

CZECH SOCIETY OF HISTOCHEMISTRY AND CYTOCHEMISTRY  
SYMPOSIUM WITH INTERNATIONAL PARTICIPATION

## PROGRESS IN BASIC , APPLIED AND DIAGNOSTIC HISTOCHEMISTRY



CONFERENCE HALL  
OF THE OFFICE OF THE DEAN BUILDING  
OF THE FIRST FACULTY OF MEDICINE  
OF CHARLES UNIVERSITY  
PRAGUE  
NOVEMBER 17 - 20 ,1996

ORGANIZED BY  
LABORATORY OF HISTOCHEMISTRY  
OF THE FIRST FACULTY OF MEDICINE  
OF CHARLES UNIVERSITY

*UNDER THE AUSPICES OF  
HIS MAGNIFICENCY PROF. JUDR. KAREL MALÝ, D.Sc.,  
RECTOR OF CHARLES UNIVERSITY  
and  
HIS SPECTABILITY DOC. MUDR. PETR HACH, CSc.,  
DEAN OF THE FIRST FACULTY OF MEDICINE*

**PROGRAM**

## SCIENTIFIC PROGRAM

Monday, November 18, 1996

9.00                      Opening ceremony

### INVITED LECTURES

Chairmen: G.Dhom , Z.Lojsda

- 9.20                      *R. Gossrau and Z. Grozdanovic* (Berlin , Germany )  
The nitric oxide synthase (NOS) I /nitric oxide (NO) signaling pathway  
in skeletal muscle.
- 10.05                      *W. Storch* (Heidelberg , Germany )  
Confocal laser-scanning fluorescence microscopy : New application in  
clinical immunology.
- 10.50 - 11.20              Coffee break

### CYTOCHEMISTRY OF THE MYOCARDIUM

Chairmen: J.Slezák , I.B.Buchwalow

- 11.20                      *I. B. Buchwalow, W. Schulze, G. Wallukat, M. M.Kostic and  
E.-G. Krause* (Berlin, Germany, Kragujevac, Yugoslavia)  
Signal transduction pathway ( G-protein - adenylylcyclase - nitric  
oxide synthase ) leading to NO production by cardiomyocytes : An  
immunocytochemical approach.
- 11.35                      *J. Slezák, W. Schulze, L'.Okruhlicová and N. Tribulová* (Bratislava,  
Slovak Republic, Berlin , Germany )  
Sub-microscopical localization of the Na,K-ATP-ase  $\alpha 1$ ,  $\alpha 2$  and  $\alpha 3$   
subunit in tissue cultured, neonatal and adult rat myocytes.
- 11.50                      *L'.Okruhlicová, N. Tribulová, C. Lugnier and J. Slezák* (Bratislava, Slo-  
vak Republic, Illkirch, France)  
Cytochemistry of cAMP-dependent phosphodiesterases in rat myocar-  
dium.
- 12.05                      *N. Tribulová, L'. Okruhlicová, B. Ziegelhoffer-Mihaličová and J.Slezák*  
(Bratislava, Slovak Republic)  
Histochemical detection of adenosine producing sites in the heart.

- 12.20 *B. Ziegelhöffer-Mihaličová, L. Okruhlicová, N. Tribulová, T. Ravingerová, J. Šeboková and A. Ziegelhöffer* (Bratislava, Slovak Republic)  
Detection of creatine phosphokinase activity in mitochondrial contact sites in normal and diabetic hearts. Effect of extracellular calcium.

12.35 - 2.00 p.m. Lunch

### **CYTOCHEMISTRY OF THE NERVOUS SYSTEM**

**CHAIRMEN : R. GOSSRAU , M. GRIM**

- 2.00 *J. Mokrý, D. Šubrtová and S. Němeček* (Hradec Králové , Czech Republic)  
Neural precursor cells in neurospheres can differentiate in the presence of EGF.
- 2.15 *Z. Syrová, M.R.Higgins, F.Sehnal and L.B. Tolber* ( České Budějovice, Czech Republic, Tuscon, Arizona, USA)  
Distribution of a lipocalin type regulatory neuropeptide in insect brain.
- 2.30 *P. Dubový, A. Oestlund and H. Aldskogius* (Brno, Czech Republic, Uppsala , Sweden )  
Usefulness of non-specific cholinesterase histochemistry for identification of Schwann cells in the PNS-CNS transitional zone of the rat spinal roots.
- 2.45 *M. Grim, J. Zelená, Z. Halata, G. Jeřábková and V. Szeder* (Praha, Czech Republic, Hamburg, Germany )  
Herbst corpuscles and muscle spindles in embryonic chick-quail chimeras.
- 3.00 *T. Soukup and M. Novotná* ( Praha , Czech Republic, Bratislava, Slovak Republic)  
Regeneration of muscle spindle .How predetermined or plastic are the intrafusal satellite cells?

### **CYTOCHEMISTRY OF THE SMALL INTESTINE**

**Chairpersons: H.Tlaskalová , W.Storch**

- 3.15 *Š. Mozeš , L. Lenhardt , S. Kuchár* ( Košice , Slovak Republic )  
Isolation of single cells for microdensitometric quantification of enzymatic activity .

- 3.30 *H. Kozáková, R. Štěpánková, Z. Řeháková and J. Kolínská* (Praha, Czech Republic )  
Brush-border disaccharidases, dipeptidyl peptidase IV and MHC class II antigens in the enterocytes of germ-free rats.
- 3.45 *Z. Lojda, J. Šmídová, R. Kotalová and J. Nevorál* (Praha, Czech Republic )  
Levels of endomysial antibodies in blood serum of patients with malabsorption syndrome and their relation to findings in the jejunal mucosa.

**Tuesday, November 19, 1996**

### **CYTOCHEMISTRY OF THE NUCLEUS**

**Chairmen : K.Smetana and I.Raška**

- 9.00 *I. Sauman and S.J.Berry* (České Budějovice, Czech Republic, Middletown,CT. USA )  
Immunocytochemical demonstration of actin associated with eukaryotic chromosomes.
- 9.15 *M. Eltsov and I. Raška* (Praha, Czech Republic)  
Detection of BEAF-32 protein by immunogold electron microscopy.
- 9.30 *K.Koberna, V.Landa, J.Kaňka, A.Pliss, I.Melčák, D.Staněk, M. Eltsov and K. Raška* ( Praha, Liběchov , Czech Republic )  
Non-isotopic detection of nucleolar transcription in permeabilized mouse embryos.
- 9.45 *I. Melčák and I. Raška* ( Praha, Czech Republic )  
Structural organization of the pre-mRNA splicing commitment. A hypothesis.

### **CYTOCHEMISTRY IN HEMATOLOGY**

#### **CYTOCHEMISTRY OF MACROPHAGES**

**Chairpersons : M. Klobušická and K.Smetana**

- 10.00 *K.Smetana, I. Jirásková, P.K. Chan and H. Busch* (Praha , Czech Republic, Houston,Texas, USA )  
The nucleolar coefficient and nucleolar cytochemistry in human blood monocytes.

- 10.15 *M. Klobušická and O. Babušíková* (Bratislava, Slovak Republic)  
The relationship between argyrophilic proteins and some immunophenotypic markers in acute leukemia cells.
- 10.30 *E. Zvetkova* ( Sofia , Bulgaria)  
Scanning cytospectrophotometric analysis of nuclear DNP of blood cells in human myeloid leukaemia.
- 10.45 *K. Smetana Jr., P. Zach , V. Němcová, P.Petrovický and H.-J. Gabius* ( Praha, Czech Republic , Munich , Germany )  
Influence of central nervous system on the expression of carbohydrate binding sites on spleen macrophages.
- 11.00 *E. Zvetkova, E. Katzarova, I. Choudhury, A. Dikov and I. Tsenov* ( Sofia , Bulgaria )  
Nitric oxide synthase and NO secretion pattern of murine macrophage subpopulations induced in vivo by ranopterin neopterin.

#### POSTER SESSION

**Chairpersons: T.Christova and V.Lichnovský**

- 11.15 - 12.00 *T.Christova, Z. Grozdanovic, D. Blottner and R. Gossrau* ( Sofia, Bulgaria , Berlin, Germany)  
Nitric oxide synthase I in neuromuscular junctions of type II .
- V. Lichnovský, Z. Kolář and Z. Tauber* ( Olomouc , Czech Republic )  
Development of BCL-2 expression in human embryos.
- D. Černochová, E. Pospíšilová, V.Lichnovský and L. Burda* (Olomouc, Czech Republic)  
Expression of P53 protein in CNS of human embryos
- M. Grim, K. Smetana jr. and J. Gabius* (Praha, Czech Republic, Munich, Germany)  
Migration of angiogenic cells from somites and limb primordia of avian embryos.
- V.Mareš, V. Lisá, A. Španová and D. Krajčí* (Praha, Czech Republic Kuwait City, Kuwait )  
Inhibition of growth and self-breakdown of C6 glioma cells exposed to Cisplatin and sodium borocaptate .

12.00 - 1.30 p.m.: Lunch.

13.30 Guided walk in old Prague.

Wednesday November 20,1996

**VARIA I**

**Chairmen : S.Čech and P.Dubový**

- 9.00 *S.Čech, W.Naib-Majani and W.Breipohl* (Brno, Czech Republic, Bonn Germany)  
Regional differences in expression of glucose-6-phosphate dehydrogenase activity in bovine lenses.
- 9.15 *B. Pospíšilová, O.Procházková, D.Slížová and P.Bílek* (Hradec Králové , Czech Republic )  
Topochemistry of alkaline phosphatase in the major salivary glands of mice at various ages of postnatal life, and during pregnancy and lactation.
- 9.30 *M. Tománek, D. Monniaux, C. Pisselet, T. Madigou and M.-L. Thieulant* (Praha-Uhřetěves, Czech Republic, Nouzilly, France, Rennes, France )  
In situ analysis of estrogen receptor mRNA in the ovary of sheep.
- 9.45 *M. Jirkovská, J. Šmídová and D. Palouš* ( Praha, Czech Republic )  
Quantitative histochemical study of alkaline phosphatase activity in normal and diabetic placenta.

**VARIA II**

**Chairmen: H.Ueberberg and Z.Lojda**

- 10.00 *Z. Lojda, J. Kobilková, J.Čapská and E. Havránková* (Praha, Czech Republic )  
Lysosomal enzymes and enzymes of pericellular proteolysis in the uterine cancer.
- 10.20 *Z.Zemanová and E.Maňáková* ( Praha , Czech Republic )  
Immunohistochemical study on the tubular-vascular barrier in normal and cystically dilated mesonephric tubules.
- 10.35 *K. Beneš and V. Šírová* ( České Budějovice , Czech Republic )  
Attempts to standardize safranin staining of lignified cell walls.
- 10.50 *J. Stano , P. Kovács, K. Neubert, P.Čupka and P.Blanárik* ( Bratislava, Malacky, Slovak Republic, Halle, Germany)  
Biochemical and histochemical study of CD 24 in some higher plants.

- 11.05      *J. Voříšek, N. Gas and M. Denis-Duphil* ( Praha, Czech Republic,  
Toulouse, France) .  
Cerium-based ultracytochemical localization of aspartate transcarbamylase activity in the yeast *Saccharomyces cerevisiae*.
- 11.20      *F. Weyda* (České Budějovice, Czech Republic)  
Eversible vesicle-vesicular gland complex in bristle tails (*Insecta Archeognatha* ).
- 11.35      Closing ceremony.