Pathologic Conditions to Study for Projects

Immunity

Systemic anaphylaxis

Autoimmune Hemolytic Anemia

Serum sickness

Transplant rejection

Autoimmune hemolytic anemia

Hashimoto’s thyroiditis

Autoimmune hemolytic anemia

Lupus - Systemic Lupus Erythematosus (SLE)

Rheumatoid Arthritis

SjÖgren Syndrome

Systemic Sclerosis

X-linked Agammaglobulinemia of Bruton

DiGeorge’s Syndrome

AIDS

Kaposi’s Sarcoma

*Amyloidosis*

Cancer

Malignant Tumors

osteosarcoma (bone),

rhabdomyosarcoma (striated muscle),

lieomyosarcoma (smooth muscle)

liposarcoma (fatty tissue)

fibrosarcoma (fibrous tissue)

chondrosarcoma ( cartilage)

teratoma

Renal Cell Carcinoma

Melanoma cancers

squamous cell carcinomas

Basal cell carcinomas

Acquired precancerous (preneoplastic) Disorders

Villous adenoma of colon

Leukoplakia

Chronic ulcerative colitis

Chronic atrophic gastritis

Hyperplastic and dysplastic proliferations

Persistent regenerative cell replication

Viral Carcinogenesis

Human Papillomavirus (HPV)

Epstein-Barr virus (EBV)

Kaposi sarcoma herpesvirus (KSHV)

Hepatitis B virus (HBV)

Hepatitus B and C

Genetic Diseases

Progeria

Mendelian Diseases

Marfan’s syndrome

Achondroplasia

Huntington’s disease

Cystic Fibrosis

Wilson’s disease

Sickle cell anemia

Hemophilia

Duchenne muscular dystrophy

Adult polycystic kidney disease

Familial hypercholestrolemia

Hereditary hemorrhagic telangiectesia (Osler- Weber- Rendu syndrome)

Hereditary spherocytosis

Huntington’s disease

Marfan’s syndrome

Neurofibromatosis (von Recklinghausen’s disease)

Tuberous sclerosis

Von Hippel- Lindau disease

Phenylketonuria (PKU)

Galactosemia

Tay-Sach’s Disease

Niemann-Pick Disease

Pompe disease

von Gierke disease

Mutations

 Autosomal

Trisomy 21 (Down Syndrome)

Edwards’ syndrome

Patau’s syndrome

Cri du chat (cry of a cat)

 Sex Chromosomes

Klinefelter’s syndrome .

Turners’ syndrome

Nonclassic inheritance (some are *epigenetic*!)

Fragile X syndrome

Prader-Willi Syndrome

Angelman Syndrome

Pediatric

Pediatric Diseases

Complications in preterm infants

Hyaline membrane disease (ARDS)

Necrotizing enterocolitis

Intraventricular and germinal matrix hemorrhage

Patent ductus arteriosus

Respiratory Distress Syndrome (RDS)

Fetal Hydrops

Cystic Fibrosis

Retinoblastoma

Wilm’s Tumor

Hemodynamic disorders

Pulmonary edema

Edema of the brain

Deep vein thrombi

Pulmonary thromboembolus

Systemic Thromboembolism

Hypovolemic shock

*Cardiogenic shock*

Septic shock

Anaphylactic shock

Vascular diseases

Berry Aneurysms

Arteriovenous (A-V) fistula

Arteriolosclerosis

Atherosclerosis

Hypertensive Vascular Disease

Abdominal Aortic Aneurysm

Thromboangiitis Obliterans (Buerger Disease)

Raynaud Phenomenon

Vasculitis

Aortic Dissection

Varicose Veins

Hemorrhoids

Esophageal varices

The Heart

Congenital Heart Disease

Atrial Septal Defect

Ventricular Septal Defect

Patent Ductus Arteriosus

Tetralogy of Fallot

Transposition of great arteries

Truncus Arteriosis

Coarctation of Aorta

General

Ischemic Heart Disease

Myocardial Infarction (MI) Heart Attack

Hypertensive Heart Disease

Mitral Valve Prolapse

Rheumatic Valvular Disease

Infective Endocarditis

Congestive or Dilated Cardiomyopathy

Hypertrophic Cardiomyopathy

Restrictive Cardiomopathy

Myocarditis

Pericardial Diseases

Pericarditis

Left Heart Failure

Right Heart Failure

Hematopoetic Disorders

Anemia

Hemolytic Anemias

Sickle Cell Anemia

Thalassemias

Vit.12 Deficiency (Pernicious) anemia

 White Blood Cell Disorders

Agranulocytosis/Neutropenia

Non-Hodgkin’s lymphomas

Leukemia

 Plasma Cell Disorders

Multiple Myeloma

Hodgkin’s Lymphoma

Acute Myelogenous Leukemia

The Lung

Acute Respiratory Distress Syndrome

Obstructive Lung Diseases

Emphysema

Chronic Bronchitis

Bronchial Asthma

Bronchiectasis

Silicosis

Asbestosis

Pulmonary Hypertension

Acute Pneumonias

Aspiration Pneumonia

Lung Abscess

Tuberculosis

Pleural Effusion and Pleuritis

Mesothelioma

Gastrointestinal Conditions

Hiatal Hernia

Mallory-Weiss Syndrome

Esophageal Varices

Esophageal Carcinoma

Chronic Gastritis

Peptic Ulcer

Gastric Ulcers

Meckel’s diverticulum

*Bowel Obstruction*

Inguinal hernia

*Enterocolitis*

*Crohn’s Disease* [Inflammatory Bowel Disease (IBD)]

Ulcerative Colitis

*Appendicitis*

The Kidney

Uremia

The Nephrotic Syndrome

The Nephritic Syndrome
*Poststreptococcal Glomerulonephritis
(Acute Glomerulonephritis)*

 Chronic Pyelonephritis

Analgesic Nephropathy

Acute Tubular Necrosis

Polycystic Kidneys

Diabetic Nephropathy

Urolithiasis (Kidney Stones)

Infectious Diseases

Clamydiae

Rickettsias

Mycoplasmas

Trichomonas vaginalis

 Entamoeba histolytica

Giardia

Plasmodium

 Leishmania

 Toxoplasma gondii

Cutaneous Leishmaniasis

Toxoplasma gondii

Giardia Lamblia

Rabies

Endocrine

Gigantism

Acromegaly

*Hypopituitarism*

Cushing’s syndrome

Graves disease

Hypothyroidism

Cretinism

Myxedema (Gull Disease)

Hashimoto’s Thyroiditis

Goiter

Primary Hyperparathyroidism

Osteitis fibrosa cystic

Hypoparathyroidism

Diabetes Mellitus

Ketoacidosis

Type II Diabetes Mellitus

Hirsuitism

 Addison’s disease

Liver and Gall Bladder

**Cirrhosis**

**Portal Hypertension**

**Ascitis**

**Jaundice**

**Viral Hepatitis**

**Pyogenic Liver Abscess**

**Hepatitus B and/or C**

**Alcoholic Liver Disease**

Wilson’s Disease

**Primary Sclerosing Cholangitis**

**Budd-Chiari Syndrome** (**Hepatic Vein Outflow Obstruction)**

**Cholelithiasis (gallstones)**

The Pancreas

**Acute Pancreatitis**

**Chronic Pancreatitis**

**Pancreatic Carcinoma**

Bone

OSTEOGENESIS IMPERFECTA

Achondroplasia

Osteoporosis

Paget Disease (Osteitis deformans)

Rickets

Osteomalacia

Pyogenic Osteomyelitis

Osteosarcoma

Chondrosarcoma

Ewing’s Sarcoma

Rheumatoid Arthritis

**Osteoarthritis**

**Gout**

Muscle

Duchenne Muscular Dystrophy (DMD)

Myotonic Dystrophy

Myasthenia Gravis

Rhabdomyosarcoma

Nervous System

Spina Bifida

**Megalencephaly**

**Microencephaly**

**Fetal Alcohol syndrome**

**Cerebral Edema**

**Hydrocephalus**

**Herniation of Brain tissue**

**Intracerebral hemorrhage**

**Traumatic Vascular Injuries**

**Epidural Hematoma**

**Pyogenic Meningitis**

**Cerebral Abscess**

**Tuberculosis**

**Meningoencephalitis**

**Encephalitis**

Kuru

**Cysticercosis**

**Brain Tumors**

**Multiple Sclerosis** (**MS**)

**Alzheimer Disease**

**Parkinson’s disease**

Huntington’s Disease

**Amyotrophic lateral sclerosis** (ALS, Lou Gehrig’s disease)

**Guillain-Barré syndrome**

Skin

**Acute Eczematous Dermatitis**

**Psoriasis**

**Lichen planus**

**Impetigo**

**Pemphigus**

**Vitiligo**

Melanoma cancers

Squamous cell carcinomas,

Basal cell carcinomas