



Content:

PROGRAM	5
Schedule	10
LECTURES	13
Zinc signals and the control of immune cell functions	15
Metallothioneins and neuroinflammation	16
Metallothionein in cancer development	17
Pathways in zinc resistance	18
Metallothionein – Immunohistochemical cancer biomarker: A meta-analysis	20
Electrochemistry of metallothioneins	22
Metallothionein and oxidative stress	25
PRACTICAL COURSES	27
Electrochemical determination of proteins by Brdicka reaction	29
Spectrophotometric and chipCE monitoring of zinc binding to MT	36
ELISA (Enzyme-Linked Immunosorbent Assay) for MT-1 and -2 detection in blood serum	41
Capillary electrophoresis determination of metallothionein	52
IMAC isolation of metallothioneins	57
ELISA (Enzyme-Linked Immunosorbent Assay)	62