

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### 3C Viral Proteases

A class of cysteine proteases which play an essential role in VIRUS REPLICATION. They cleave precursor viral POLYPROTEINS to produce functional proteins and enzymes.

#### Tree locations:

Cysteine Endopeptidases D08.811.277.656.262.500.108  
Viral Proteases D08.811.277.656.979.250  
D12.776.964.900.500.500

### ADP-Ribose 1"-Phosphate Phosphatases

Enzymes that are highly specific for hydrolysis of the D-ribose 1 phosphate bond of ADP-D-ribose 1"-phosphate to produce ADP-D-ribose and phosphate ion.

#### Tree locations:

Phosphoric Monoester Hydrolases D08.811.277.352.650.030

### Amblyomma

A genus of hardbacked TICKS, in the family IXODIDAE. It includes lone star tick and Gulf Coast tick in Americas. Amblyomma americanum is the primary vector of EHRlichia CHAFFEENSIS and EHRlichia EWINGII which cause EHRlichia. Other Amblyomma-associated diseases include TULAREMIA and RICKETTSIOSIS.

#### Tree locations:

Ixodidae B01.050.500.131.166.132.832.400.100

### Amycolatopsis

A genus of high GC content gram positive bacteria of the family Pseudonocardiaceae in the order Pseudonocardiales. It is known for producing the antibiotics epoxyquinomycin, VANCOMYCIN, and RISTOCETIN which are used in treating various infections.

#### Tree locations:

Actinomycetales B03.510.024.049.075

### Angiotensin-Converting Enzyme 2

A transmembrane glycoprotein with an extracellular catalytic domain which functions as a carboxypeptidase. It cleaves a single C-terminal residue from a distinct range of substrates. The catalytic efficiency is 400-fold higher with ANGIOTENSIN II as a substrate than with ANGIOTENSIN I. Angiotensin-converting enzyme 2 is also a functional receptor for the spike glycoprotein (SPIKE PROTEIN, CORONAVIRUS) of the CORONAVIRUSES SARS-COV, SARS-COV2, and HCOV-NL63.

#### Tree locations:

Carboxypeptidases D08.811.277.656.350.245.042

### Actinomadura

A genus of gram-positive bacteria in the family Thermomonosporaceae, order ACTINOMYCETALES. It is a filamentous bacterium found in soil and is a causative agent for MADURA FOOT.

#### Tree locations:

Actinomycetales B03.510.024.049.025

### Akkermansia

A genus of gram-negative, anaerobic bacteria in the phylum VERRUCOMICROBIA and the family Akkermansiaceae. This genus includes the species Akkermansia muciniphila which is known for residing in the human intestinal tract and having effects on human metabolism.

#### Tree locations:

Verrucomicrobia B03.440.930.500

### American Natives

Members of indigenous populations within the United States with pre-colonial contact origins.

#### Tree locations:

Indians, North American M01.686.508.150.600.500

### Analytic Hierarchy Process

A technique or tool used to analyze choices for complex decisions, by organizing them, for analysis, into a tree structure.

#### Tree locations:

Decision Support Techniques E05.245.095  
L01.313.500.750.190.095

### Anosmia

Complete or severe loss of the subjective sense of smell. Loss of smell may be caused by many factors such as cold, allergy, OLFACTORY NERVE DISEASES; viral RESPIRATORY TRACT INFECTIONS (e.g., COVID-19), aging and various neurological disorders (e.g., ALZHEIMER DISEASE).

#### Tree locations:

Olfaction Disorders C10.597.751.600.500  
C23.888.592.763.550.500

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### Aortic Valve Disease

Diseases involving the AORTIC VALVE functionality. Aortic valve disease often results in a backward and/or regurgitated blood flow into the LEFT VENTRICLE or a decreased blood flow from the heart. It includes congenital (e.g., bicuspid aortic valve), syndromic, and acquired (e.g., age-related, infection-associated) conditions.

#### Tree locations:

Heart Valve Diseases C14.280.484.048

### Aquifex

A thermophilic, gram-negative genus of bacteria in the phylum Aquificae and the family Aquificaceae. Rod-shaped and non-spore forming, this genus is known to grow near underwater volcanoes or hot springs.

#### Tree locations:

Gram-Negative Bacteria B03.440.025

### Auricularia

A genus of fungi in the family Auriculariaceae, order Auriculariales and phylum BASIDIOMYCOTA. Auricularia fungi are basidiomycetes which are gelatinous, ear-shaped mushrooms in decaying wood.

#### Tree locations:

Basidiomycota B01.300.179.105

### Autosomal Emery-Dreifuss Muscular Dystrophy

Emery-Dreifuss muscular dystrophy associated with mutations on LAMINS (LMNA gene).

#### Tree locations:

Laminopathies C16.320.488.500  
Muscular Dystrophy, Emery-Dreifuss C05.651.534.500.350.250  
C10.668.491.175.500.350.250  
C16.320.577.350.250

### Bacterial Zoonoses

Bacterial infections that may be transmitted between non-human animals and HUMANS.

#### Tree locations:

Bacterial Infections C01.150.252.162  
Zoonoses C01.973.250  
C22.969.250

### Aortico-Ventricular Tunnel

Congenital anomaly characterized by an extra-cardiac channel connecting the AORTA either to the right or left HEART VENTRICLE.

#### Tree locations:

Heart Defects, Congenital C14.240.400.118  
C14.280.400.118  
C16.131.240.400.118

### Aureobasidium

A genus of fungi in the family Saccotheciaceae, order Dothideales, and phylum ASCOMYCOTA. Aureobasidium fungi are cosmopolitan and form black hyphae when colony is aged. Aureobasidium pullulans is best known and is one of the causative agents of PHAEHYPHOMYCOSIS.

#### Tree locations:

Ascomycota B01.300.107.160

### Automated Facial Recognition

Electronic identification of a human based on attributes of the face.

**AN: FACIAL RECOGNITION is also available**

#### Tree locations:

Biometric Identification E05.318.740.225.500.250  
N04.452.910.099.250

### Bacillus thuringiensis Toxins

Endotoxins produced by BACILLUS THURINGIENSIS used in transgenic plants and insecticides. When eaten by a susceptible insect they are protease activated in the insect midgut resulting in death from bacterial septicemia.

#### Tree locations:

Bacterial Toxins D23.946.123.090

### Bacteriophage Receptors

Receptors on the bacterial cell surface which are recognized by BACTERIOPHAGES.

**AN: do not confuse with PHAGE ATTACHMENT SITES see ATTACHMENT SITES, MICROBIOLOGICAL**

#### Tree locations:

Bacterial Outer Membrane Proteins D12.776.097.120.712  
D12.776.543.100.650  
Receptors, Virus D12.776.543.750.830.062

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### Batrachochytrium

A genus of fungi in the order Rhizophydiales, class Chytridiomycetes and phylum CHYTRIDIOMYCOTA. Batrachochytrium fungi are chytrid fungi found in aquatic habitats. Many are parasitic including Batrachochytrium dendrobatidis which is causative agent for chytrid disease in aquatic invertebrates.

#### Tree locations:

Chytridiomycota B01.300.283.500

### Bicuspid Aortic Valve Disease

Congenital heart valve defects where the AORTIC VALVE has two instead of normal three cusps. It is often associated with AORTIC REGURGITATION and AORTIC INSUFFICIENCY.

#### Tree locations:

Aortic Valve Disease C14.280.484.048.875  
Heart Defects, Congenital C14.240.400.186  
C14.280.400.186  
C16.131.240.400.186

### Blood-Borne Infections

Diseases due to or propagated by body fluids from hosts whose BLOOD has been contaminated with pathogens.

#### Tree locations:

Communicable Diseases C01.221.250  
C23.550.291.531.500

### Caldicellulosiruptor

A genus of thermophilic, anaerobic, gram-positive, and non-spore forming bacteria in the order Thermoanaerobacterales and phylum FIRMICUTES. It is known for fermenting CELLULOSE and hemicellulose from plants and for its role in producing BIOFUELS.

#### Tree locations:

Firmicutes B03.353.563

### Betrayal

Act of violation of trust or confidence of a moral standard, etc.

#### Tree locations:

Interpersonal Relations F01.829.401.023

### Bipolaris

A genus of fungi in the family Pleosporaceae, order Pleosporales and phylum ASCOMYCOTA. Bipolaris fungi are ascomycetes and plant pathogens, mostly on POACEAE and some monocot crops. They are also causative agent for PHAEOHYPHOMYCOSIS and were formerly a part of Bipolaris, Cochliobolus and CURVULARIA complex.

#### Tree locations:

Ascomycota B01.300.107.200  
Mitosporic Fungi B01.300.381.114

### Brain Cortical Thickness

The thickness of the CEREBRAL CORTEX often detected automatically from medical imaging. Abnormal changes in cortical thickness (e.g., CORTICAL THINNING) are potential biomarkers for various neuropathologies.

#### Tree locations:

Neuroimaging E01.370.350.578.375  
E01.370.376.537.250  
E05.629.375

### Calliphoridae

A family of the superfamily Oestroidea in the order Diptera. Several species are major livestock pests causing MYIASIS by parasitic maggots.

**AN: for killing Calliphoridae with insecticides, see note at INSECTICIDES; infestation by maggots = MYIASIS**

#### Tree locations:

Diptera B01.050.500.131.617.720.500.500.750.155

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### Cardiac Papillary Fibroelastoma

Primary tumors predominantly of the CARDIAC VALVES characterized by multiple papillary frond structures. Although histologically benign, they may result in complications (e.g., valve dysfunction, EMBOLISM; STROKE; and SUDDEN DEATH).

#### Tree locations:

Heart Neoplasms C04.588.894.309.250  
C14.280.459.250

### Caregiver Burden

The stresses or associated emotional responses experienced by CAREGIVERS when caring for the mentally or physically disabled.

#### Tree locations:

Stress, Psychological F01.145.126.990.551

### Cell Competition

A cellular process that selectively eliminates cells with mutations from further development through short-range cell-cell interaction.

#### Tree locations:

Cell Physiological Phenomena G04.033

### Cercospora

A genus of fungi in the family Mycosphaerellaceae, order Capnodiales and phylum ASCOMYCOTA. Cercospora fungi are ascomycete and causative agents for plant fungal diseases such as leaf spots. Cercospora species produce the phytotoxin cercosporin and have no known sexual stage.

#### Tree locations:

Ascomycota B01.300.107.220

### Chain of Infection

A sequence of infection transmission from infectious agent leaving DISEASE RESERVOIR or host through a portal of exit, conveyed by some mode of transmission, and entering through a portal of entry to infect a susceptible host.

#### Tree locations:

Epidemiologic Methods N06.850.520.203

### Cardiometabolic Risk Factors

A cluster of personal behavior or lifestyle, environmental exposure, inborn or inherited conditions and characteristics, which, on the basis of epidemiological evidence, is known to be associated with CARDIOVASCULAR DISEASES and TYPE 2 DIABETES MELLITUS.

#### Tree locations:

Heart Disease Risk E05.318.740.600.800.725.500.500  
Factors N05.715.350.200.700.500.500  
N05.715.360.750.625.700.700.500.500  
N06.850.490.625.750.500.500  
N06.850.520.830.600.800.725.500.500

### Carnivorous Plant

Plants adapted to trap and kill insects and other non-plant organisms, deriving nutrients from trapped organisms.

#### Tree locations:

Plants B01.650.080

### Ceratocystis

A genus of fungi in the family Ceratocystidaceae, order Microascales, and phylum ASCOMYCOTA. Ceratocystis fungi are ascomycetes and causative agents for plant fungal diseases such as root rot.

#### Tree locations:

Ascomycota B01.300.107.210

### Cerebral Cortical Thinning

Decrease in CEREBRAL CORTICAL THICKNESS.

#### Tree locations:

Neurologic Manifestations C10.597.210  
C23.888.592.206  
Pathological Conditions, Anatomical C23.300.220

### Chemotherapy-Related Cognitive Impairment

The diminished or impaired mental and/or intellectual function associated with the chemical treatment of cancer.

#### Tree locations:

Cognitive Dysfunction F03.615.250.700.250  
Drug-Related Side Effects and Adverse C25.100.429  
Reactions

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### Chilopoda

Class of Arthropoda in the subphylum Myriapoda which comprises centipedes and millipedes. Chilopoda or centipedes are characterized by long multi-segmented bodies each segment with a pair of legs. Most centipedes are predatory and venomous. While centipede bites typically only cause pain, irritation and allergic reactions they sometimes cause acute HYPERTENSION and MYOCARDIAL ISCHEMIA.

#### Tree locations:

Arthropods B01.050.500.131.266

### Clavibacter

A genus of high GC content, Gram-positive aerobic bacteria in the family Microbacteriaceae and phylum ACTINOBACTERIA. This genus contains some phytopathogenic coryneform (club-shaped) bacteria causing stunting diseases in plants.

#### Tree locations:

Actinobacteria B03.510.024.232  
B03.510.460.400.400.049.663

### Clonal Hematopoiesis

Expansion of blood cells arising from mutant HEMATOPOIETIC STEM CELLS often related to aging. Mutations on epigenetic regulator genes are common in clonal hematopoiesis and may be a risk factor for HEMATOLOGIC NEOPLASMS and other cardiovascular diseases. When variant allele fraction is at least 2% and is present in the absence of severe cytopenias it is referred to as clonal hematopoiesis of indeterminate potential (CHIP).

#### Tree locations:

Clonal Evolution G04.375.500  
G05.158.500  
Hematopoiesis G04.152.825.207  
G09.188.343.207

### Colitis-Associated Neoplasms

Colonic neoplasms associated with chronic inflammation conditions such as ULCERATIVE COLITIS and CROHN DISEASE.

#### Tree locations:

Colonic Neoplasms C04.588.274.476.411.307.180.400  
C06.301.371.411.307.180.400  
C06.405.249.411.307.180.400  
C06.405.469.158.356.180.400  
C06.405.469.491.307.180.400

### Chronic Exertional Compartment Syndrome

Compartment syndrome characterized by pain in muscle groups with elevated compartment pressures due most often exercise training in athletes. Most often encountered chronic exertional compartment syndrome is in the anterior or deep posterior compartments of the lower leg in athletes in training similar to POPLITEAL ARTERY ENTRAPMENT SYNDROME.

#### Tree locations:

Compartment Syndromes C05.651.180.180  
C14.907.303.180

### Clinical Reasoning

Process by which clinicians collect signs and process information to understand the patient's medical situation or problem, and then plan and implement appropriate medical interventions.

#### Tree locations:

Clinical Decision-Making E01.055.500

### Clostridioides

A genus of anaerobic, gram-positive bacteria in the family Peptostreptococcaceae and the order CLOSTRIDIALES. It is a known cause of DIARRHEA in its most common form Clostridioides difficile, which used to be known as CLOSTRIDIUM DIFFICILE.

#### Tree locations:

Clostridiales B03.353.625.657

### Compulsive Exercise

Obsessive, excessive unhealthy levels of activity performed on a regular basis that overrides social activities and basic responsibilities and leads to anxiety when circumstances prevent exercise,

#### Tree locations:

Behavior, Addictive F01.145.527.100.120.250  
Exercise I03.350.062

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### Coronavirus 3C Proteases

3C proteases that occur in species of CORONAVIRIDAE.

**Tree locations:**

3C Viral Proteases D08.811.277.656.262.500.108.500  
D08.811.277.656.979.250.500  
D12.776.964.900.500.500.500

### Coronavirus M Proteins

Viral matrix proteins found in species of CORONAVIRIDAE.

**Tree locations:**

Viral Matrix Proteins D12.776.964.970.880.940.500

### Coronavirus Papain-Like Proteases

Papain-like proteases the occur in species of CORONAVIRIDAE.  
Some species have more than one gene.

**Tree locations:**

Viral Papain-like D08.811.277.656.262.500.896.500  
Proteases D08.811.277.656.979.750.500  
D12.776.964.900.500.750.500

### Coronavirus RNA-Dependent RNA Polymerase

RNA-Dependent RNA Polymerases found in species of CORONAVIRIDAE.

**Tree locations:**

RNA-Dependent RNA D08.811.913.696.445.735.780.500  
Polymerase  
Viral Replicase Complex D12.776.964.900.750.250  
Proteins

### Coronavirus Envelope Proteins

Membrane proteins in the VIRAL ENVELOPE of CORONAVIRUSES.

**Tree locations:**

Viral Envelope Proteins D12.776.964.970.880.163

### Coronavirus Nucleocapsid Proteins

Nucleocapsid proteins from species of the CORONAVIRIDAE virus family.

**Tree locations:**

Nucleocapsid Proteins D12.776.964.970.600.700

### Coronavirus Protease Inhibitors

Protease inhibitors that specifically inhibit one or more of the proteases that are produced by CORONAVIRUSES.

**Tree locations:**

Viral Protease Inhibitors D27.505.519.389.745.900.250

### Correctional Facilities

Places for the confinement of persons in lawful detention, including both persons awaiting trial under local jurisdiction and those persons convicted of crimes.

**AN: specify geographic location if pertinent**

**Tree locations:**

Non-Medical Public and Private Facilities J03.220

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### COVID-19

A viral disorder generally characterized by high FEVER; COUGH; DYSPNEA; CHILLS; PERSISTENT TREMOR; MUSCLE PAIN; HEADACHE; SORE THROAT; a new loss of taste and/or smell (see AGEUSIA and ANOSMIA) and other symptoms of a VIRAL PNEUMONIA. In severe cases, a myriad of coagulopathies often correlating with COVID-19 severity is seen (e.g., BLOOD COAGULATION; THROMBOSIS; ACUTE RESPIRATORY DISTRESS SYNDROME; SEIZURES; HEART ATTACK; STROKE; multiple CEREBRAL INFARCTIONS; KIDNEY FAILURE; catastrophic ANTIPHOSPHOLIPID ANTIBODY SYNDROME and/or DISSEMINATED INTRAVASCULAR COAGULATION). In younger patients rare inflammatory syndromes are sometimes associated with COVID-19 (e.g., atypical KAWASAKI SYNDROME; TOXIC SHOCK SYNDROME; pediatric multisystem inflammatory disease; and CYTOKINE STORM SYNDROME). A coronavirus SARS-CoV-2 in the genus BETACORONAVIRUS is the causative agent.

#### Tree locations:

Coronavirus Infections	C01.925.782.600.550.200.163
Pneumonia, Viral	C01.748.610.763.500
	C01.925.705.500
	C08.381.677.807.500
	C08.730.610.763.500
Respiratory Tract Infections	C01.748.214
	C08.730.214

### COVID-19 Serological Testing

Diagnosis of COVID-19 by assaying bodily fluids or tissues for the presence antibodies specific to SARS-COV-2 or its antigens.

#### Tree locations:

COVID-19 Testing	E01.370.225.312.250
	E05.200.312.250
Serologic Tests	E01.370.225.812.735.258
	E05.200.812.735.258
	E05.478.594.760.258

### COVID-19 Vaccines

Vaccines or candidate vaccines containing SARS-CoV2 component antigens, genetic materials, or inactivated SARS-CoV-2 virus, and designed to prevent or treat COVID-19.

#### Tree locations:

Viral Vaccines	D20.215.894.899.085
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### COVID-19 Nucleic Acid Testing

Diagnosis of COVID-19 by assaying bodily fluids or tissues for the presence of the VIRAL RNA of SARS-COV-2.

#### Tree locations:

COVID-19 Testing	E01.370.225.312.500
	E05.200.312.500

### COVID-19 Testing

Diagnosis of COVID-19 by assaying bodily fluids or tissues for the presence of COVID-19 antibodies, SARS-COV-2 antigens or the VIRAL RNA of SARS-COV-2.

#### Tree locations:

Clinical Laboratory Techniques	E01.370.225.312
	E05.200.312

### Crassulacean Acid Metabolism

A water-saving mode of photosynthesis whereby CARBON DIOXIDE (CO<sub>2</sub>) taken up during the nocturnal opening of stomata (STOMATA, PLANT) is fixed to produce malate, which is accumulated in VACUOLES overnight as malic acid and subsequently decarboxylated during the day with the resulting CO<sub>2</sub> produced being re-fixed by RUBISCO and re-assimilated through the REDUCTIVE PENTOSE PHOSPHATE CYCLE. CAM photosynthesis is found mostly in plants in arid areas, but it is also found in aquatic plants and orchids.

#### Tree locations:

Photosynthesis	G02.111.158.937.350
	G02.111.669.700.350
	G02.740.921.500
	G03.191.937.350
	G03.493.700.500
	G03.800.700.350
	G15.568.500

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### Curvularia

A genus of fungi in the family Pleosporaceae, order Pleosporales and phylum ASCOMYCOTA. Curvularia fungi are plant pathogens, mostly on grasses (POACEAE) and were formerly a part of Bipolaris, Cochliobolus and Curvularia complex.

#### Tree locations:

Ascomycota B01.300.107.240  
Mitosporic Fungi B01.300.381.279

### Dehalococcoides

A genus of organohalide-respiring bacteria in the class Dehalococcoidia and phylum CHLOROFLEXI. It can dehalogenate toxic compounds such as TETRACHLOROETHENE into less harmful chemical forms.

#### Tree locations:

Chloroflexi B03.275.575

### Dentist's Role

The expected function of a member of the dental profession.

#### Tree locations:

Professional Role F01.829.316.616.625.225

### Dermatophilus

A genus of high GC content, Gram-positive, aerobic bacteria in the family Dermatophilaceae and phylum ACTINOBACTERIA. Type species Dermatophilus congolensis is a known causative agent for dermatophilosis in humans and animals.

#### Tree locations:

Actinobacteria B03.510.024.288  
B03.510.460.400.400.049.719

### Developmental Dysplasia of the Hip

Dislocation of the HIP JOINT from an abnormal FEMORAL HEAD to the ACETABULUM relationship. It is most often due to ligamentous laxity, abnormal positioning of the joint and various other developmental, congenital factors, and method of delivery (e.g., OLIGOHYDRAMNIOS). When dislocation is diagnosed in neonates it is referred to as CONGENITAL HIP DYSPLASIA.

#### Tree locations:

Hip Dislocation C05.550.518.384.500  
Musculoskeletal Abnormalities C05.660.297  
C16.131.621.297

### Default Mode Network

Brain regions which are functionally-connected that are active during resting state and deactivated when engaged in task- or attention-oriented behavioral activities as seen in cognitive imaging studies often with fMRI.

#### Tree locations:

Neural Pathways A08.612.300

### Deltacoronavirus

A genus of Coronavirus that occurs primarily in BIRDS and PIGS.

**AN: infection: coordinate with CORONAVIRUS INFECTIONS**

#### Tree locations:

Coronavirus B04.820.578.500.540.150.257

### Deportation

Removal of a foreign national from a country.

#### Tree locations:

Jurisprudence I01.880.604.583.133

### Developmental Disability Nursing

Providing care for special needs patients with intellectual or other developmental needs.

#### Tree locations:

Nursing Care N02.421.533.175  
Specialties, Nursing H02.478.676.188

### Diagnostic Reference Levels

Radiological values used as guides to indicate whether the radiation dosage or amount of radiopharmaceutical being given to a patient is unusually high or unusually low for the specific medical imaging procedure.

#### Tree locations:

Radiation Dosage E05.799.513.250  
N06.850.810.250.090  
Reference Standards E05.978.808.125

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### Dickeya

A genus of gram-negative bacteria in the family Pectobacteriaceae and the order Enterobacteriales. Species of this genus are known phytopathogens that cause various diseases in plants such as POTATOES. It is closely related to PECTOBACTERIUM CHRYSANTHEMI.

#### Tree locations:

Gammaproteobacteria B03.660.250.139

### Disease Hotspot

Areas of increased disease risk, prevalence, incidence or higher efficiency of transmission.

#### Tree locations:

Disease Outbreaks N06.850.290.100

### Drug Elimination Routes

Various processes through which administered drugs are discharged from the body.

#### Tree locations:

Pharmacokinetics G03.787.297  
G07.690.725.297

### Economic Factors

Measures of available financial and material resources.

#### Tree locations:

Socioeconomic Factors I01.880.853.996.134

### Embolic Stroke

An ischemic stroke due to a blood clot, emboli or other types of blockage which forms somewhere other than the brain and subsequently travels near and restricts blood flow to the brain. Most often the origin of the clot is from the heart and is referred to as cardioembolic stroke.

#### Tree locations:

Ischemic Stroke C10.228.140.300.775.400.375  
C14.907.253.855.400.375

### Digital Technology

The design and development of devices and procedures that collect, store, analyze, manipulate, and display numerically encoded information, usually via processes encoded in the binary number system.

#### Tree locations:

Electronics H01.671.293.239  
Technology J01.897.160

### Double Stranded RNA Viruses

RNA viruses that have their genetic material encoded in the form of double-stranded RNA.

#### Tree locations:

RNA Viruses B04.820.223

### Drug Tapering

Gradual discontinuation or reduction of a therapeutic dose of a particular drug over a period of time.

#### Tree locations:

Drug Therapy E02.319.309

### Elevated Plus Maze Test

A maze test in which an animal is placed on the center of elevated platform and is allowed to choose one of four arms configured like a plus sign. Animals are inherently wary of open elevated areas and tend to avoid the open arms.

#### Tree locations:

Maze Learning F02.463.425.874.500.500

### Emotional Abuse

Nonphysical abuse as defined as a pattern of behavior in which one person deliberately and repeatedly subjects another to nonphysical acts that are detrimental to behavioral and affective functioning and overall mental well-being. (APA Dictionary of Psychology, accessed 4/21/2020),

#### Tree locations:

Social Problems I01.880.735.305

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### Erysiphe

A genus of fungi in the family Erysiphaceae, class Leotiomycetes and phylum ASCOMYCOTA. Erysiphe fungi are plant pathogens associated with powdery mildew.

**Tree locations:**

Ascomycota B01.300.107.280

### Eye-Tracking Technology

Techniques used for EYE MOVEMENT MEASUREMENTS, which capture and measure a person's EYE MOVEMENT and/or EYE GAZE.

**Tree locations:**

Eye Movement Measurements E01.370.380.230.642  
E01.370.405.245.787.642

### Fonsecaea

A genus of fungi in the family Herpotrichiellaceae, order Chaetothyriales, and phylum ASCOMYCOTA. Fonsecaea fungi are ascomycetes sometimes associated with CHROMOBLASTOMYCOSIS.

**Tree locations:**

Ascomycota B01.300.107.411

### Food Insecurity

Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

**Tree locations:**

Food Supply J01.576.423.750.688

### Freedom of Movement

The right to freedom of movement and residence within the borders of each state or nation. The right to leave any country and to return as provided in the Universal Declaration of Human Rights, Section 13, 1948.

**Tree locations:**

Human Rights I01.880.604.473.682

### Exiguobacterium

A genus of gram-negative bacteria in the phylum FIRMICUTES and the order BACILLALES. This genus is known for its ability to survive in a wide range of temperatures and plays a role in the diet of the MEALWORM.

**Tree locations:**

Bacillaceae B03.353.500.100.309

### Financial Stress

In medicine, a term used to describe problems a patient has related to the cost of medical care. Not having health insurance or having a lot of costs for medical care not covered by health insurance can cause financial problems and may lead to debt and bankruptcy. Financial stress can also affect a patient's quality of life and access to medical care. For example, a patient may not take a prescription medicine or may avoid going to the doctor to save money. Cancer patients are more likely to have financial stress than people without cancer. Also called economic burden, economic hardship, financial burden, financial distress, financial hardship, and financial toxicity. (<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/financial-stress>)

**Tree locations:**

Stress, Psychological F01.145.126.990.643

### Food Deserts

Areas characterized by relatively poor access to healthy and affordable food.

**Tree locations:**

Food Supply J01.576.423.750.594  
Sustenance J02.750.500

### Food Security

Access generally by all in a community to enough nutritious food for an active, healthy life. (from <http://www.fns.usda.gov/fsec/> accessed 4/22/2011)

**Tree locations:**

Food Supply J01.576.423.750.875

### Freedom of Religion

The right to practice, worship, observe, and teach one's beliefs without external without external constraints.

**Tree locations:**

Human Rights I01.880.604.473.515

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Functional Status

Ability regarding basic physical and cognitive activities such as walking or reaching, focusing attention, and communicating, as well as the routine activities of daily living, including eating, bathing, dressing, transferring, and toileting; and life situations such as school or play for children and, for adults, work outside the home or maintaining a household. (from <https://www.nvhs.hhs.gov/wp-content/uploads/2017/08/010617rp.pdf>)

#### Tree locations:

Activities of Daily Living N02.421.784.110.500  
Health Status N06.850.505.400.425.175

### Fungal Genus Venturia

A genus of fungi in the family Venturiaceae, order Venturiales, and phylum ASCOMYCOTA. Venturia fungi are ascomycetes and causative agents for plant fungal diseases such as apple scab caused by Venturia inaequalis.

#### Tree locations:

Ascomycota B01.300.107.456

### Gender Role

Social role encompassing a range of behaviors and attitudes that are considered acceptable based on perceived sex.

#### Tree locations:

Gender Identity F01.393.446.250.625  
F01.752.747.385.200.625  
Social Norms F01.829.750.500

### HaCaT Cells

A spontaneously transformed human epithelial cell line developed from a long-term primary culture of human adult skin KERATINOCYTES. As it maintains an epidermal differentiation capacity, it has been used as a model for keratinization studies. (From: J Cell Biol. 1988 Mar;106(3):761-71.)

#### Tree locations:

Cell Line A11.251.210.353  
Keratinocytes A11.409.500.500  
A11.436.397.500

### Fungal Genus Humicola

A genus of ascomycetous fungi of the family Chaetomiaceae, order SORDARIALES, and phylum ASCOMYCOTA. Humicolar fungi develop lateral CONIDIA and form minimally developed or no conidiophores.

#### Tree locations:

Sordariales B01.300.107.800.390

### Gender Equity

Fairness of treatment for men and women according to their respective needs. This may include equal treatment or treatment that is different but which is considered equivalent in terms of rights, benefits, obligations, and opportunities. [United Nations Educational, Scientific and Cultural Organization]

#### Tree locations:

Prejudice F01.145.813.550.312  
Sociology I01.880.302

### Glycemic Control

Strategies used for regulating BLOOD GLUCOSE levels. Such strategies include administration of INSULIN; DIETARY MODIFICATION; and EXERCISE.

#### Tree locations:

Therapeutics E02.491

### Health Belief Model

A model which is based on certain predictors of a person's perception of threat severity, susceptibility, interventional benefits and self-efficacy about a health threat that can be used to promote and educate health behavior.

#### Tree locations:

Models, Psychological E05.599.695.275  
Models, Theoretical E05.599.323

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Heart Disease Risk Factors

Aspects of personal behavior or lifestyle, environmental exposure, inherited conditions and characteristics, which are determined to be associated with HEART DISEASES.

#### Tree locations:

Risk Factors E05.318.740.600.800.725.500  
N05.715.350.200.700.500  
N05.715.360.750.625.700.700.500  
N06.850.490.625.750.500  
N06.850.520.830.600.800.725.500

### Hericium

A genus of fungi in the family Hericiaceae, order Russulales, and phylum BASIDIOMYCOTA. Hericium fungi are basidiomycetes with distinctive white fruiting body that resembles icicles such as in lion's mane mushroom, Hericium erinaceus.

#### Tree locations:

Basidiomycota B01.300.179.108

### High Reliability Organizations

Organizations operating complex, high-hazard domains for extended periods without serious accidents or catastrophic failures. The concept of high reliability extends beyond standardization. High reliability organizations cultivate resilience by relentlessly prioritizing safety over other performance pressures. (from <https://psnet.ahrq.gov/primer/high-reliability> accessed 3/25/2020)

#### Tree locations:

Organizations N03.540.468

### Host Adaptation

Genetic changes that allow an infectious organism to develop a symbiotic relationship with the organism they infect or jump a species barrier to infect a new host organism.

#### Tree locations:

Adaptation, Biological G16.012.875  
Host-Pathogen Interactions G06.462.190  
G16.527.200.190

### Hyperferritinemia

A finding of elevated serum level of FERRITIN. It is often associated with IRON OVERLOAD, repeated blood transfusions, malignancy, iron metabolic syndromes, virus infection, liver injury or dysfunction, and renal failure. Hyperferritinemia in iron metabolic syndromes (e.g., Still's diseases, and HEMOPHAGOCYTIC SYNDROME) is referred to as dysmetabolic hyperferritinemia.

#### Tree locations:

Iron Metabolism Disorders C18.452.565.300

### Hemorrhagic Stroke

Stroke due to rupture of a weakened blood vessel in the brain (e.g., CEREBRUM HEMISPHERE; CEREBELUM; SUBARACHNOID SPACE).

#### Tree locations:

Stroke C10.228.140.300.775.300  
C14.907.253.855.300

### Heteroplasmy

The occurrence of more than one organellar GENOME in the organelle population of a cell, tissue, or individual organism. It is due to the accumulation of different mutations that occur within the population of individual organelles of a cell.

#### Tree locations:

Genetic Variation G05.365.461

### HIV Testing

Diagnosis of HIV INFECTIONS by assaying bodily fluids or tissues for the presence of HIV ANTIBODIES; HIV ANTIGENS; or the VIRAL RNA of HIV.

#### Tree locations:

Microbiological Techniques E01.370.225.875.408  
E05.200.875.408

### Human-Animal Interaction

Encompasses any situation where there is interchange between human(s) and animal(s) at an individual or cultural level. These interactions are diverse and idiosyncratic, and may be fleeting or profound. (<https://www.avma.org/KB/Policies/Pages/The-Human-Animal-Bond.aspx> accessed 8/22/2019)

#### Tree locations:

Behavior F01.145.496

### Hyperspectral Imaging

The use of SPECTROMETRY measurements (of radiance, reflectance, optical scattering, absorption, etc.) made for each point of an image, across the whole spectrum of a selected spectral range such as infrared, visual, ultraviolet, or X-rays. Hyperspectral images are analyzed to determine the make up and location of specific chemical compounds in the objects being imaged.

#### Tree locations:

Spectrum Analysis E05.196.867.381

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Hyperthermia

An abnormal elevation of body temperature, usually as a result of inability to regulate core body temperature due to non-pathologic factors.

#### Tree locations:

Body Temperature Changes C23.888.119.455  
Heat Stress Disorders C26.522.750

### Identity Recognition

Ability to identify another individual by their facial, vocal, and other bodily features or distinguishing characteristics such as BODY HEIGHT; EYE COLOR; a birth mark or TATTOO; or GAIT.

#### Tree locations:

Pattern Recognition, Physiological F02.463.593.524.250

### Immune Checkpoint Inhibitors

Drugs that block negative regulator IMMUNE CHECKPOINT proteins (e.g., PD-1 RECEPTOR and CTLA-4 ANTIGEN) thereby increasing suppressed immune activation in immunotherapies.

#### Tree locations:

Antineoplastic Agents D27.505.954.248.487  
Molecular Mechanisms of Pharmacological Action D27.505.519.507

### Indigenous Canadians

The three groups of indigenous aboriginal peoples of Canada. These include First Nations, Inuit and Métis. These are three distinct peoples with unique histories, languages, cultural practices and spiritual beliefs.

#### Tree locations:

Indians, North American M01.686.508.150.600.375

### Hyperthermic Intraperitoneal Chemotherapy

A cancer treatment that involves filling the abdominal cavity with heated chemotherapy drugs. It is performed after the surgeon removes tumors or lesions from the abdominal area, to kill any cancer cells that remain after surgery and reduce the risk for cancer recurrence. (From: <https://www.mdanderson.org/treatment-options/hyperthermic-intraperitoneal-chemotherapy.html>; Feb, 20, 2020)

#### Tree locations:

Chemotherapy, Adjuvant E02.186.170.500  
E02.319.170.500  
Hyperthermia, Induced E02.565.370

### Imaging Genomics

The field of study investigating the relationship between imaging features, identified during various imaging procedures, and the presence of various genetic or molecular markers of particular disorders and diseases.

#### Tree locations:

Genomics H01.158.273.180.350.850  
Phenomics H01.158.273.180.700.500  
Radiology H02.403.740.663

### Immune Checkpoint Proteins

Immunomodulators that regulate immune system either in stimulatory or inhibitory fashion allowing IMMUNE TOLERANCE. Activation of suppressed immune system (IMMUNOSUPPRESSION (PHYSIOLOGY)) in immunotherapy by IMMUNE CHECKPOINT INHIBITORS often targets inhibitory checkpoint molecules.

#### Tree locations:

Biological Factors D23.383  
Proteins D12.776.465

### Induced Demand

Stimulating demand by providing or selling of sometimes unnecessary services to users accompanied by exercising power on behalf of service providers.

#### Tree locations:

Economics N03.219.665

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Inonotus

A genus of fungi in the family Hymenochaetales, order Hymenochaetales, and phylum BASIDIOMYCOTA. Inonotus fungi are basidiomycetes and include medicinal mushrooms such as chaga mushroom (*Inonotus obliquus*).

#### Tree locations:

Basidiomycota B01.300.179.109

### Internet Addiction Disorder

Problematic, compulsive Internet use that results in significant impairment of person's function in daily life.

#### Tree locations:

Behavior, Addictive F01.145.527.100.120.750

### Interprofessional Education

Education which encourages health professionals to learn the their teammates' roles and responsibilities, making them better able to provide patient-centered care.  
(<https://www.simulationiq.com/blog/content/cross-departmental-interprofessional-education-overcoming-common-obstacles> accessed 8/22/2091)

#### Tree locations:

Education, Professional I02.358.805

### Jails

Place of confinement for persons held in lawful custody in a place under the jurisdiction of a local government such as a city or county for the confinement of persons awaiting trial or those convicted of misdemeanor crimes.

**AN: specify geographic location if pertinent**

#### Tree locations:

Correctional Facilities J03.220.250

### Internal Hernia

A protrusion of an internal abdominal organ through a hole in an anatomical structure such as a muscle or a membrane. For instance, in paraduodenal hernia the SMALL INTESTINE herniates through an opening in the MESENTERIES. It includes intra-abdominal and diaphragmatic hernias. In abdominal hernia a protrusion occurs through a weak spot in the muscle of the ABDOMINAL WALL.

#### Tree locations:

Hernia C23.300.707.960

### Internet Use

Utilization of the Internet and its services.

#### Tree locations:

Communication L01.143.580  
Internet L01.224.230.110.500.673

### Ischemic Stroke

Stroke due to BRAIN ISCHEMIA resulting in interruption or reduction of blood flow to a part of the brain. When obstruction is due to a BLOOD CLOT formed within in a cerebral blood vessel it is a thrombotic stroke. When obstruction is formed elsewhere and moved to block a cerebral blood vessel (see CEREBRAL EMBOLISM) it is referred to as embolic stroke. Wake-up stroke refers to ischemic stroke occurring during sleep while cryptogenic stroke refers to ischemic stroke of unknown origin.

#### Tree locations:

Stroke C10.228.140.300.775.400  
C14.907.253.855.400

### Kimura Disease

A chronic inflammatory disease characterized by benign enlargement of cervical LYMPH NODE and SALIVARY GLANDS with increased levels of IMMUNOGLOBULIN E. Unlike ANGIOLYMPHOID HYPERPLASIA WITH EOSINOPHILIA it involves eosinophil infiltrates in lymph node and salivary glands and mostly found in Asian males.

#### Tree locations:

Lymphadenitis C15.604.315.459  
Salivary Gland Diseases C07.465.815.178

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Laminopathies

Congenital neuromuscular and muscular dystrophy diseases associated with mutations in the LAMIN TYPE A (Lamin A/C or LMNA gene). It includes CARDIOMYOPATHY, DILATED, 1A; CHARCOT-MARIE-TOOTH DISEASE, type 2B1; EMERY-DREIFUSS MUSCULAR DYSTROPHY, types 2 and 3; HUTCHINSON-GILFORD PROGERIA SYNDROME; LIPODYSTROPHY, FAMILIAL PARTIAL, TYPE 2; Malouf syndrome; Mandibuloacral dysplasia; LMNA-related muscular dystrophy; Restrictive dermopathy, lethal; Heart-hand syndrome, Slovenian type.

#### Tree locations:

Genetic Diseases, Inborn C16.320.488

### Latent Infection

Delayed infection of the host by a dormant or inactive pathogen.

#### Tree locations:

Infections C01.550

### Liberibacter

A genus of gram-negative ALPHAPROTEOBACTERIA in the family RHIZOBIACEAE that is a known plant pathogen transmitted by PSYLLIDS.

#### Tree locations:

Rhizobiaceae B03.660.050.662.347

### Lynngbya

A unicellular, photosynthetic genus of CYANOBACTERIA belonging to the family Oscillatoriaceae. It is a known cause of seaweed dermatitis and also Ciguatera poisoning when ingested.

#### Tree locations:

Cyanobacteria B03.280.355  
B03.440.475.100.355

### Mania

A state of elevated excitement with over-activity sometimes accompanied with psychotic symptoms (e.g., PSYCHOMOTOR AGITATION, inflated SELF ESTEEM and flight of ideas). It is often associated with mental disorders (e.g., CYCLOTHYMIC DISORDER; and BIPOLAR DISEASES).

#### Tree locations:

Neurobehavioral Manifestations C10.597.606.483  
C23.888.592.604.487  
F01.700.548

### Laser Speckle Contrast Imaging

Two-dimensional imaging created from the quantification of the blurring of speckle (randomly varying intensity patterns of light seen after it is scattered through a medium) that occurs spatially or temporally. LSCI is used for measuring blood flow in tissues such as the retina, skin, and brain.

#### Tree locations:

Optical Imaging E01.370.350.589.062  
E05.642.062

### Leptosphaeria

A genus of fungi in the family Leptosphaeriaceae, order Pleosporales and phylum ASCOMYCOTA. Leptosphaeria fungi are filamentous ascomycetes mostly found in soil and rarely associated with opportunistic MYCETOMA.

#### Tree locations:

Ascomycota B01.300.107.538

### Logotherapy

Directive existential psychotherapy that emphasizes the importance of meaning in the person's life.

#### Tree locations:

Psychotherapy F04.754.528

### Magnetic Iron Oxide Nanoparticles

Synthesized nanoparticles related to iron oxide crystalline structures with magnetic properties useful for biomedical applications. Examples include hematite, magnetite and maghemite nanoparticles.

#### Tree locations:

Metal Nanoparticles J01.637.512.600.500.144

### Marathon Running

A sporting event in which participants run a distance of approximately 26.2 miles in a race.

#### Tree locations:

Running G11.427.410.568.610.660  
G11.427.410.698.277.750.660  
I03.350.750.660  
I03.450.642.845.610.660

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Masked Mycotoxins

Fungal toxins masked by other macromolecules thereby reducing detection levels of such mycotoxins.

#### Tree locations:

Mycotoxins D23.946.587.559

### Mechanical Tests

Evaluation of mechanical properties of material or a device.

#### Tree locations:

Materials Testing E05.570.500  
Mechanical Phenomena G01.374.687

### Mediterranea

A genus of gram-negative, anaerobic bacteria in the phylum BACTEROIDETES and family BACTEROIDACEAE. This genus includes the type species *Mediterranea massiliensis*, which resides in the human colon.

#### Tree locations:

Bacteroidaceae B03.440.080.094.389

### Metal Workers

Craftspersons who take ordinary types of flat metal and make them into specialized products for various duct and ventilation systems, as well as architectural and specialized metal fabrication.

#### Tree locations:

Occupational Groups M01.526.590

### Mast Cell Stabilizers

Compounds that prevent the release of inflammatory mediators from MAST CELLS.

#### Tree locations:

Anti-Inflammatory Agents D27.505.954.158.636  
Immunologic Factors D27.505.696.477.914

### Mediation Analysis

A type of statistical analysis used to understand, clarify, and explain the relationship and pathway between a presumed cause (an independent variable) and effect (dependent variable) with respect to causal links (mediating variables) and/or to analyze the effect of an intervention (mediating factor/variable) on an outcome.

#### Tree locations:

Factor Analysis, Statistical E05.318.740.400.500  
N05.715.360.750.350.500  
N06.850.520.830.400.500

### Mesothelioma, Malignant

A type of mesothelioma with a tendency to metastasize. The majority of the tumors originate from either the PLEURA or PERITONEUM, but which may also originate in the PERICARDIUM or testicular tissue. It is associated with ASBESTOS exposure. Somatic mutations identified in WT1, BCL10, CDKN2A, NF2, and BAP1 genes are associated with the malignancy. OMIM: 156240

#### Tree locations:

Lung Neoplasms C04.588.894.797.520.173  
C08.381.540.144  
C08.785.520.124  
Mesothelioma C04.557.470.035.510.757  
C04.557.470.660.510.757  
Pleural Neoplasms C04.588.894.797.640.350  
C08.785.640.350

### Microbacterium

A genus of gram-positive, heat-resistant BACTERIA belonging to the family Microbacteriaceae and phylum ACTINOBACTERIA. Similar to CORYNEBACTERIACEAE, it is found in dairy products and the mammalian intestinal tract.

#### Tree locations:

Actinobacteria B03.510.024.775  
B03.510.460.400.400.049.775

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Microvascular Density

Measured density of MICROVESSELS in a given field of area. It is a surrogate BIOMARKER used for many physiological and pathophysiological processes such as angiogenesis, neovascularization, disease and tumor progressions.

#### Tree locations:

Cardiovascular Physiological Phenomena G09.330.480

### Mitochondrial Permeability Transition Pore

A multiprotein inner mitochondrial complex which opens only under certain pathological conditions (e.g., OXIDATIVE STRESS) uncoupling the membrane leading to APOPTOSIS and MITOCHONDRIAL TRANSMEMBRANE PERMEABILITY-DRIVEN NECROSIS particularly in CARDIOMYOCYTES during MYOCARDIAL REPERFUSION INJURY.

#### Tree locations:

Mitochondrial Membrane Transport D12.776.543.585.475.563  
Proteins D12.776.575.750.563  
Multiprotein Complexes D05.500.437

### Molecularly Imprinted Polymers

Synthetic polymeric matrices with artificial molecular recognition sites generated by MOLECULAR IMPRINTING TECHNIQUE. It can specifically bind target molecules (e.g., antibodies, enzymes or receptors).

#### Tree locations:

Polymers D05.750.218  
D25.720.517  
J01.637.051.720.573

### Multidimensional Scaling Analysis

A method of providing a visual representation of similarities among a set of data by plotting a map of perceived similarities on a set of vectors in p-dimensional space such that distances among them correspond to a function of the input matrix.

#### Tree locations:

Cluster Analysis E05.318.740.250.507  
N05.715.360.750.200.563  
N06.850.520.830.250.507  
Multivariate Analysis E05.318.740.150.500.500  
N05.715.360.750.125.500.500  
N06.850.520.830.150.500.500

### Military Deployment

The movement of MILITARY PERSONNEL and support structures to designated areas for the purpose of performing of military duties in support of a mission.

#### Tree locations:

Personnel Staffing and Scheduling I03.946.225.125  
Warfare and Armed Conflicts I01.880.735.950.375

### Models, Biopsychosocial

A systematic integration of biological, psychological, and social approaches to the study of mental health and specific mental disorders.

#### Tree locations:

Models, Theoretical E05.599.063

### Morris Water Maze Test

A maze test often used to evaluate spatial learning and memory in rodent models by measuring time a submerged platform in an open swimming arena is found.

#### Tree locations:

Maze Learning F02.463.425.874.500.750

### Mycosphaerella

A genus of fungi in the family Mycosphaerellaceae, order Dothideomycetes and phylum ASCOMYCOTA. Mycosphaerella are endophytic fungi and causative agents for plant fungal diseases such as leaf blight and foot and leaf rots.

#### Tree locations:

Ascomycota B01.300.107.613

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### N95 Respirators

Respiratory protective devices designed to achieve a close seal around the nose and mouth to maintain efficient filtration of aerosolized particles and droplets. They are often fitted for the prevention of the spread of infections (e.g. COVID19) or to administer inhaled anesthetics or other gases.

#### Tree locations:

Respiratory Protective Devices E07.700.700.500  
J01.637.708.560.937.500  
Surgical Attire E07.325.877.750  
E07.858.594.875

### Negative-Sense RNA Viruses

RNA viruses that have their genetic material encoded in the form of single-stranded, negative-sense RNA. Unlike RETROVIRUSES they do not employ DNA intermediates in their life-cycle

#### Tree locations:

RNA Viruses B04.820.480

### Nocardioides

A genus of aerobic Gram-positive high G+C DNA content bacteria in the family Nocardiaceae and the phylum ACTINOBACTERIA. Members can utilize a wide range of carbon and nitrogen sources including ethene and VINYL CHLORIDE.

#### Tree locations:

Actinobacteria B03.510.024.986  
B03.510.460.400.400.049.887

### Open Field Test

A maze test in which an animal is placed in an open chamber designed to assess anxiety and exploratory behavior by movement patterns. In novel object recognition test various objects are added to open field to assess exploration and memory.

#### Tree locations:

Maze Learning F02.463.425.874.500.875

### Orientia

A genus of intracellular, gram-negative obligate bacteria belonging to the family RICKETTSIACEAE and the phylum PROTEOBACTERIA. This genus also includes ORIENTIA TSUTSUGAMUSHI which is a known cause of SCRUB TYPHUS transmitted to humans by various TROMBICULID MITES.

#### Tree locations:

Rickettsiae B03.660.050.783.875.650.450

### Nasoalveolar Molding

A presurgical facial orthotic treatment for patients with bilateral and unilateral CLEFT LIP and CLEFT PALATE. The treatment uses NASOALVEOLAR MOLDING DEVICES designed to reduce the cleft gap, reposition the alveolar segments to improve nasal symmetry, shaping and lessening the severity of the cleft deformity before primary palatoplasty, cheiloplasty, and RHINOPLASTY.

#### Tree locations:

Preoperative Care E02.760.795.500  
E04.604.750.310  
N02.421.585.795.500

### Neglecta

A genus of gram-positive, anaerobic bacteria in the order CLOSTRIDIALES and phylum FIRMICUTES. This genus is known for the type species *Neglecta timonensis* which was discovered in the stool of a patient with DIABETES MELLITUS, TYPE 2.

#### Tree locations:

Clostridiales B03.353.625.774

### Nocardiopsis

A genus of gram-positive bacteria in the phylum ACTINOBACTERIA and family Nocardiopsaceae. This genus occurs in saline and alkaline soils, and is known for producing antimicrobial compounds such as thiopeptides.

#### Tree locations:

Actinobacteria B03.510.024.988  
B03.510.460.400.400.049.915

### Opiate Overdose

Accidental or deliberate use of an OPIOID in excess of normal dosage. It includes overdose for prescription and illicit opioids.

#### Tree locations:

Drug Overdose C25.775.383.500  
E02.319.306.500.500.500  
Opioid-Related Disorders C25.775.643.500.700  
F03.900.647.500.700

### Ovarian Torsion

A condition that occurs when an ovary twists around the ligaments that hold it in place. This twisting can cut off blood flow. It usually affects only one ovary.

#### Tree locations:

Ovarian Diseases C13.351.500.056.630.728  
C19.391.630.728  
Torsion Abnormality C23.300.970.625

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Pangolins

Solitary, chiefly burrowing and nocturnal mammals of the order Pholidota. They have bodies, tails and heads encased in sharp scales, which protect them when rolled up into a ball when threatened. Also called scaly anteaters, pangolins are myrmecophagous mainly eating ants and termites and are distributed in the warmer parts of the Asia and the Africa continents. Chinese pangolins are potential intermediate DISEASE RESERVOIR of COVID-19 virus, SARS-CoV-2.

#### Tree locations:

Eutheria B01.050.150.900.649.313.976

### Paraduodenal Hernia

A protrusion of the SMALL INTESTINE through an opening in the MESENTERY.

#### Tree locations:

Internal Hernia C23.300.707.960.750

### Persistent Left Superior Vena Cava

Finding of the SUPERIOR VENA CAVA on the left instead of the usual right side of the ASCENDING AORTA. In bilateral superior vena cava it is found on both sides.

#### Tree locations:

Vascular Malformations C14.240.850.930  
C16.131.240.850.902

### Pestalotiopsis

A genus of fungi in the family Sporocadaceae, order XYLARIALES, and phylum ASCOMYCOTA. Pestalotiopsis fungi are ascomycetes and causative agents for plant fungal diseases such as tip blight.

#### Tree locations:

Mitosporic Fungi B01.300.381.684  
Xylariales B01.300.107.950.500

### Phoma

A genus of fungi in the family Didymellaceae, order Pleosporales and phylum ASCOMYCOTA. Phoma fungi are ascomycetes commonly found in soil and aquatic environments including water distribution systems. Opportunistic superficial infection with Phoma fungi is PHAEOHYPHOMYCOSIS

#### Tree locations:

Ascomycota B01.300.107.700

### Pannus

A genus of CYANOBACTERIA in the family Synechococcaceae that is free-floating and occurs in various water environments attaching to algae and submersed plants.

#### Tree locations:

Cyanobacteria B03.280.622  
B03.440.475.100.622

### Pegivirus

A genus of virus in the family FLAVIVIRIDAE. While mostly non-pathogenic pegivirus coinfections are sometimes associated with NON-HODGKIN LYMPHOMA in human and a viral hepatitis Theiler's disease in horses.

#### Tree locations:

Flaviviridae B04.820.578.344.588

### Persistent Organic Pollutants

Toxic chemicals that persist for long periods of time in the ENVIRONMENT and that contaminate ECOSYSTEMS where they are released and where they are transported to by wind, water, and the FOOD CHAIN.

#### Tree locations:

Environmental Pollutants D27.888.284.429

### Phellinus

A genus of fungi in the family Hymenochaetaceae, class Hymenochaetales and phylum BASIDIOMYCOTA. Phellinus fungi are basidiomycetes which form large shelf-shaped mushrooms. Phellinus linteus (now Tropicoporus linteus) is a medicinal mushroom which produces compounds such as hispidin, a phenolic compound with antioxidant properties.

#### Tree locations:

Basidiomycota B01.300.179.115

### Phomopsis

A genus of fungi in the family Valsaceae, order Diaporthales and phylum ASCOMYCOTA. Phomopsis fungi are ascomycetes found in the soil and plants and causative agents for plant fungal diseases such as leaf blight and fruit rots.

#### Tree locations:

Ascomycota B01.300.107.708

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Phormidium

A genus of filamentous, sheathed CYANOBACTERIA in the family Oscillatoriaceae that is found mostly in aquatic environments and is similar to the genera LYNGBYA and PLECTONEMA.

#### Tree locations:

Cyanobacteria B03.280.631  
B03.440.475.100.631

### Physical Distancing

Maintaining recommended amount of spacial separation between self and others.

#### Tree locations:

Communicable Disease Control N06.850.780.200.688

### Planktothrix

A genus of CYANOBACTERIA in the order Oscillatoriales and family Microcoleaceae. Type species of this genus are found in lakes of the Northern Hemisphere and are known producers of hepatotoxins and MICROCYSTINS.

#### Tree locations:

Cyanobacteria B03.280.641  
B03.440.475.100.641

### Plant Necrosis and Chlorosis

Plant diseases affecting mostly leaves where either plant cells or tissues are dead and/or collapsed (necrosis) or yellowed due to loss of CHLOROPHYLL (chlorosis).

#### Tree locations:

Plant Diseases G15.610.525

### Positive-Strand RNA Viruses

RNA viruses that have their genetic material encoded in the form of single-stranded, positive-sense RNA. Unlike RETROVIRUSES they do not employ DNA intermediates in their life-cycle.

#### Tree locations:

RNA Viruses B04.820.578

### Photothermal Therapy

Application of LOCAL HYPERTHERMIA within a specific tissue using electromagnetic radiation to convert light/laser into heat often coupled with PHOTSENSITIZER including nanoparticle.

#### Tree locations:

Hyperthermia, Induced E02.565.460  
Phototherapy E02.774.834

### Phytoplasma Disease

Plant diseases caused by PHYTOPLASMA bacteria.

#### Tree locations:

Plant Diseases G15.610.350

### Plant Defense Against Herbivory

Traits developed in plants that help them avoid being used as host plants or food sources; or to tolerate and recover from HERBIVORY. Traits may be mechanical or chemical such as those that affect accessibility (thorns, thick husks, etc.), attractiveness to herbivore (odor, color, texture, etc.), digestibility (toxins, lignins, etc.), and movement in response to touch.

#### Tree locations:

Plant Physiological Phenomena G15.579

### Popliteal Artery Entrapment Syndrome

Entrapment of the POPLITEAL ARTERY in the LEG due to an abnormal course of the artery often associated with onset of development and/or overuse of the gastrocnemius or popliteus muscles on the back of the leg. It is most often associated with runners and other athletes with enlarged calf muscle that compresses the popliteal artery.

#### Tree locations:

Arterial Occlusive Diseases C14.907.137.671

### Practice Patterns, Pharmacists'

Patterns of practice related to how PHARMACISTS prepare or compound PRESCRIPTION DRUGS as especially influenced by cost of the service requested and provided.

#### Tree locations:

Delivery of Health Care N04.590.374.458  
N05.300.575

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Preoperative Exercise

Various physical exercises implemented before a surgery designed for better TREATMENT OUTCOME.

#### Tree locations:

Exercise G11.427.410.698.277.531  
I03.350.531  
Perioperative Care E02.760.731.850  
E04.604.875  
N02.421.585.722.850

### Pseudonocardia

A genus of high gram-content ACTINOBACTERIA in the family Pseudonocardiaceae. This genus is known for its antibiotic properties which aid in the protection of leafcutter ANTS from parasites in the fungus they produce.

#### Tree locations:

Actinobacteria B03.510.024.993  
B03.510.460.400.400.049.943

### Psychosocial Functioning

Level of and variations in social and emotional level of variations in social and emotional activity or behaviors.

#### Tree locations:

Behavior and Behavior F01.872  
Mechanisms  
Health Status N06.850.505.400.425.756  
Psychology, Developmental F04.096.628.270.500

### Psychotherapists

Trained professionals who treat mental or emotional problems using psychological rather than solely using medical methods.

#### Tree locations:

Health Personnel M01.526.485.858

### Quadricuspid Aortic Valve

Congenital malformation where the AORTIC VALVE has four instead of three cusps. It is often associated with AORTIC REGURGITATION and AORTIC VALVE STENOSIS.

#### Tree locations:

Aortic Valve Disease C14.280.484.048.937  
Heart Defects, Congenital C14.240.400.818  
C14.280.400.818  
C16.131.240.400.817

### Prolyl Oligopeptidases

A family of serine proteases with specificity for proline-specific cleavage of peptides that are not longer than 30 amino acids. In humans it is broadly distributed in all tissues with higher activity found in the brain.

#### Tree locations:

Serine Endopeptidases D08.811.277.656.300.760.637

### Pseudoscience

System of theories, assumptions, and methods erroneously regarded as based on science.

#### Tree locations:

Social Problems I01.880.735.646

### Psychosocial Intervention

Psychological and social interventions by providers including psychologists, psychiatrists, social workers, counselors/therapists, primary care and other nonpsychiatric physicians, nurses, physical and occupational therapists, religious leaders, lay and peer providers, paraprofessionals and caregivers, and automated providers (e.g. Internet/audio/video-delivered interventions). Combinations of provider options are sometimes used.

#### Tree locations:

Psychotherapy F04.754.715

### Puccinia

A genus of fungi in the family Pucciniaceae, order Pucciniales, and phylum BASIDIOMYCOTA. Puccinia fungi are causative agents for some plant fungal rust diseases such as cereal rust caused by Puccinia graminis.

#### Tree locations:

Basidiomycota B01.300.179.487

### Quick Diagnosis Units

Alternatives to conventional hospitalization for the diagnosis of suspected serious diseases allowing coordinated diagnostic procedures.

#### Tree locations:

Hospital Units N02.278.388.720

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Radiation Genomics

The study of the association between patient genomic data and the response to IONIZING RADIATION.

#### Tree locations:

Genomics H01.158.273.180.350.925  
Radiobiology H01.158.273.789.750  
Radiology H02.403.740.669

### Receptors, Coronavirus

A broad class of cell surface proteins that bind specifically to VIRAL SPIKE PROTEINS found on a CORONAVIRUS. The attachment of the virus is the first step of a process that leads to CORONAVIRUS INFECTIONS.

#### Tree locations:

Receptors, Virus D12.776.543.750.830.363

### Reinfection

Infection by the same infectious agent following a recovery. Reinfection may be by a different strain or reactivation of the same strain.

#### Tree locations:

Recurrence C23.550.291.937.250

### Renibacterium

A genus of high GC-content, Gram-positive ACTINOBACTERIA in the family MICROCOCCACEAE. The type species of this genus, Renibacterium salmoninarum, is known to cause bacterial kidney disease in SALMONIDS.

#### Tree locations:

Micrococcaceae B03.510.024.850.750  
B03.510.400.500.750

### Retinyl Esters

A carboxylic ester of retinol formed by condensation of the hydroxy group of retinol with a carboxy group.

#### Tree locations:

Esters D02.241.400.500  
Retinoids D02.455.326.271.665.202.495.754  
D02.455.426.392.368.367.379.249.700.775  
D02.455.849.131.495.754  
D23.767.261.700.735

### Rappaport

A genus of gram-negative GAMMAPROTEOBACTERIA in the family CARDIOBACTERIACEAE.

#### Tree locations:

Cardiobacteriaceae B03.660.250.080.775

### Recreational Drug Use

Occasional or habitual non-prescribed, not health-related use of substances.

#### Tree locations:

Behavior F01.145.683

### Reinjuries

Damage inflicted on the same body part as a previous injury.

#### Tree locations:

Wounds and Injuries C26.741

### Resistant Starch

Dietary starch and related high-molecular carbohydrate incapable of enzymatic hydrolysis in the SMALL INTESTINE and instead ferments in the COLON, producing SHORT-CHAIN FATTY ACIDS by-products.

#### Tree locations:

Dietary Fiber D09.301.416.750  
G07.203.300.400.750  
J02.500.400.750  
Starch D05.750.078.562.855.875  
D09.301.915.875  
D09.698.365.855.875

### Return of Spontaneous Circulation

Recovery of blood circulation reestablishing blood pressure and pulse after CARDIAC ARREST. Timeline and quality of care post-return of spontaneous circulation impacts cognitive RECOVERY OF FUNCTION in CARDIAC REHABILITATION.

#### Tree locations:

Blood Circulation G09.330.100.847

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Return to School

Resumption of educational activity following an hiatus or period of absence.

**Tree locations:**

Education I02.689

### Rhinorrhea

Excess nasal drainage.

**Tree locations:**

Signs and Symptoms, Respiratory C23.888.852.834

### Routinely Collected Health Data

Data collected for purposes other than research. Examples include health administrative data, electronic health records, and disease or clinical registries.

**Tree locations:**

Health Care Surveys N03.349.380.210.875  
N05.425.210.750

### SARS-CoV-2

A species of BETACORONAVIRUS causing atypical respiratory disease (COVID-19) in humans. The organism was first identified in 2019 in Wuhan, China. The natural host is the Chinese intermediate horseshoe bat, RHINOLOPHUS affinis.

**AN: infection = COVID-19**

**Tree locations:**

Betacoronavirus B04.820.578.500.540.150.113.968

### Self-Testing

Process whereby a person who wants to know his or her health status collects a specimen, performs a test and interprets the test result in private.

**Tree locations:**

Human Activities I03.733  
Self Care E02.900.950

### Rhamnogalacturonans

Types of polysaccharides that are components of the plant cell wall pectin matrix. Rhamnogalacturonan I is characterized by a backbone of the repeating disaccharide (4)-alpha-D-galacturonic acid-(1,2)-alpha-L-rhamnose-(1,-) with many of the rhamnose residues substituted at C-4 with side chains of various neutral sugars linked together in various ways. Rhamnogalacturonan II type is complex, highly branched polysaccharide where the backbone consists exclusively of D-galacturonic acid units.

**Tree locations:**

Pectins D05.750.078.738.500  
D09.698.670.500  
D20.215.784.500.618.500

### Rhizopus oryzae

A species of zygomycetous fungi of the genus RHIZOPUS, family MUCORACEAE, and order MUCORALES. It may cause MUCORMYCOSIS in IMMUNOSUPPRESSED HOSTS.

**Tree locations:**

Rhizopus B01.300.300.500.800.500

### Sanitary Surveys, Water Supply

**Tree locations:**

Data Collection E05.318.308.975  
N06.850.520.308.975  
Water Quality N06.850.460.350.080.750.500

### Schema Therapy

Therapy that emphasizes lifelong patterns, affective change techniques, and the therapeutic relationship.  
(<https://www.apa.org/pubs/videos/4310804>)

**Tree locations:**

Psychotherapy F04.754.834

### Semicircular Canal Dehiscence

A vestibular disorder caused by a pathologic third window into the BONY LABYRINTH (in contrast to the normal ROUND WINDOW OF EAR and the OVAL WINDOW OF EAR). It can present with autophony, sound- or pressure-induced VERTIGO, and chronic disequilibrium among other vestibulocochlear symptoms.(From: Semin Neurol. 2020 Jan 27; 48: 58-65.)

**Tree locations:**

Vestibular Diseases C09.218.568.900.663

## New MeSH Headings for 2021

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### Service Animals

Animals that have been trained to do work or perform tasks for an individual with a disability. The task(s) performed by the animal must be directly related to the person's disability. Emotional support, therapy, comfort, or companion animals are not considered service animals under the Americans With Disabilities Act.([www.ada.gov/regs2010/service\\_animal\\_qa.html](http://www.ada.gov/regs2010/service_animal_qa.html), accessed 3/31/2020)

#### Tree locations:

Animals, Domestic B01.050.050.116.812

### Severe Fever with Thrombocytopenia Syndrome

A tick-borne infection with SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME BUNYAVIRUS of the genus Phlebovirus. It is associated with fever, THROMBOCYTOPENIA; LEUKOCYTOPENIA, and multiorgan dysfunction. It is found in parts of Asia including China, Japan, Korea and Vietnam and can be transmitted from infected domestic animals and humans.

#### Tree locations:

Bunyaviridae Infections C01.925.782.147.905  
Tick-Borne Diseases C01.920.930.831

### Sexual Selection

A type of natural selection in which members of one sex choose to mate with members of the other sex that have genetically different components.

#### Tree locations:

Selection, Genetic G05.783.500

### Skeletal Muscle Enlargement

An increase in SKELETAL MUSCLE mass in normal muscle development. In human adults it results primarily from an increase in the size of SKELETAL MUSCLE FIBERS unlike in muscle hyperplasia where an increase in the number of skeletal muscle fibers is a major factor.

#### Tree locations:

Muscle Development G07.345.500.325.377.625.590.500  
G11.427.578.590.500

### Social Comparison

Perception of one's abilities and attitudes in relation to those of others in a process that plays a significant role in self-image and subjective well-being.

#### Tree locations:

Self Concept F01.752.747.792.962

### Sestrins

Alkylhydroperoxide reductases induced by the P53 TUMOR SUPPRESSOR PROTEIN. They may be involved in anti-OXIDATIVE STRESS response by regenerating oxidized PEROXIREDOXINS.

#### Tree locations:

Peroxidases D08.811.682.732.962

### Sexual Arousal

Physiological arousal elicited by sexual contact or by other erotic stimulation resulting in impulses being transmitted through the central nervous system. The impulses also trigger the release of sex hormones, dilation of the arteries supplying the genital areas, and inhibition of vasoconstrictor centers of the lumbar nerves.

#### Tree locations:

Arousal F02.830.104.518  
G11.561.035.369

### Sexual Trauma

Physical and psychological injuries resulting from SEXUAL VIOLENCE.

#### Tree locations:

Stress Disorders, Traumatic F03.950.750.438

### Social Cognition

Perception, interpretation, and categorizing self judgement of one's own social behaviors and group position and those of others.

#### Tree locations:

Social Perception F02.463.593.752.500

### Social Defeat

Conflict between members of the same species that generates emotional and psychological stress and increased social distance..

#### Tree locations:

Social Behavior F01.145.813.627

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Social Evolution

The process of cumulative change that arise over over successive generations in social interactions, especially between individuals of the same species,

**Tree locations:**

Social Behavior F01.145.813.653

### Social Inclusion

The process of improving the basis on which individuals and groups take part in society by improving the ability, opportunity, and dignity of those disadvantaged.

**Tree locations:**

Social Behavior F01.145.813.745

### Social Network Analysis

A set of methods that identify the ties or relationships linking each member of a group to every other member.

**Tree locations:**

Sociometric Techniques I01.880.866.500

### Sorangium

A genus of gram-negative, soil-dwelling DELTAPROTEOBACTERIA in the order MYXOCOCCALES that has gliding motility.

**Tree locations:**

Myxococcales B03.660.125.500.658

### Supermarkets

Self-service retail markets selling groceries, fresh produce, meats and other foods.

**Tree locations:**

Food Supply J01.576.423.750.937

### Social Factors

Social and cultural phenomena and influences that affect behavior.

**Tree locations:**

Socioeconomic Factors I01.880.853.996.877

### Social Interaction

Process involving reciprocal response between two or more individuals. This includes the development of cooperation and competition, the influence of status and social roles, and the dynamics of group behavior, leadership, and conformity. Persistent social interaction between specific individuals leads to the formation of social relationships.

**Tree locations:**

Interpersonal Relations F01.829.401.716

### Soil Erosion

The displacement of significant quantities of SOIL from an area by wind or rainwater runoff.

**Tree locations:**

Ecological and Environmental Phenomena G16.500.870  
Geological Phenomena G01.311.865

### Spray Drying

Method of drying liquids and liquid suspensions to prepare drugs in their final dehydrated powder form.

**AN: use only for drugs, not for food**

**Tree locations:**

Preservation, Biological E02.792.738  
Technology, Pharmaceutical E05.916.920

### Surgical Navigation Systems

Hardware and software tools that coordinate the use of imaging data (IMAGE INTERPRETATION, COMPUTER ASSISTED) to provide measurements for the planning of surgery and guidance of instruments during operating procedures in COMPUTER-ASSISTED SURGERY.

**Tree locations:**

Surgical Equipment E07.858.724

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Sustenance

Food and water regarded as a source of strength and requirements for life.

#### Tree locations:

Food and Beverages J02.750

### T Follicular Helper Cells

A specialized subpopulation of CD4+ T cells involved in formation of GERMINAL CENTER. Tfh are mostly located in secondary lymphoid organs, e.g., TONSIL; SPLEEN and LYMPH NODES. They are CD4 ANTIGEN; CD45 ANTIGEN; B-CELL LYMPHOMA 6 PROTEIN; CXCR5 RECEPTORS; ICOS INDUCIBLE T-CELL CO-STIMULATOR; and PD1 RECEPTOR positive.

#### Tree locations:

T-Lymphocytes, A11.118.637.555.567.550.500.400.450  
Helper-Inducer A11.118.637.555.567.569.200.400.450  
A11.118.637.555.567.569.500.400.450  
A15.145.229.637.555.567.550.500.400.250  
A15.145.229.637.555.567.569.200.400.250  
A15.382.490.555.567.550.500.400.450  
A15.382.490.555.567.569.200.400.450  
A15.382.490.555.567.569.500.400.450

### Team Sports

Organized recreational activities involving individuals.

#### Tree locations:

Sports I03.450.642.845.880

### Test Anxiety

Anxiety related to situations where abilities or knowledge are being tested.

#### Tree locations:

Performance Anxiety F01.470.132.650.500

### Sympathoadrenal System

A collection of SYMPATHETIC NERVOUS SYSTEM and the ADRENAL MEDULLA of the ADRENAL GLANDS. Intra-adrenal connection from the medulla to the cortex connects the system to other neuroendocrine systems, which in concert participate in FLIGHT REACTION in stress situations. CATECHOLAMINES are the principle hormone in the system.

#### Tree locations:

Adrenal Medulla A06.300.071.265.500  
Neurosecretory Systems A06.688.866  
A08.713.866  
Sympathetic Nervous System A08.800.050.800.850

### Tannerella

A genus of anaerobic, gram-negative bacteria in the family Tannerellaceae and phylum BACTEROIDETES. TANNERELLA FORSYTHIA, a known species of this genus, is a cause of PERIODONTAL DISEASES and associated with ESOPHAGEAL CANCER and BACTERIAL VAGINOSIS.

#### Tree locations:

Bacteroidetes B03.440.080.850

### Teleworking

Arrangement under which an employee performs the duties and responsibilities of such employee's position, and other authorized activities, from an approved worksite other than the location from which the employee would otherwise work. (from <https://www.opm.gov/FAQs/QA.aspx?fid=b48bf83b-440c-4f1e-a88c-3cdc9d802ac8&pid=75346675-3b92-4aec-831d-58cf5b0e86d2> accessed 3/26/2020)

#### Tree locations:

Employment N01.824.245.788  
Personnel Staffing and Scheduling N04.452.677.650.313

### Therapy Animals

Therapy animals visit hospitals, nursing homes, hospices, schools, and other places where people may be facing health challenges or stressors to provide an emotional or mental health benefit by their presence. They may also be used to assist physical and occupational therapists. Therapy animals are generally registered, trained, and screened, but are not covered by laws as are service animals.

#### Tree locations:

Animals, Domestic B01.050.050.116.859

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Thermobifida

A genus of thermophilic, gram-positive ACTINOBACTERIA in the family Nocardiopsaceae that is rod-shaped and found in decaying organic matter. This genus plays a major role in the degradation of plant cell walls.

#### Tree locations:

Actinobacteria B03.510.460.400.400.049.957

### Thermosynechococcus

A genus of thermophilic, unicellular CYANOBACTERIA in the family Synechococcaceae that is photosynthetic.

#### Tree locations:

Cyanobacteria B03.280.813  
B03.440.475.100.813

### Thrombotic Stroke

A type of ischemic stroke resulting from obstruction due to a BLOOD CLOT formed within in a CEREBRAL ARTERY often associated with ATHEROSCLEROSIS. A stroke due to a blood clot in a cerebral vein is a venous infarction (see VENOUS INFARCTION, BRAIN).

#### Tree locations:

Ischemic Stroke C10.228.140.300.775.400.750  
C14.907.253.855.400.750

### Tinea cruris

Fungal infection of the groin. The main causative fungus is TRICHOPHYTON.

#### Tree locations:

Intertrigo C17.800.174.640.500  
C17.800.815.650.500  
Tinea C01.150.703.302.720.745  
C01.800.200.720.745  
C17.800.838.208.883.608

### Tourism

Travel for pleasure.

#### Tree locations:

Travel I03.883.694

### Thermomonospora

A genus of high GC content ACTINOBACTERIA in the family Thermomonosporaceae. Species of this genus, Thermomonospora fusca and Thermomonospora curvata, are known for their roles in the industrial production of enzymes including CELLULASE.

#### Tree locations:

Actinobacteria B03.510.460.400.400.049.971

### Thermotoga

A genus of anaerobic, gram-negative bacteria in the family Thermotogaceae and phylum Thermotogae. Species of this genus such as THERMOTOGA MARITIMA and THERMOTOGA NEAPOLITANA are known to live in high-temperature environments and also play a role in HYDROGEN production.

#### Tree locations:

Gram-Negative Anaerobic Straight, Curved, and Helical Rods B03.440.425.410.748

### Timbre Perception

An ability to perceive and distinguish sound sources based on tonal quality or sound color (e.g., overtone).

#### Tree locations:

Auditory Perception F02.463.593.071.937  
G07.888.125.937

### Toona

A plant genus of the family MELIACEAE. Several members were formerly classified under CEDRELA (e.g., Toona sinensis formerly Cedrela sinensis) and produces various LIMONOIDS (e.g., toonins).

#### Tree locations:

Meliaceae B01.650.940.800.575.912.250.715.750

### Transtheoretical Model

A model which is based on a theory that people don't change at once but instead rely on multiple stages of readiness to change. Each stage in turn is associated with strategies for progressing through that stage.

#### Tree locations:

Health Belief Model E05.599.323.500  
E05.599.695.275.500  
Models, Theoretical E05.599.925

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Trauma Nursing

Specialization in the care of patients who suffer an acute injury or illness, whether it is accidental or intentional. It includes skills in caring for patients of all ages—from newborn to the elderly. Examples of cases that may be involved are: traffic accidents, or other wounds or injuries.

#### Tree locations:

Nursing Care N02.421.533.944  
Specialties, Nursing H02.478.676.960

### Tumor-Associated Macrophages

Various macrophages found in TUMOR MICROENVIRONMENT. They may interact with tumor cells to influence growth and NEOPLASTIC PROCESSES.

#### Tree locations:

Macrophages A11.329.372.850  
A11.627.482.850  
A11.733.397.907  
A15.382.670.522.815  
A15.382.680.397.815

### Uridylate-Specific Endoribonucleases

Endoribonucleases that cleave RNA at 5'-polyuridine locations within the RNA strand.

#### Tree locations:

Single-Strand Specific D08.811.277.352.700.350.850.500  
DNA and RNA  
Endonucleases

### Vancomycin-Resistant Staphylococcus aureus

Isolates of the Staphylococcus aureus that are resistant to the antibiotic VANCOMYCIN. The S. aureus becomes resistant by acquiring plasmids carrying genes for VANCOMYCIN RESISTANCE. Vancomycin-intermediate S. aureus has low-level vancomycin resistance requiring an intermediate concentration of vancomycin between sensitive and resistant isolates. These S. aureus with reduced susceptibility to vancomycin and related GLYCOPEPTIDE antibiotics are often seen in HEALTHCARE ASSOCIATED INFECTIONS.

#### Tree locations:

Staphylococcus aureus B03.300.390.400.800.750.100.750  
B03.353.500.750.750.100.750  
B03.510.100.750.750.100.750  
B03.510.400.790.750.100.750

### Treatment Switching

When patients in a randomized clinical trial switch from the treatment initially assigned to them to another treatment, typically from the control to experimental treatment.

**AN: use only in the context of a randomized controlled trial**

#### Tree locations:

Epidemiologic Methods E05.318.870  
N06.850.520.915  
Health Care Evaluation Mechanisms N05.715.360.912  
Therapeutics E02.990

### Uncinate Fasciculus

A hook-shaped WHITE MATTER axon tract that connects the uncus and pole of the TEMPORAL LOBE, the LIMBIC SYSTEM and the FRONTAL LOBE. It innervates AMYGDALA proper.

#### Tree locations:

Frontal Lobe A08.186.211.200.885.287.500.270.850  
Temporal Lobe A08.186.211.200.885.287.500.863.712

### User-Centered Design

Design process using input from users regarding systems, devices, or software.

#### Tree locations:

Equipment Design E05.320.775  
Software L01.224.900.900  
Universal Design J01.293.910.500

### Vertebral Body

Main portion of the vertebra which bears majority of the weight.

#### Tree locations:

Spine A02.835.232.834.946

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Vestibulocochlear Physiological Phenomena

Processes and properties of the VESTIBULOCOCHLEAR SYSTEM and the CRANIAL NERVE VIII.

**Tree locations:**

Physiological Phenomena G07.888

### Viral Genome Packaging

Folding of the viral genomic nucleic acid into the VIRUS PARTICLE.

**Tree locations:**

Virus Assembly G06.920.925.950.500

### Viral Papain-like Proteases

A subclass of cysteine endopeptidases found in VIRUSES that share structural similarities with PAPAINE.

**Tree locations:**

Cysteine Endopeptidases D08.811.277.656.262.500.896  
Viral Proteases D08.811.277.656.979.750  
D12.776.964.900.500.750

### Viral Proteases

A broad category of proteolytic enzymes that are produced by VIRUSES. They play a role in the viral life cycle by processing viral proteins and possibly acting on host cell proteins.

**Tree locations:**

Peptide Hydrolases D08.811.277.656.979  
Viral Nonstructural Proteins D12.776.964.900.500

### Viral Replication Compartments

Sites in the host cell where the virus induces the formation of cellular assemblies for the replication of the VIRAL GENOME.

**Tree locations:**

Inclusion Bodies, Viral A11.284.420.390.500  
G06.920.400.500

### Viral Envelope

Bilayer lipid membrane acquired by VIRAL PARTICLES during VIRAL MORPHOGENESIS. Although the LIPIDS of the viral envelope are host derived, various virus-encoded INTEGRAL MEMBRANE PROTEINS, i.e. VIRAL ENVELOPE PROTEINS are incorporated there.

**Tree locations:**

Virion A21.249.750

### Viral Packaging Sequence

Specific sequences in the viral nucleic acid that are involved in packaging the viral genome (VIRAL GENOME PACKAGING) into the VIRUS PARTICLES.

**Tree locations:**

Nucleotide Motifs G05.360.080.611.500  
Regulatory Sequences, Nucleic Acid G02.111.570.080.689.905  
G05.360.080.689.905

### Viral Protease Inhibitors

Compounds that specifically inhibit PROTEOLYTIC ENZYMES that are encoded by VIRUSES.

**Tree locations:**

Protease Inhibitors D27.505.519.389.745.900

### Viral Replicase Complex Proteins

Viral genome-encoded enzymes that facilitate the replication of RNA VIRUSES.

**Tree locations:**

Multienzyme Complexes D08.811.600.948  
Viral Nonstructural Proteins D12.776.964.900.750

### Viral Transcription

The biosynthesis of subgenomic viral RNAs, transcribed from the VIRAL GENOME.

**Tree locations:**

Transcription, Genetic G02.111.873.875

## New MeSH Headings for 2021

Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations

### Viral Zoonoses

Viral infections that may be transmitted between non-human animals and HUMANS.

#### Tree locations:

Virus Diseases C01.925.933  
Zoonoses C01.973.500  
C22.969.500

### Viroporin Proteins

Viral proteins that assemble into oligomeric ION CHANNELS which can facilitate the transfer of viral materials across the CELL MEMBRANE.

#### Tree locations:

Viral Envelope Proteins D12.776.964.970.880.970

### Waiting Rooms

Area for the use of persons such as clients, patients or visitors before an appointment or service.

#### Tree locations:

Health Facilities N02.278.956  
Non-Medical Public and Private Facilities J03.985

### Water Insecurity

The lack of reliable access to adequate quantities of acceptable quality water for sustaining livelihoods, human and well-being. (from <https://www.unwater.org/publications> accessed 3/34/2020)

#### Tree locations:

Drinking Water G07.203.100.418.750  
J02.200.418.750

### Virome

All of the VIRUSES that exist within a particular biological niche such as an organism or specific location of the organism, soil, a body of water, etc.

#### Tree locations:

Microbiota G06.591.968  
G16.500.275.157.049.100.500.968  
N06.230.124.049.100.500.937

### Voice Recognition

Ability to identify an individual vocal patterns and expressions.

#### Tree locations:

Identity Recognition F02.463.593.524.250.750  
Timbre Perception F02.463.593.071.937.500  
G07.888.125.937.500

### Warburg Effect, Oncologic

An observation in neoplastic cellular transformation, characterized by an increased glucose uptake via glycolytic activities resulting in an increased LACTATE production under aerobic microenvironment.

#### Tree locations:

Cell Respiration G03.197.810  
G04.270.810  
Cell Transformation, Neoplastic C04.697.098.500.580  
C23.550.727.098.500.580  
Glycolysis G02.111.158.750.500  
G03.191.750.500  
G03.295.436.500  
G03.493.360.500

### Workhouses

An establishment offering relief for the destitute poor in an area, funded from the local poor tax, which provided some combination of communal accommodation and a requirement for inmates, particularly the able-bodied, to perform work. (from [Workhouses.org.uk](http://Workhouses.org.uk) accessed 12/11/2019)

#### Tree locations:

Almshouses I01.880.787.190.500.500  
J03.340.030.500

## New MeSH Headings for 2021

*Listed in alphabetical order with Heading, Scope Note, Annotation (AN), and Tree Locations*

### **Working Dogs**

Dogs that are trained to perform practical tasks, as opposed to PETS or companion dogs.

#### **Tree locations:**

Animals, Domestic B01.050.050.116.906

### **Xylophilus**

A genus of gram-negative, aerobic BETAPROTEOBACTERIA in the order Burkholderiales that is a known cause of diseases in plants.

#### **Tree locations:**

Burkholderiales B03.660.075.090.941

### **X-Linked Emery-Dreifuss Muscular Dystrophy**

Emery-Dreifuss muscular dystrophy associated with mutations on emerin (EMD gene) or four and a half LIM domains 1 (FHL1 gene) both located on X chromosome.

#### **Tree locations:**

Muscular Dystrophy, Emery- C05.651.534.500.350.500  
Dreifuss C10.668.491.175.500.350.500  
C16.320.322.625.500  
C16.320.577.350.500