Glossary of Analytical Terms

Abdominal—having to do with the abdomen.

Adrenal gland—one of a pair of endocrine organs near the kidneys that produce essential hormones for regulating the metabolism.

Acromegaly—a disorder that is caused by chronic overproduction of growth hormone by the pituitary gland. Acromegaly is characterized by a gradual and permanent enlargement of the flat bones (as the lower jaw) and of the hands and feet, abdominal organs, nose, lips, and tongue.

Acne—a disorder of the skin usually found in adolescents caused by inflammation of the skin glands and hair follicles.

Acro—refers to an extremity of the body.

Action potential—a temporary reversal in the potential difference across a plasma membrane (as of a nerve cell or muscle fiber) that occurs when a cell has been activated by a stimulus.

All-or-none—a nervous system response mechanism marked either by complete operation/effect or by none at all.

Alopecia—loss of hair.

Amblyopeia—a lessening of sight especially in one eye without apparent change in the eye structures (also called lazy-eye).

Analgesia—insensitivity to pain without loss of consciousness.
Anesthesia— the loss of sensation and usually of consciousness without loss of vital functions.

Angiospasm—contraction of the blood vessels with increase in blood pressure.

Ankylosis—stiffness of a joint by disease or surgery.

Anoxia—hypoxia (reduced supplies of oxygen to tissues) of such severity as to result in permanent damage.

Anterior—relating to or situated near the head.

Antebrachial—pertaining to the forearm.

Antecubital—the region in front of the elbow joint.

Arteries—thick-walled muscular blood vessels that carry oxygenated blood in the route away from the heart.

Aorta—the largest artery in the body; carries blood leaving the heart from the left ventricle.

Antibody—a protein of high molecular weight that is produced by specialized β cells in response to an antigen.

Antigen—any substance foreign to the body that causes an immune response.

Anuria—absence of urine excretion.

Arthralgia—pain in one or more joints.

Artrium—thin-walled upper chambers of the human heart.
Autonomic nervous system—all nerves from the central nervous system to the smooth muscle, cardiac muscle, and glands of internal organs and structures.

Axon—a long and single nerve-cell fiber that conducts impulses away from the cell body.

Arthocentesis—puncture of a joint cavity to remove fluid.

Axial—pertaining to the head, neck and trunk.

Axillary—pertaining to the armpit.

Bile—fluid secreted by the liver and stored in the gallbladder.

Blepharitis—inflammation of the eyelids.

Blood—fluid connective tissue of water, solutes and formed elements; transports substances to and from cells.

Blood pressure—pressure exerted by the blood upon the walls of the arteries.

Boil—a bacterial infection of a hair follicle and/or sebaceous gland.

Brachial—pertaining to the arm.

Bronchus—tube-like airway that branches from the trachea and leads the lungs.

Bronchitis—inflammation of the tubes that lead from the trachea to the lungs.

Buccal—pertaining to the mouth and the inner lining of the cheeks.
Bulbourethral gland—located beneath the prostate gland, this gland secretes an alkaline fluid which helps the sperm survive the acidic environment of the urethra.

Capillaries—the smallest blood vessels in the body; connects arterioles and venules.

Cardiac cycle—series of contractions and relaxations that constitutes a complete heartbeat.

Cardiac muscle—specialized muscle tissue found only in the heart.

Cardiovascular—relating to, or involving the heart and blood vessels.

Carpal—a bone in the wrist.

Celiac—pertaining to the abdomen.

Cell—the smallest living unit; organized unit with a capacity to survive and reproduce on its own.

Cell body—the portion of a nerve cell that includes cytoplasm and a nucleus.

Cellular respiration—the process that releases energy from organic compounds.

Central nervous system—the brain and the spinal cord.

Cephalic—pertaining to the head.

Cerebellum—hindbrain regions with reflex centers for maintaining posture and for coordination.
Cerebrum—part of the forebrain that controls the sense of smell and motor responses and integrates the rest of the brain.

Cervical—pertaining to the neck.

Cholecystitis—inflammation of the gall bladder.

Cholestasis—a checking or failure of bile flow.

Circulatory system—the body system consisting of blood, blood vessels, and the heart that is responsible for transportation of vital substances throughout the body.

Cirrhosis—a condition of liver destruction as caused by a number of diseases.

Colles fracture—a fracture at the distal (further away) end of the radial bone.

Coma—a condition of unconsciousness, as caused by an illness, disease, or poison.

Congestive heart failure—a condition when the heart is unable to maintain the circulation of blood throughout the body.

Conjunctivitis—inflammation of the conjunctiva (the covering of the eye).

Cordotomy—surgical division of a portion of the spinal cord for relief of severe pain.

Costal—having to do with a rib.

Convulsion—an abnormal contraction of muscles.
Cranial—having to do with the skull.

Craniotomy—a surgical opening of the skull.

Cyst—a fluid-filled growth.

Cystectomy—cutting off a cyst; the surgical removal of all or part of the urinary bladder.

Cystitis—inflammation of the urinary bladder.

Dendrite—a short extension out from the cell body of a neuron.

Dermatitis—inflammation of the skin.

Dermis—the layer of skin under the epidermis.

Diastolic pressure—lowest arterial pressure reached during the relaxation phase of a cardiac cycle; when the heart chamber wall relaxes.

Digestive—the system consisting of a tube two openings and specialized regions for ingesting, digesting, and absorbing food, then eliminating undigested material.

Diplopia—double vision.

Distal—in a position of being farther away from a reference point; opposite of proximal.

Diuresis—an increased amount of urine.
Diverticulitis—inflammation or infection of a diverticulum (an abnormal pouch) of the colon that is characterized by marked by abdominal pain, fever, chills, and cramping.

Dorsal—in a position of being on the upper side of an animal; opposite of ventral.

Dysentery—in infectious disease characterized by severe diarrhea with mucus and blood.

Dysphagia—difficulty in swallowing.

Dyspnea—a condition of having difficulty with respiration.

Eczema—a noncontagious skin rash that produces itching, blisters, and scaling.

Electrocardiogram—(EKG or ECG)—a recording of electrical activity associated with heartbeat.

Electroencephalogram—(EEG)—a recording of electrical activity associated the brain.

Electromyography—a recording the electrical activity associated with muscles to diagnose possible neuromuscular disorders.

Embolus—a blood clot or gas bubble that blocks a blood vessel.

Embryo—a developing human from the time of implantation in the uterus to the end of the eighth week of the gestational period.

Encephalitis—inflammation of the brain.

Endocrine gland—a ductless gland that secretes a hormone directly into the blood or body fluids.
Enucleation—to remove without cutting into.

Epidermis—outer layer of skin.

Epididymus—coiled tube in which sperm complete maturation; stores sperm.

Epilepsy—one of several disorders characterized by abnormal electrical discharges in the brain and usually involving involuntary movements or convulsions.

Erythema—a reddening of the skin due to blood vessels dilating because of an injury or inflammation.

Esophagus—tube portion of the digestive tract that leads to the stomach.

Exocrine gland—a gland that releases a secretion through a duct.

Exophthalmos—abnormal protrusion of the eyeball.

Femoral—having to do with the femur or the area around the femur.

Fibrosis—a condition marked by increase of interstitial fibrous tissue.

Follicle—a small pit or cavity, as around a hair.

Frontal—having to do with the forehead.

Gall bladder—a muscular sac in which bile from the liver is stored.

Gamete—a male or female sex cell; ova (eggs) in females, sperm in males.
Gastric—having to do with the stomach.

Gestational period—the period of development of young in the uterus from conception until birth.

Goiter—an enlargement of the thyroid gland that is sometimes visible as a swelling of the anterior part of the neck; often results from a lack of iodine.

Hemiplegia—a condition in which one side of the body becomes paralyzed due to disease or injury to the brain.

Hemarthrosis—blood in a joint cavity.

Homeostasis—an internal balance within the working systems of the human body necessary for healthy metabolism and cell function.

Hormones—a chemical secreted by an endocrine gland that helps regulate metabolism, growth, reproduction, and digestion.

Hyperglycemia—too much sugar in the blood.

Hypertension—high blood pressure.

Hyperventilation—an increase in the rate and depth of respiration that leads to not having enough carbon dioxide in the blood.

Hypoxia—when not enough oxygen is reaching body tissues.

Immunity—resistance to specific disease-causing agents.
Immunodefiency—a deficiency in the ability to produce normal amounts of antibodies against disease.

Impetigo—an acute contagious staphylococcal or streptococcal skin disease characterized by vesicles, pustules, and yellowish crusts.

Infection—having a condition caused by invasion of a disease-causing organism.

Inguinal—situated near the groin area.

Integumentary system—the body system that consists of protective coverings of cell, tissues, and organs.

Interneuron—a type of nerve cell that connects sensory and motor neurons and interprets an impulse; found only in the brain and spinal cord.

Iridectomy—the surgical removal of part of the iris of the eye.

Keloid—a thick scar resulting from excessive growth of fibrous tissue and occurring especially after burns or radiation injury.

Keratitis—any inflammation of the cornea of the eye characterized by burning, blurring of vision, and sensitivity to light.

Kidney—filters liquid wastes from the blood and produces urine.

Laminectomy—surgical removal of part of a vertebrae.

Lateral—toward the side.

Liver—the largest gland in the body; produces bile which helps digest fats, helps to detoxify the blood of alcohol, filters out inferior red blood cells, and aids in glycogen storage.
Lungs—organs responsible for exchange of gases; site for the uptake of oxygen and the release of waste carbon dioxide.

Lymph—a clear fluid in the intercellular spaces of tissues containing white blood cells (especially lymphocytes) and filtered by lymph glands.

Medial—toward the middle.

Muscular dystrophy—a group of different hereditary diseases all marked by a progressive deterioration of muscles.

Myelin sheath—the sheath around many sensory and motor neurons.

Myocardium—the middle layer of heart muscle.

Motor neuron—type of neuron that carries impulses from the brain and spinal cord to muscles or glands.

Muscle tissue—tissue with cells able to contract and lengthen for movement.

Myalgia—muscle pain.

Mycology—the study of fungi.

Myopathy—a disease condition of muscle fibers.

Nasal—having to do with the nose.
Negative feedback mechanism—a mechanism of the endocrine system that chemically corrects an imbalance; called “negative feedback” because when the level of the imbalance decreases, the feedback stops the correcting effects.

Nephron—the functional unit of the kidney which filters out liquid wastes from the blood.

Neuron—a nerve cell.

Nervous system—the body system that allows sensing, response, and motor control.

Neurotransmitters—chemicals secreted by the axon that help pass along an impulse.

Occipital lobe—the part of the brain that responsible for visual interpretations and for combining visual images with recognition.

Oral—having to do with the mouth.

Orbital—a bony cavity that encloses and protects the eye; the eye socket.

Organ—a structure consisting of a group of tissues working together to perform a specific function.

Orthopedic—a medical specialty that prevents, diagnoses, and treats diseases and abnormalities on the skeletal and muscular systems.

Ostealgia—pain in a bone.

Osteochondritis—inflammation of bone and cartilage.

Osteoma—a bone tumor.
Osteomalacia—a softening of adult bone due to a disorder in calcium or phosphorus metabolism, usually caused by vitamin D deficiency.

Osteomyelitis—bone inflammation cause by a reaction to bacterial or fungal infection.

Osteonecrosis—death of bone tissue; occurs frequently in elderly people when blood supplies to the bone being reduced due to obstructed arteries; usually occurs in the femoral head.

Osteopathology—the study of bone diseases.

Osteotomy—cutting a bone.

Otic—having to do with the eye.

Ovary—the primary female reproductive organ; produces eggs.

Ova—female reproductive cells; eggs.

Oviduct—the tube that leads from an ovary with the uterus; also called fallopian tube

Pancreas—digestive gland which secretes enzymes for digestion of carbohydrates, fats, and proteins; secretes insulin which regulates blood sugar.

Parathyroid gland—an endocrine gland embedded in the thyroid gland that increases blood calcium levels, decreases blood phosphate levels, affects the bones, kidneys, and intestines.

Patella—the knee bone.

Pathogen—any organism that causes disease.
Pediculosis—disease caused by lice infestation.

Pericardium—the protective covering tissue over the heart.

Peripheral nervous system—all the nerves leading into and out of the spinal cord and brain; includes the ganglia of those nerves.

Peristalsis—recurring waves of contraction and relaxation of muscles in the wall of a tubular or saclike organ.

Pharynx—part of the digestive tract between the mouth and the esophagus.

Phlebitis—inflammation of a vein.

Pituitary gland—endocrine gland that, with the hypothalamus, controls many metabolic functions, including activity of many other endocrine glands.

Pineal gland—a small endocrine gland in the brain that produces melatonin.

Posterior—located toward the back.

Primary sex characteristics—the reproductive organs, such as the testes in males, and the ovaries in females.

Prostate gland—a gland located near the top of the male urethra that releases an alkaline fluid that helps the sperm move.

Proximal—in a position of being closer to the truck; opposite of distal.

Pruritus—an itch.
Puberty—a stage in development when the reproductive organs mature

Pustule—pus-filled area on the skin.

Pyorrhea—an inflammation of the sockets of the teeth leading usually to loosening of the teeth.

Quadriplegia—having a paralysis of all four limbs.

Reflex arc—a pathway by which an impulse does not have to travel to the brain in order to be interpreted, allowing for a very quick response.

Respiratory system—the body system responsible for the exchange of gases between the environment and the blood; consists of the lungs, airways, and the muscles that work to bring air into and out of the body.

Rhinitis—inflammation of the mucous membranes of the nose characterized by congestions, itching, and sneezing.

Sacrum—five fused vertebrae of the lower part of the spinal column that form the dorsal (back) wall of the pelvis.

Sagittal—a median plane of the body that divides the body into unequal right and left parts.

Scabies—a disease resulting from a mite infection.

Scrotum—the sac outside the body cavity that houses the testes.

Sebaceous gland—a small gland embedded in the layers of skin that secrete an oily substance which lubricates the hair and skin.
Secondary sex characteristics—physical characteristics, other than the sex organs, that are associated with being distinctly male or distinctly female, such as a deepening of the voice in males or the development of breasts in females.

Semen—fluid containing sperm and fluid secreted by glands along the male reproductive tract.

Seminal vesicles—gland at the base of the male urinary bladder that releases a fluid high in fructose that provides energy for sperm as they move along from the epididymus.

Sensory neuron—a type of nerve cell in a sense organ that receives impulses and carries them to the brain or spinal cord.

Skeletal system—the body system made up primarily of bones that provides support, protection and shape to the body, and allows the body to store minerals, make blood cells, and grow.

Skeletal muscle—a type of muscle cell attached to bones that can be controlled (also called voluntary).

Sinusitis—inflammation of a sinus cavity of the skull.

Small intestine—the part of the digestive system between the stomach and large intestine responsible for a major portion of chemical digestion and the absorption of nutrients into the blood.

Smooth muscle—a type of muscle cell that lines the walls in organs and blood vessels (also called involuntary muscle).

Spinal cord—a bundle of nerves extending from the brain that transmitted impulses from the brain to the rest of the body.

Spleen—an organ that filters out red blood cells and stores blood.

Stomach—a muscular organ of the digestive system that stores food, secretes chemicals that help break the food into more digestible forms, and controls the passage of food into the small intestine.
Synapse—the space in between nerve cells.

System—a group of organs working together to do a specific function.

Testes—the primary male reproductive organ, produces sperm.

Thoracic—pertaining to the chest.

Thyroid—an endocrine gland in the neck that increases energy release from cells, increases growth rate, and stimulates nervous system.

Tinnitus—having a ringing in the ears or head.

Tissue—a group of cells working together to perform a specific function.

Trachea—the windpipe.

Tracheotomy—a surgical procedure that consists of cutting into the trachea in order to achieve an airway for the patient.

Transfusion—the replacing of blood or blood components.

Uremia—blood in the urine.

Ureter—muscular tube that carries urine from the kidneys to the urinary bladder.

Urethra—tube that carries urine from the bladder to the outside of the body.
Urinary bladder—a sac that holds and stores urine for excretion.

Uterus—a muscular, hollow organ in which embryos develop.

Valve—any body structure that closes off a passage or allows movement of a fluid in only one direction.

Vagina—tube that leads from the uterus to the outside of the body.

Vas deferens—ducts through which sperm move from the epididymus to the urethra.

Ventral—in a position of being on the lower side of an animal; opposite of dorsal.

Ventricle—thick-walled, muscular pumping chambers of the heart.

Vertebrae—bones that make up the spinal column and protect the spinal cord.

Vertebral—of, relating to, or being vertebrae or the spinal column

Vertigo—a disordered state associated with disorders of the inner ear and characterized by dizziness

Wart—a flesh-colored, raised area caused by a virus