



Full Syllabus



Course Title	
Introduction to Inflammatory Mechanisms in brain degenerative diseases	
Lecturer	
Prof. Dan Frenkel Prof. Dinorah Friedmann-Morvinski	
Semester	
second	
Course requirements	
Recommended immunology and introduction to neurobiology	
Final grade components	
Exam	
Course schedule	
Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1	Resident brain cells – microglia, astrocyte, and oligodendrocyte, Blood Brain Barrier.
2	Peripheral immune cells and penetration to the brain
3	Inflammation in Neurological Diseases I: Stress conditions: 1) Autoimmune disease – Multiple Sclerosis, 2) Pathogen infiltration – Viral infection
4	Inflammation in Neurological Diseases III: Blood vessels injuries Head injury and stroke
5	Inflammation in Neurological Diseases IV: Brain degenerative diseases – ALS
6	Inflammation in Neurological Diseases IV: brain degenerative diseases – Alzheimer’s disease
7	Inflammation in Neurological Diseases IV: Brain degenerative diseases – Parkinson’s Disease and Huntington’s disease
8	Brain tumors interaction with immune cells
9	Immune therapeutic approaches in brain tumors
10	Immunotherapeutic Application in Neurological Diseases I:



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	Anti-inflammatory Drugs in Neurological Diseases
11	Glia in ageing and neurodegeneration
12	Immunotherapeutic Application in Neurological Diseases II: Can we develop vaccine against Neurological Diseases?
13	Immunotherapeutic Application in Neurological Diseases III: Therapeutic application in animal model and clinical trials
Required course reading	
Optional course reading	
Recommended papers will be presented in each lecture	
Comments	
הקורס ינתן בעברית אבל כל המצגות באנגלית	