: prefix, Latin rubrum = red.
- * ruga: Latin = a wrinkle.
- * rugose: adjective, Latin ruga = a wrinkle, hence, wrinkled.
- * sac: Latin saccus = a sack.
- * sacculi: Latin sacculus, diminutive of saccus.
- * sacrum: Latin sacer = sacred (probably considered so because of its size).
- * sagittal: adjective, Latin sagitta = arrow, because the sagittal suture is notched posteriorly, like an arrow, by the lambdoid sutures.

- * salivary: adjective, Latin saliva = spit.
- * salpinx: Greek = trumpet; hence, the uterine or auditory tube, each of which is trumpet-shaped.
- * saphenous: adjective, Greek saphenes = obviously visible. The saphenous veins become very apparent when varicose.
- * sartorius: Latin = tailor; hence, sartorius muscles, which produce the posture in which tailors once worked, squatting on the floor.
- * scala: Latin = stairs; hence the parallel spiral passages which wind up to, or down from, the cupula of the bony cochlea.
- * scalene: adjective, Greek skalenos = uneven, hence a triangle with unequal sides, an apt description of the shape of scalenus anterior and scalenus medius muscles.
- * scalenus: adjective, Greek skalenos = uneven, hence a triangle with unequal sides, an apt description of the shape of scalenus anterior and scalenus medius muscles.
- * scaphoid: adjective, Greek skaphe = skiff, and eidos = shape or form; hence the carpal which is hollowed out on its distal surface for the head of the capitate; also the fossa occupied by tensor veli palatini muscle.
- * scapula: Greek skapto = I dig, because of the resemblance to a spade.
- * sciatic: adjective, Greek ischion = hip-joint. Ischiadikos meant pertaining to the ischium or hip - later changed to sciatic. (The ischium earns its name because it forms > 2/5 of the acetabulum, whereas the ilium contributes < 2/5, and the pubis only 1/5). The sciatic nerve lies on the ischium.
- * sclera: Greek skleros = hard; hence the tough, outer layer of the eyeball; adjective - scleral.
- * sclerotomy: Greek skleros = hard, and tome = a cutting.
- * scoliosis: Greek skolios = crooked or curve, and -osis = condition, hence, the lateral curvature of the spine.
- * scrotum: possibly derived from Latin scortus = leather; adjective - scrotal.
- * secrete: Latin secretus = separated; hence, to produce a chemical substance by glandular activity - adjective, secretory; noun, secretion.
- * sella: Latin = saddle; adjective - sellar, sella turcica = Turkish saddle.
- * semen: Latin = seed; adjective - seminal (seminal vesicle).
- * semilunaris: adjective, Latin semi = half, and luna = moon; hence, having a half-moon shape.
- * semimembranosus: adjective, Latin semi = half, and membrana = membrane; hence, the hamstring muscle of which the upper half is membranous.
- * seminiferous: Latin semen = seed and ferre = to carry, to bear; hence, the sperm-producing tubules in the testes.
- * semitendinosus: adjective, Latin semi = half, and tendo = I stretch; hence, the hamstring muscle of which the lower half is tendinous.
- * septum: Latin saeptum = fenced in; hence, a dividing fence or partition.
- * serous: Latin = like serum.
- * serratus: adjective, Latin = notched like the edge of a saw (serrate).
- * sesamoid: adjective, Greek sesamodes, eidos = shape or form; like grains of sesame, hence, small bone in tendon at site of friction.
- * sialogram: Greek salion = saliva, and gramma = a diagram; hence, a radiograph of a salivary duct.
- * sigmoid: adjective, Greek sigma, the form used at the end of a word having an S-shape; hence, S-shaped.
- * sinister: adjective, Latin = left-sided.
- * sinus: Latin = a hollow or space which may contain air, venous or arterial blood, lymph or serous fluid; adjective, sinusoid.
- * sole: the lower surface of the foot - see soleus.
- * soleus: adjective, Latin solea = flatfish or sandal; hence soleus muscle which does not enter the sole of the foot, but resembles the fish.
- * solitarius: Latin = solitary, alone.
- * soma: Greek = the body.
- * somatic: adjective, Greek soma = the body; hence, pertaining to the body frame but not to its viscera.
- * somite: Greek soma = body, hence an embryonic body segment.
- * spasm: Greek spasmos = an involuntary contraction of a muscle; adjective - spastic, or spasmodic.
- * sperma: Greek = seed or semen, adjective, spermatc.
- * sphenoid: adjective, Greek spheon = wedge, and eidos = shape or form; hence the unpaired bone which is wedged into the base of the skull between the unpaired frontal and occipital.
- * sphincter: Greek sphinkter = a tight binder; hence, a circular muscle which closes an orifice; adjective - sphincteric.
- * spine: Latin spina = a thorn; hence, a sharp process, or a lay term for the vertebral column; adjective, spinous, spinal.
- * splanchnic: adjective, Greek splanchnon = a viscus or internal organ; hence pertaining to viscera.
- * spleen: Latin splen = the spleen; hence; adjective - splenic (Latin - lien).
- * splenium: Greek splenion = a bandage. The splenium of corpus callosum resembles a partly rolled bandage.
- * splenius: Greek splenion = a bandage. Hence, splenius capitis muscle, with its finely-woven fibres and its quarter-spiral twist from a coronal to a sagittal plane.
- * spongiosum: adjective, Greek spongia = a sponge.
- * squama: Latin = a scale (as of fish or reptile); adjective - squamous.
- * squamous: adjective, Latin squama = a scale (as of fish or reptile), hence scale-like.
- * stapes: Latin = stirrup; adjective - stapodial, stapedi.
- * stellate: adjective, Latin stella = star.
- * stereocilia: Greek stereos = solid, and cilium = eyelash, hence non-motile microvilli.
- * sternbra: Greek sternon = chest or breast, and -bra = from vertebra, hence the segments of the sternum that fuse in later life.
- * sternum: Greek sternon = chest or breast; adjective, sternal.
- * stoma: Greek = a mouth.
- * stomach: Greek stomachos = gullet or oesophagus, later applied to the wider part of the digestive tract just below the diaphragm; adjective - gastric.
- * strabismus: Greek strabismos = squinting; hence, inability to focus both eyes on a given point.
- * stratum: Latin = a covering sheet, or layer.
- * stria: Latin = furrow, applied to a streak or stripe.
- * striatum: adjective, Latin striatus = furrowed; hence, corpus striatum, the caudate and lentiform nuclei connected by grey strands which traverse the internal capsule, giving the strands a striated appearance.
- * stroma: Greek = bed or mattress, deep to the covers; hence, the supporting framework of an organ, as distinct from its special parenchyma.
- * styloid: adjective, Greek stylos = an instrument for writing, and eidos = shape or form; hence a pen- or pencil-like structure.
- * subclavian: Latin sub = under or below, and clavis = a key, hence under the clavicle.
- * subiculum: diminutive of Latin subix = a support.
- * sublimis: Latin = superficial.
- * substantia: Latin = a substance.
- * succus: Latin = juice (succus entericus, the secretion of the small intestine).
- * sudomotor: Latin sudor = sweat, and movere = to move, hence stimulating the sweat glands.
- * sulcus: Latin = a groove.
- * superciliary: adjective, Latin super = above, and cilia = eyelid; hence, pertaining to the eyebrow.
- * superficial: adjective, Latin super = above, and facies = surface; hence, nearer the surface.
- * superior: adjective, comparative of Latin superus = above.
- * supination: the act of turning the back of the hand to face posteriorly; verb - supinate.
- * supine: adjective, Latin supinus, recumbent on the back. Hence, also, the position of the hand with the dorsum facing posteriorly.
- * supra: Latin prefix = superior to.
- * suprarenal: Latin supra = above, over, superior to, and ren = the kidney.
- * sural: adjective, Latin sura = the calf.
- * sustentaculum: Latin = a support, which sustains; sustentaculum tali - the ledge on the calcaneus supporting part of the talus.
- * suture: Latin sutura = a seam; the fibrous joints between cranial bones.
- * sympathetic: Greek syn = with, and pathos = feeling; hence, the peripheral part of the autonomic nervous system which arises in the thoracolumbar region of the spinal cord and communicates with other nerves.
- * symphysis: Greek syn = with, and physis = growth; hence a joint where union between the bones is by fibrocartilage - used for median joints. (Symphysis of the mandible is exceptional, the 2 halves fusing before the age of 2).
- * synapse: Greek syn = with, and aptein = to join; hence, the zone through which an impulse passes from one neuron to another.
- * synchondrosis: Greek syn = with, and chondros = cartilage; hence, the union of 2 bones by cartilage.
- * syncytium: Greek syn = with, and kytos = cell, hence a multinucleate mass of protoplasm, formed by the merging of cells.
- * syndesmosis: Greek syn = with, and desmos = a band; hence, the union of 2 bones by fibrous tissue.
- * syndrome: Greek syn = with, and dromos = running; hence, a group of signs and symptoms which is characteristic of a certain pathology.
- * synergist: Greek syn = with, and ergon = work; hence a muscle which cooperates with others in producing a given movement.
- * synovia: Greek syn = with, and ovum = egg; hence the fluid in freely movable joints resembling egg-white; adjective, synovial.
- * synovial: adjective, Greek syn = with, and ovum = egg; hence pertaining to the fluid in freely movable joints resembling egg-white.
- * systole: Greek = contraction; hence the contraction of cardiac muscle.
- * taenia: Latin = a tape or ribbon.
- * talus: Latin = ankle-bone; hence, the tortoise-shaped tarsal of the talocrural (ankle) joint.
- * tapetum: Latin = a carpet or coverlet; hence the roof of the posterior horn of the lateral ventricle.
- * tarsus: Greek tarsos = a flat surface; hence the flat part of the foot, and later, the bones of the foot behind the metatarsals, adjective, tarsal.

- * tectorial: adjective, Latin tectorium = an overlying surface like plaster, a covering or roof.
- * tectum: Latin = roof; hence the roof of the midbrain.
- * tegmen: Latin = covering (cf. integument = the skin).
- * tegmentum: Latin = covering.
- * tela: Latin = a web; e.g., a fold of pia mater containing a choroid plexus.
- * telencephalon: Greek telos = end, and enkephalos = brain; hence the rostral part of the developing brain. (With the diencephalon, it makes up the prosencephalon).
- * temporal: Latin tempus = time; hence, the temporal area of the scalp, where grey hair first appears, marking the progress of ageing.
- * tendon: Latin tendo = I stretch out.
- * tenia: Latin = a tape or ribbon.
- * tensor: Latin tensus = stretched; hence a muscle which produces tension.
- * tentorium: Latin = tent; tentorium cerebelli.
- * teres: Latin = rounded, cylindrical.
- * testicle: Latin testiculus = the male gonad (see testis).
- * testis: Latin testiculus = the male gonad. From Latin testis = a witness. Under Roman law, no man could bear witness (testify) unless he possessed both testes. Plural - testes.
- * tetralogy: Greek tetra = four, and logos = discourse, hence a combination of four elements e.g., symptoms or defects.
- * tetrology: Greek tetra = four, and logos = discourse, hence a combination of four elements or symptoms.
- * thalamus: Greek = bedroom - derivation obscure, though the posterior end of the thalamus is rounded and named pulvinar = cushion.
- * theca: Greek theka = a capsule, sheath.
- * thenar: Greek = palm of hand; hence, the ball of the thumb.
- * thorax: Greek = the chest, adjective, thoracic.
- * thrombus: Greek = a clot.
- * thymus: Greek = sweetbread.
- * thyroid: Greek thyreos = shield, and eidos = shape or form; hence, shaped like a shield (which shields the glottis).
- * tibia: Latin = the shin-bone, adjective, tibial.
- * tonsil: Latin tonsilla = tonsil (e.g., palatine tonsil).
- * torus: Latin = a bulge.
- * trabecula: diminutive of Latin trabs = a beam; hence the supporting fibres of a structure.
- * trachea: Greek tracheia = rough, referring to its corrugations.
- * tract: Latin tractus = an elongated strand of wool or dough; hence a pathway for nerve fibres.
- * tragus: Latin = goat, because of the beard-like tuft of hair on its internal aspect.
- * transverse: perpendicular to the long axis.
- * trapezium: Greek trapezion = a trapezium - a quadrilateral with 2 sides parallel.
- * trapezius: Greek trapezion = a trapezium - a quadrilateral with 2 sides parallel; hence, trapezius muscle, the diamond-shape of both trapezii muscles together.
- * trapezoid: Greek trapezion = a trapezium - a quadrilateral with 2 sides parallel, and eidos = shape or form, hence resembling a trapezium.
- * triceps: Latin tres = 3, and caput = head; hence a 3-headed muscle.
- * trigeminal: Latin trigeminus = triplets; hence, cranial nerve V, with 3 large divisions.
- * trigone: Latin trigonum = a triangle.
- * triquetral: Latin triquetrus = 3-cornered.
- * triticea: Latin triticum = a grain of wheat; hence, the tiny cartilage in the lateral thyrohyoid ligament.
- * trochanter: Greek = a runner; hence, the bony landmark, the greater trochanter, which moves so obviously in running.
- * trochlea: Greek trochilia = a pulley.
- * truncus: Latin = trunk (of a tree).
- * tuber: Latin tuber = a swelling or lump.
- * tubercle: Latin diminutive of tuber, a small prominence, usually bony.
- * tuberculum: Latin diminutive of tuber, a small prominence, usually bony.
- * tuberosity: Latin tuber = a swelling or lump, usually large and rough.
- * tunica: Latin = shirt; hence a covering.
- * turbinate: Latin turbo = a child's (spinning) top; hence shaped like a top. Old term for nasal conchi.
- * tympanum: Latin = a drum.
- * ulna: Latin = elbow or arm; hence, the medial bone of the forearm.
- * umbilicus: Latin = the navel.
- * umbo: Latin = the boss on the centre of a shield, umbo of tympanic membrane.
- * uncinata: Latin uncinatus = hooked.
- * uncus: Latin = hook; adjective - uncinata.
- * ungual: pertaining to Latin unguis = finger-nail.
- * urachus: Greek ouron = urine, and echein = to hold, hence the canal connecting the bladder and umbilicus in the foetus.
- * ureter: Greek oureter = passage from kidney to bladder.
- * urethra: Greek ourethra = passage from bladder to exterior.
- * uterus: Latin = womb.
- * utericle: diminutive of Latin uterus = womb.
- * uvea: Latin uva = grape. The pigmented vascular layer of the eyeball (iris, ciliary body and choroid).
- * uvula: diminutive of Latin uva = grape.
- * vagina: Latin = sheath; hence, invagination is the acquisition of a sheath by pushing inwards into a membrane, and evagination is similar but produced by pushing outwards.
- * vagus: Latin = wandering; hence, cranial nerve X, which leaves the head and neck to traverse the thorax and upper part of the abdomen.
- * valgus: Latin = knock-kneed.
- * vallate: Latin vallatus = walled; hence, the large papillae on the tongue which are depressed below the surface and are surrounded by a groove which is itself bounded by a wall.
- * vallecule: diminutive of Latin vallis = a fossa.
- * valve: Latin valva = the segment of a folding-door.
- * valvula: diminutive of Latin valva.
- * varicocoele: Latin varix = vein and Greek kele = tumour, hernia, hence a varicose condition of the veins of the pampiniform plexus.
- * varus: Latin = bow-legged.
- * vas: Latin = vessel (plural = vasa).
- * vascular: Latin vasculum, diminutive of vas; hence, pertaining to blood vessels.
- * vastus: Latin = great, vast, extensive.
- * vein: Latin vena; adjective - venous.
- * velum: Latin = curtain; veli = of a curtain.
- * venter: Latin = belly; hence, ventral, pertaining to the belly side.
- * ventricle: diminutive of Latin venter = a small belly.
- * vermiform: Latin vermis = a worm, and forma = shape; hence, worm-shaped.
- * vermis: Latin = worm; hence, the segmented median part of the cerebellum.
- * vertebra: Latin verto = I turn; hence, one of the movable bones of the backbone which seems to be shaped for rotation.
- * vertex: Latin = summit; hence the highest point on the skull.
- * vertical: perpendicular (at a right angle) to the horizontal.
- * vesica: Latin = bladder, adjective - vesical.
- * vesicle: diminutive of Latin vesica = bladder, hence a little bladder.
- * vesicula: diminutive of Latin vesica = bladder; seminal vesicle.
- * vestibule: Latin vestibulum = entrance hall.
- * vibrissa: Latin vibrare = to vibrate; hence, the hairs in the nasal vestibule which vibrate in the current of air.
- * villus: Latin a hair; hence, a vascular, hair-like process, usually projecting from a mucous surface.
- * vincula: Latin = fetters (singular - vinculum); hence, the delicate vascular synovial bands passing to a tendon in the digits.
- * visceral: adjective, Latin viscus = an internal organ.
- * viscus: Latin = an internal organ, plural - viscera, adjective - visceral.
- * vital: Latin vita = life.
- * vitelline: Latin vitellus = yolk.

- * vitreous: Latin vitreus = glassy.
- * vocal: adjective, Latin vox = voice.
- * vomer: Latin = plough-share; hence, the bone of the nasal septum which is split in two at its upper edge.
- * vorticosae: Latin vortex = whirl; hence the whirl-like arrangement of the 4 venae vorticosae leaving the eyeball.
- * vulva: Latin = the external female genitalia.
- * xiphoid: Greek xiphos = a sword, and eidos = shape or form; hence, sword-shaped.
- * zona: Latin = a belt; hence, a circular band.
- * zonule: diminutive of zona.
- * zygapophysis: Greek zygon = yoke, apo = from, physis = growth; the articular process of a vertebra. The downward "growth" of the vertebra above articulates with the upward "growth" of the vertebra below, forming a zygapophyseal joint.
- * zygoma: Greek zygon = yoke; hence, the bone joining the maxillary, frontal, temporal and sphenoid bones.
- * zygomatic: adjective, Greek zygon = yoke; hence, pertaining to the bone joining the maxillary, frontal, temporal and sphenoid bones.
- * zygote: Greek zygon = yoke; hence the fusion of the male and female gametes.