

**Syllabus**  
**Pathological Physiology 2**  
**Summer Semester 2022/2023**  
**Week 6**

## **General Medicine**

### **1. Lecture**

- Motor disorders - neurophysiology, role of spinal cord, brain-stem, cerebellum, basal ganglia, cortex; Disorders: paralysis, extrapyramidal syndromes, neuromuscular disorders, myopathies
- Sensory system - Somatosensory disorders

### **2. Seminars**

- T: Glomerular and tubular disorders – classification, nephrotic, nephritic sy., etiopathogeneses, clinical signs, laboratory findings
- S: Kidney stones – classification, etiopathogenesis, clinical signs, complications  
Tubulointerstitial diseases - classification, etiopathogenesis, clinical signs, complications  
Pyelonephritis – acute, chronic, etiopathogenesis, clinical signs, complications

### **3. Examination of knowledge (quiz, oral examination)**

### **4. Presentations of semester works and selected topics according to the group schedules**

## **Dental Medicine**

### **1. Lecture**

- Motor disorders - neurophysiology, role of spinal cord, brain-stem, cerebellum, basal ganglia, cortex; Disorders: paralysis, extrapyramidal syndromes, neuromuscular disorders, myopathies
- Facial palsy

### **2. Seminars**

- T: Kidney stones – classification, etiopathogenesis, clinical signs, complications  
Tubulointerstitial diseases - classification, etiopathogenesis, clinical signs, complications
- S: Pyelonephritis – acute, chronic, etiopathogenesis, clinical signs, complications

### **3. Examination of knowledge (quiz, oral examination)**

### **4. Presentations of semester works and selected topics according to the group schedules**

**Seminars (S)** = special topics for discussion; **Tutorials & homeworks & exams (T)** = discussions, consultations, oral and quiz exams on the current topics.

**Note:** The range of topics and their timetable during the tutorials and seminars in each group is determined by the teacher and to a large extent, by the presentations, consultation interests, questions and readiness of the group and may vary in between groups. Neither tutorials nor seminars are lectures, but dialogue and discussion and thus require an active participation and preparation of students for the topics.

### **Recommended audiovisual materials**

- Introduction to Upper and Lower Motor Neuron Introduction to Upper and Lower Motor Neuron Lesions <https://www.youtube.com/watch?v=CIXsS7O8seg>
- Cerebral Palsy - (DETAILED) Overview <https://www.youtube.com/watch?v=7fUGWKM32hE>
- Bell's Palsy, Pathophysiology, Symptoms, Diagnosis and Treatment, Animation <https://www.youtube.com/watch?v=5KUbnVeMYEo>
- Spinocerebellar ataxia - causes, symptoms, diagnosis, treatment, pathology <https://www.youtube.com/watch?v=tX7OPCKvta8>
- Understanding Parkinson's disease <https://www.youtube.com/watch?v=ckn9zybpYZ8>
- What is Parkinson's Disease? <https://www.youtube.com/watch?v=cRLB7WqX0fU>

- Myasthenia Gravis <https://www.youtube.com/watch?v=il3vvxNpls8>
- The Duchenne Timeline <https://www.youtube.com/watch?v=wNthAUjytGg>
- Brown-Sequard Syndrome causes, pathophysiology, symptoms diagnosis and treatment <https://www.youtube.com/watch?v=J4rvgSQibTs>
- Nociceptors - An Introduction to Pain <https://www.youtube.com/watch?v=fUKlpuz2VTs>
- PAIN! Physiology - The Ascending Pathway, Descending Pain Pathway and the Substantia Gelatinosa <https://www.youtube.com/watch?v=5c8maFAhqlc>
- Gate Control Theory of Pain <https://www.youtube.com/watch?v=oQLFvGM7nl>