# **Teaching topics:** Bone and soft tissue

# **Teaching outline:**

BONE REMODELING, GROWTH, AND DEVELOPMENT

DEVELOPMENTAL (GENETIC) ABNORMALITIES OF BONE

Defects in Nuclear Proteins and Transcription Factors

Defects in Hormones and Signal Transduction Mechanisms

Defects in Extracellular Structural Proteins

Defects in Folding and Degradation of Macromolecules

ACQUIRED ABNORMALITIES OF BONE

Diseases Associated with Decreased Bone Mass-Osteoporosis

Diseases Caused by Ostepclast Dysfunction- Paget Disease

**FRACTURES** 

OSTEONECROSIS (AVASCULAR NECROSIS)

**INFECTIONS ---OSTEOMYELITIS** 

Pyogenic Ostepmyelitis

**Tuberculous Osteomyelitis** 

Skeletal Syphilis

BONE TUMORS AND TUMOR-LIKE LESIONS

**Bone-Forming Tumors** 

**Cartilage-Forming Tumors** 

Fibrous and Fibro-Osseous Tumors

Ewing Sarcoma and Primitive Neuroectodermal Tumor (PNET)

Giant Cell Tumor

Metastatic Disease

#### **JOINTS**

### **ARTHRITIS**

Osteoarthritis

Rheumatoid Arthritis

Juvenile Rheumatoid Arthritis

Seronegative Spondyloarthropathies-Ankylosing Spondyloarthritis

Infectious Arthritis

Goat and Gouty Arthritis

Calcium Pyrophosphate Crystal Deposition Disease (Pseudogout)

TUMORS AND TUMOR-LIKE LESIONS

Ganglion and Synovial Cyst

Pigmented Villonodilar Synovitis/Giant Cell Tumor of Tendon Sheath

SOFT TISSUE TUMORS AND TUMOR-LIKE LESIONS

PATHOGENESIS AND GENERAL FEATURES

FATTY TUMORS-Lipoma, Liposarcoma

### FIBROUS TUMORS AND TUMOR-LIKE LESIONS

 $Reactive\ Pseudos arcomatous\ Proliferations-Nodular\ Fasciitis,\ Myositis\ Ossificans$ 

Fibromatoses-Superficial Fibromatosis, Deep-Seated Fibromatosis(Desmoid Tumors)

Fibrosarcoma

FIBROHISTIOCYTIC TUMORS-Benign Fibrous Histiocytoma, Malignant Fibrous Histiocytoma

TUMORS OF SKEKETAL MUSCLE-Rhabdomyosarcoma

TUMORS OF SMOOTH MUSCLE-Leiomyoma, Leiomyosarcoma

SYNOVIAL SARCOMA