

**Societas Histo - et Cytochemica Bohemoslovaca**

**Symposium**  
cum participatione internationali

**PROGRESSUS IN HISTOCHEMIA GENERALI,  
APPLICATA ATQUE DIAGNOSTICA**

**HARRACHOV**

**Diebus 21 - 24 m. Aprilis 1987**

Organisatum pro Societate Histo-et Cytochemica  
a Laboratorio Histochemico  
Facultatis Medicae Universitatis Carolinae Pragensis  
sub directione prof. MUDr. Z. Lojda, DrSc., sodalis  
Acad.Sci. Bohemoslov.

## Sub auspiciis praesidium honorificorum

**Academicus J.Říman**

praeses Academiae Scientiarum Bohemoslovacae

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## SCIENTIFIC PROGRAM

Wednesday April 22, 1987

8.15 **Opening ceremony**

8.45-10.35 **Enzyme Histochemistry I**  
Chairmen: Garrett, J., Lojda, Z

1. 8.45-9.05 Stoward, P.J., Stapleton, A. (UK):  
Multivariate Quantitative Enzyme Histochemistry: A  
New Tool for Diagnostic Histopathology
2. 9.10-9.30 Gossrau, R., Lojda, Z., Graf, R., Ruhnke, M.,  
(Berlin-West, ČSSR)  
The Current State of Indoxyl Substrates in Catalytic  
Enzyme Histochemistry, Immunohistochemistry, Af-  
finity Histochemistry and Hybridocytochemistry
3. 9.35-9.45 Halbhuber, K.-J., Zimmermann, N., Linss, W. (GDR):  
Improvements in Cerium based Phosphatase Cytoche-  
mistry
4. 9.50-10.00 Slezák, J., Okrouhlicová, L., Tribulová, N. (ČSSR):  
Imperfectness and Pitfalls in Cytochemical Adeny-  
late Cyclase Demonstration and how to avoid them
5. 10.05-10.15 Seidler, E. (GDR):  
Model Tests for the Histochemical Investigation of  
Hydrolases with Tetrazolium Salts
6. 10.20-10.30 Stoward, P.J., Nakae, Y. (UK):  
Simultaneous Histochemical Assay of Two Dehydroge-  
nases in the Same Cell

10.35-10.50 Coffee Break

10.50-12.35 **Enzyme Histochemistry II**

Chairmen: Gosrau, R., Slezák, J.

7. 10.50-11.00 Juliš, J., Lojda, Z., Schnabel, R. (ČSSR, GDR):  
Some Examples of the Usefulness of Image Analysis  
in Enzyme Histochemistry
8. 11.05-11.15 Pařízek, J., Slížová, D. (ČSSR):  
Combined Enzyme Histochemistry - Resin Casts- Scanning  
Electron Microscopy Method
9. 11.20-11.30 Garrett, J.R., Osman, I.A., Smith, R.E. (UK, USA):  
Protease Histochemistry for Studying Human Mast  
Cells
10. 11.35-11.45 Lojda, Z., Kotalová, R., Šmídová, J., Ueberberg, H.  
(ČSSR, FRG):  
Protease Histochemistry in the Study of Mast Cells  
of the Human Jejunal Mucosa in Patients with Mal-  
absorption Syndrome
11. 11.50-12.00 Gosrau, R., Graf, J. (Berlin-West):  
Species Differences and the General Biological Sig-  
nificance of Proteases
12. 12.05-12.15 Lojda, Z., Růžičková, M., Šmídová, J., Prošková,  
J., Šálková, J., Smith, R.E. (ČSSR, USA):  
The Dilemma in the Choice of the Most Suitable  
Substrate for the Assessment of DPP IV Activity in  
Human Lymphocytes
13. 12.20-12.30 Dubový, P. (ČSSR):  
Histochemical Study of the Dipeptidyl Peptidase IV  
Activity in Cat and Macaque Glabrous Skin

12.35- 14.00 Lunch

14.00-16.45 **Immunohistochemistry**

Chairmen: Lippa, H., Lojda, Z.

14. 14.00-14.20 Raška, I., Kostrouch, Z., Jarník, M., Lejnar, J.,  
Bědnář, J., Petrašovičová, V., Koberna, K. (ČSSR):  
The Use of Colloidal Gold Complexes for Light and  
Electron Microscopic Histochemistry
15. 14.25-14.35 Schulze, W., Holtzhauer, M. (GDR):  
An Attempt to Localize Phospholamban by the Immuno-  
gold Technique
16. 14.40-14.50 Lukáš, Z., Viklický, V., Dráber, P., Feit, J.  
(GDR):  
Reactivity of Monoclonal Antibody (VI-01) to Vimen-  
tin and Desmin with Human Tissues
17. 14.55-15.05 Graf, R., Gosrau, R. (Berlin-West):  
Immunocytochemistry of the Cytoskeleton of the  
Mouse and Rat Decidua
18. 15.10-15.20 Hardonk, M.J., Koudstaal, J. (Netherlands):  
Immunohistochemical Methods in the Study of Kupffer  
Cell Behavior
19. 15.25-15.35 Geiler, G., Geiler, T. (GDR):  
Differentiation of B and T Lymphocytes of Synovial  
Fluid in Cases of Rheumatoid Arthritis Using Mono-  
clonal Antibodies. Relation to the Local Activity
20. 15.45-15.55 Bahn, H., Stiller, D. (GDR):  
Immunohistochemical Localization of Fibronectin in  
Soft Tissue Tumors
21. 16.00-16.10 Wöckel, W., Hofman, W. (FRG):  
Immunohistochemical Findings in the Carcinoid Tu-  
mour of the Thymus
22. 16.15-16.25 Fuchs, U., Hahn von Dorsche, H., Ziegler, M. (GDR):  
Glucagon Antibodies and Pancreatic Islets

23. 16.30-16.40 Hulinská, D., Ženka, J., Grim, M., Jegorov, A. (ČSSR):  
Immunocytochemical Study of Trichinella Spiralis and T. Pseudospiralis and Effect of their Excretion on the Muscle Fibre Alterations

16.45-17.00 Coffee Break

17.00-18.30 **Enzyme Histochemistry III**  
Chairmen: Stoward, P.J., Mitro, A.

24. 17.00-17.10 Rath, F.W., Körner, Th. (GDR):  
Enzyme Histochemical Investigations of Itos' Cells in Semithin Sections of Human Liver Biopsy Specimens

25. 17.15-17.25 Voříšek, J. (ČSSR):  
Electron-Cytochemical Localization of Leucine Aminopeptidase (P) and Carboxypeptidase Y in Vacuoles of Saccharomyces Cerevisiae

26. 17.30-17.40 Voříšek, J., Nagy, M., Hervé, G. (France):  
Ultracytochemical Localization of Dihydroorotate Dehydrogenase in Saccharomyces Cerevisiae

27. 17.45-17.55 Hadačová, V., Beneš, K., Klozová, E. (ČSSR):  
Are in Plant Material Naphthyl Esters and Naphthyl Amides Hydrolyzed by PAGE Identical or Different Enzyme Proteins?

28. 18.00-18.10 Beneš, K., Binarová, P. (ČSSR):  
The Localization of Carboxyl Esterase in Embryoids of Medicago Sativa L. in Connection with their Polarity

29. 18.15-18.25 Mrázková, O., Zemanová-Friebová, Z. (ČSSR):  
Enzymatic Activities in Developing Vascular Beds of the Chick Embryo Kidneys and Liver

Thursday, April 23, 1987

8.00-10.55 **Neurohistochemistry**  
Chairmen: Davidoff M., Lodin Z.

30. 8.00-8.10 Maršák, T.L., Zatssepina, O.V., Karavanov, A.A., Brodskij, V.Ja., Mareš, V. (USSR, ČSSR):  
Organization of the Nucleolar Apparatus and Transcription Activity of rRNA Genes in Nerve Cells of the Cerebellum

31. 8.15-8.25 Faltin, J., Lodin, Z., Lisá, V., Mareš, V., Lojda, Z. (ČSSR):  
Histochemistry of Peptidases in Cultivated Normal and Transformed Nerve and Glial Cells

32. 8.30-8.40 Mareš, V., Lisá, V., Faltin, J., Lisý, V., Lodin, Z., Lojda, Z. (ČSSR):  
 $\gamma$ -Glutamyl Transpeptidase (GGT) in C<sub>6</sub> Glioma Cells During Spontaneous Growth and After Sublethal Cisplatin Treatment

33. 8.45-8.55 Peoggel, G., Luppá, H., Ludwig, A. (GDR):  
Histochemical Demonstration of Cyclic Nucleotide Phosphodiesterase in the Hippocampus of Rat and Hamster

34. 9.00-9.10 Davidoff, M., Schulze, W. (BPR, FRG):  
Coexistence of Gaba and Choline Acetyltransferase in the Central Nervous System of the Rat

35. 9.15-9.25 Mitro, A., Lojda, Z. (ČSSR):  
Histochemical Study of Proteases in Extraventricular Liquor Space of Rat

36. 9.30-9.40 Kamarád, V. (ČSSR):  
Histochemical Changes in Rat Plexus Chorioideus After Supralethal Irradiation

37. 9.45-9.55 Mráz, J., Šubrtová, D. (ČSSR):  
The Effect of Isopropylmethyl-Phosphonofluoridate (Impf) on Nervous System, and Its Possible Influencing with Preventive Therapy

38. 10.00-10.10 Haninec, P., Grim, M. (ČSSR):  
Localization of Dipeptidylpeptidase IV (DPP IV) in  
Spinal Cord and Peripheral Nerve Sheaths of the Rat
39. 10.15-10.25 Pavlíková, D, Kapeller, K. (ČSSR):  
Distribution of Nucleoside Phosphatase by Cerium  
Methods in the Rat Superior Cervical Ganglion
40. 10.30-10.40 Dicuiescu, I. (RPR):  
Cytochemical Identification of Paranodal Zone in  
the Nerve Fibre
41. 10.45-10.55 Michel, G., Luppá, H., Andrä, J. (GDR):  
The Demonstration of Myo-neuronal Synapses in Swine  
Skeletal Muscle Fibres
- 11.00-11.15 Coffee Break
- 11.15-12.30 Histochemistry of Cardiac and Skeletal Muscles  
Chairmen: Schulze, W., Slezák, J.
42. 11.15-11.25 Okrouhlicová, L., Slezák, J., Tribulová, N. (ČSSR):  
Cytochemical Localization of Guanylate Cyclase in  
Cardiac Myocytes of Atrial and Ventricular Fibres
43. 11.30-11.40 Tribulová, N., Slezák, J., Gabauer, I., Okrouhlicová,  
L. (ČSSR):  
Morphological Expression of Peculiarities in Con-  
duction System Ischemia
44. 11.45-11.55 Lazarová, Z., Slezák, J. (ČSSR):  
Electron Microscopical Demonstration of the Activi-  
ty of Succinic Dehydrogenase in the Model of Iso-  
prenaline Necrotization of Myocardium
45. 12.00-12.10 Asmussen, G., Soukup, T. (ČSSR, GDR):  
Influence of Suspension Hypokinesia on Fibre Types  
of Rat Slow and Fast-Twitch Muscles
46. 12.15-12.25 Soukup, T., Asmussen, G. (ČSSR, GDR):  
The Effect of Suspension Hypokinesia on Muscle  
Spindles and Tendon Organs of the Rat Slow and  
Fast-Twitch Muscles

- 12.30-14.00 Lunch  
14.00 Sight Seeing (Walk)  
19.00 Banquet

Friday, April 24, 1987

- 8.00-11.00 Cytochemistry of Blood and Other Cells. Histoche-  
mistry of Digestive and Urogenital System  
Chairmen: Rath, W., Smetana, K.
47. 8.00-8.10 Lemež, P., Lemež, L., Lojda Z. (ČSSR):  
Cytochemical Examination on Chick Embryonic Haema-  
topoietic Cells
48. 8.15-8.25 Smetana, K., Jirsová, I. (ČSSR):  
Further Studies on the Distribution of AgNOR Proteins  
in Interphase Nucleoli
49. 8.30-8.40 Klobušická, M., Babušíková, O., Hrivňáková, A.  
(ČSSR):  
A Comparative Cytochemical and Biochemical Analysis  
of Immunologically Phenotyped Human Leukemia Cells
50. 8.45-8.55 Motlík, J., Fulka, J., Rimkevičová, Z., Fulka, J.  
(ČSSR):  
Effect of Cyclic and Elevating Agents on Nuclear  
Maturation of Pig and Mouse Oocytes
51. 9.00-9.10 Smetana, K.Jr. (ČSSR):  
Comments to the Biology of Multimiculate Osteo-  
clasts
52. 9.15-9.25 Kunz J., Duncker, M., Plaschke, C. (GDR):  
Mechanical Stress Effects on Cell Proliferation and  
<sup>3</sup>H-Proline Incorporation in Periodontal Ligament
53. 9.30-9.40 Lojda, Z., Kolínská, J., Šmídová, J., Gosrau, R.  
(ČSSR, Berlin-West):  
Are Synthetic Substrates Suitable for the Diagnosis  
of Sucrase-Isomaltase Deficiencies in Biopsies of Jeju-  
nal Mucosa of Patients with Malabsorption Syndrome?

54. 9.45-9.55 Kudweis, M., Vitovec, J., Koudela, B. (ČSSR):  
Some Histochemical Findings in the Intestinal Mucosa of Piglets During the Experimental Infection with *Coccidia Eimeria Scabra* (Henry 1931)
55. 10.00-10.10 Lichnovský, V., Lojda, Z., Boček, M., Melníková, A. (ČSSR):  
Activities of Some Hydrolases in the Developing Human Kidney (Metanephros)
56. 10.15-10.25 Abdalla, M., Lippa, H., Andrä, J. (GDR):  
Histochemische Darstellung und elektrophoretische Charakterisierung von Acetylcholinesterase in der Vertebratenniere
57. 10.30-10.40 Hardonk, M.J., Bakker, W.W. (Netherlands):  
Occurrence and Functional Significance of Nucleoside Di- and Triphosphatase in the Glomerular Basement Membrane of the Rat Kidney
58. 10.45-10.55 Graf, R., Gossrau, R., Ruhnke, R. (Berlin-West):  
Renal Proteases in Dogs and Marmosets. Alternative to the Human Enzymes?
- 11.00-11.15 Coffee Break
- 11.15-14.00 **Miscellaneous**  
Chairmen: Ueberberg H., Mareš V.
59. 11.15-11.25 De Nollin, S., Jacob, W., Dockx, P. (Belgium):  
Laser Microprobe Mass Analysis (Lamma) of Cytochemically Localized Calcium in *Aspergillus Fumigatus* after Exposure to Ketokonazole
60. 11.30-11.40 Wohlrab, F., Schwarz, J. (GDR):  
Stainability of Oxidized Insuline by Victoria Blue 4R. Spectrophotometric Investigation
61. 11.45-11.55 Bácsy, E., El-Sherif, G. (Hungary):  
Ultrastructural Study of the  $Ca^{2+}$ -Dependent ATP-ase Activity in Rat Adenohypophyseal Cells
62. 12.00-12.10 Čejková, J., Lojda, Z. (ČSSR):  
The Usefulness of the Histochemical Methods in the Evaluation of Corneal Hydration Changes in Various Experimental Conditions
63. 12.15-12.25 Čejková, J., Lojda, Z., Brůnová, B., Vacík, J., Michálek, J. (ČSSR):  
Morphological and Histochemical Changes in the Rabbit Corneas after Short-Term and Long-Term Wear of Soft Contact Lenses
64. 12.30-12.40 Kadon, M., Ulrici, V., Vogel, A., Pieper, K.S., Kässner, A. (GDR):  
Histochemical and Biochemical Investigation on Functional Characteristics of the Condylary Cartilage of the Temporo-Mandibular Joint in Miniature Pigs
65. 12.45-12.55 Žďárská, Z., Vaškounová, J. (ČSSR):  
Localization of Mucosubstances, Proteins, Enzymes and Lipids in the Adult Trematode *Brachylaimus Aequans*
66. 13.00-13.10 Bílek, P. (ČSSR):  
Differences of the Enzymes Activities in the Diverse Glandular Types of the Spider's Spinning Apparatus
67. 13.15-13.25 Weyda, F. (ČSSR):  
Vesicular Glands in Archacognatha (Insecta)
68. 13.30-13.40 Kulich, J., Vit, A., Horský, J., Friedrich, A. (ČSSR):  
Changes of Acid Phosphates and Non-Specific Esterase Zymograms Obtained after Isoelectric Focusing (IEF) of Homogenates of Virus Infected Plant Tissue
69. 13.45-13.55 Lodin, Z. Tauber, O. (ČSSR, FRG)  
A "Thought" on a Mutual Interaction between Peripheral Muscarinic Receptors, Enteropeptides and the Gastric Function and Hierarchy in the Peptides System
- 14.00 **Closing Ceremony**