Meetings

Embryology

The 6th International Embryological Conference was held in Helsinki, Finland, from 22 to 25 July, 1963. The topics and methods discussed ranged from subcellular physiology to embryonic behavior, and from electron microscopy to immunochemistry and transplantation.

Toivonen and his associates, Saxén, Vainio, and Kuusi, all of the University of Helsinki, have made outstanding contributions to embryonic induction and related problems, with emphasis on biochemical aspects. This classical topic was treated from various angles: Dodson (Cambridge) demonstrated the role of mesoderm in differentiation of skin epidermis in the chick embryo and showed that crude collagen can substitute for mesoderm, carrying differentiation all the way to cornification. The epithelium of the optic cup is a bipotential system in the sense that it can form either retina or pigment epithelium. Lopashov and Stroeva (Moscow) gave demonstrations of their extensive transplantation experiments in mammals, in which the role of the mesenchyme in directing the specification toward pigment epithelium was analyzed. The amphibian organizer is known to be located in the grey crescent region of the uncleaved egg. A. Curtis (London) has accomplished the technical feat of transplanting and extirpating parts of the cortical layer of the egg in the clawed toad (Xenopus). He has localized the organizer capacity to induce secondary embryos in the cortex. Vainio (Helsinki) uses virus infection as a sensitive tool for demonstrating metabolic changes in differentiating cells. He has shown a close relation between susceptibility to various viruses and cellular differentiation. For instance, polyoma virus infects only undifferentiated mesenchyme cells, not kidney tubules induced in them by the Grobstein method. The enzyme spectrum changes with such induction; alkaline phosphatase disappears at the time the incipient tubules become resistant to virus. D. Brown (Baltimore) discussed his biochemical studies of ribosomal, transfer, and messenger RNA formation in the first phases of frog development. New ribosomal RNA is not formed in quantity earlier than the tail-bud stages, but old, stored ribosomal RNA can be programmed by new messenger RNA. Magnesium plays a signal role in ribosome formation.

Immunochemical methods have been applied successfully for some time to the analysis of the development of lens proteins. A lively discussion between Langman (Montreal), Vyasov (Moscow), and others brought out a number of controversial points and the extreme complexity of the problem.

Problems relating to gametes were extensively covered. Dalcq and Pasteels (Brussels) discussed and demonstrated ultrastructural and histochemical aspects of gametogenesis and fertilization in vertebrates and invertebrates. Dettlaff and her co-workers (Moscow) showed the important role of the germinal vesicle in the maturation of frog oocytes. A controversy of long standing concerns the question of whether primordial germ cells supply all or only part of the gametes of the adult. The question has been decided for the clawed toad (Xenopus) by Blackler (Geneva), who made exchange transplants of the prospective germ cell area between neurulae of two subspecies, using, in addition, a nuclear marker. Adult frogs carrying transplants were mated with normal frogs. The eggs laid by some experimental females were exclusively of the graft (donor) type. Advances in the biochemical aspects of lens regeneration in amphibians were reported by Yamada (Oak Ridge). RNA synthesis in the cells of the upper iris which perform the regeneration were observed remarkably early, before any other

could be demonstrated. changes Through autoradiography, RNA was first localized in nuclei; from nuclei it is transferred to the cytoplasm. Electron-microscope data confirm this finding. RNA production is probably related to synthesis of lens fiber proteins. Elizabeth Hay (Boston) showed electron-microscope pictures, obtained through autoradiography, of the sequence of steps in the synthesis of collagen in regenerating emphibian limb cartilage. The process was traced from the earliest beginning, at the site of the cisternae of the endoplasmic reticulum, to the discharge of collagen to the extracellular space.

These conferences are open to all interested scientists. The approximately 200 participants at the Helsinki conference included many from the U.S.S.R. and countries of eastern Europe, and thus the meeting provided a fine opportunity for communication between embryologists of East and West.

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Meeting Notes

The following is a list of international and non-international meetings scheduled to take place in the Soviet Union and satellite nations during 1964 and 1965. Similar lists will appear quarterly in this section. In cases where an exact source for information is not known, the address of the academy of sciences of the nation in question is given.

January 1964 (no date)

Theoretical and Applied Mechanics, 2nd all-union congr., Moscow, U.S.S.R. (G. K. Mikhaylov, Organizing Committee, Dept. of Technical Sciences, Inst. of Mechanics, Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

February 1964 (no date)

Czechoslovak Medical Soc., 12th internal medicine day. (J. Berman, First Internal Medicine Clinic, U Nemocnice 2, Prague 2, Czechoslovakia)

March 1964 (no date)

Applied **Psychology**, 15th intern. congr., Dubrovnik, Yugoslavia. (Z. Bujas, Marulićev trg 19, Zagreb, Yugoslavia)

April 1964

4-11. Stomatology, intern. congr., Leipzig, East Germany. [German Acad. of

Sciences (Berlin), Mohrenstrasse 39, Berlin W.8, East Germany]

May 1964

6-10. East German Geographic Soc., 7th meeting, Leipzig. (The Society, Georgi Dimitroff Platz 1, Leipzig Cl)

May 1964 (no dates)

Mechanism of Antibody Formation, intern. symp., Prague, Czechoslovakia. (Inst. of Microbiology, Czechoslovak Acad. of Science, Na cvićišti 2, Prague 6)

Earth Slides, all-union conf., Kiev, U.S.S.R. (A. M. Drannikov, bul'var Shevchenko, 78, Kiyevskiy inzhenernostroitel 'nyy institut., Kiev)

Czechoslovak National **Geodetic** Conf., Czechoslovakia. (B. Volfik, Research Inst. of Geodesy, Topography, and Cartography, Prague 1)

Heat and Mass Transfer conf., Minsk, U.S.S.R. (Minsk Inst. for Heat and Mass Transfer, Minsk)

Czechoslovak Medical Soc., Internal Medicine, Experiment and Diagnosis. (J. Berman, First Internal Medicine Clinic, U Nemocnice 2, Prague, Czechoslovakia)

May-June 1964

Telecommunications Union, 3rd assembly of the consultative committee, Moscow, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

June 1964

3-5. Ultrasonic Diagnosis in Ophthalmology, 1st intern. symp., Berlin, East Germany. (W. Buschmann, Augenklinik der Humboldt Universität, Berlin, Ziegelstrasse 5, Berlin N4, East Germany)

15-19. Czechoslovak Microbiological Soc., intern. congr. on antibiotics, Prague, Czechoslovakia. (V. Vlćek, Antibiotics Research Inst., Roztoky, Czechoslovakia)

22–26. Material Handling Conf., Scientific Soc. for Mechanical Engineering, Hungary. (L. Prockl, Scientific Soc. for Mechanical Engineering, Szabadsag ter 17, Budapest 5, Hungary)

25–27. **Hungarian Radiological** Congr., Budapest. (Magyar Radiologus, Szakcsoport, Kongressbüro, Szabolcss ut., 35, Budapest 13)

June 1964 (no date)

Biological Action of **Ionizing Radiations**, all-union conf., Vil'nyus, U.S.S.R. (Inst. of Biophysics, Acad. of Sciences of the U.S.S.R., Moscow, B-133 ul Profsoyuznaya 7)

Balkan Medical Union, 7th Balkan Medical Week, Sofia, Bulgaria. (M. Popescu-Buzeu, 10 rue Progresului, Bucharest, Rumania)

July 1964

15-19. International Union of **Biological Sciences**, 15th general assembly, Prague, Czechoslovakia. (G. L. Stebbins, Dept. of Genetics, University of California, Davis)



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July 1964 (no date)

Testing and Research Laboratories of the International Union of Materials and Structures, 18th annual meeting of the permanent commission, Moscow, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

August 1964

2-8. International Assoc. of **Applied Psychology**, 15th congr., Ljubljana, Yugoslavia. (Inst. of Psychology, Faculty of Philsosophy, Askerceva 12, Ljubljana)

Philsosophy, Askerceva 12, Ljubljana) 3-10. International Union of Anthropological and Ethnological Sciences, 7th intern. conf., Moscow, U.S.S.R. (Inst. of Ethnography, Acad. of Sciences, Lenin Prospekt 7, Moscow)

9-16. Sodic Soils, 9th symp., Budapest, Hungary. (I. Szabolcs, Research Inst. of Soil Sciences and Agricultural Chemistry, Hungarian Acad. of Sciences, Herman-Otto-ut., 15, Budapest)

14-29. Soil Scientists, all-union soc.,

14-29. Soil Scientists, all-union soc., tour of the Soviet Union. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

17-22. Cardiology, 4th European congr., Prague, Czechoslovakia. (D. H. Kafka, Karlovy Namesti 32, Prague 2)

26-3. Electron Microscopy, 3rd European regional conf., Prague, Czechoslovakia. (Organizing Committee, Intern. Federation of Electron Microscopy Societies, Albertov 4, Prague 2)

31-9. Soil Scientists, 8th intern. congr., Bucharest, Rumania. (C. N. Cernescu, Geological Inst., Sosceaua Kiseleff 55, Bucharest)

August 1964 (no date)

Spectroscopy Conf., Scientific Soc. for Mechanical Engineering, Hungary, (L. Prockl, Scientific Soc. for Mechanical Engineering, Szabadsag ter 17, Budapest 5, Hungary)

September 1964

1-5. Material Testing, Scientific Soc. for Mechanical Engineering, Hungary. (L. Prockl, Scientific Soc. for Mechanical Engineering, Szabadsag ter 17, Budapest 5, Hungary)

15-20. Yugoslav Pharmacists, 4th congr., Opartija. (Yugoslav Acad. of Sciences and Arts, Zrinski trg. 11, Zagreb 1)

18. Coordination Chemistry, Hungarian Chemical Soc., Tihany. (M. T. Beck, Szabadsag ter 17, Budapest 5, Hungary)

30-4. Spectroscopy, 11th intern. conf., Belgrade, Yugoslavia. (Sekretarijat, Prirodno-matematicki fakultet, Fizickohemijsky zavod Beograd, Studentski trg., 16, Blok "C," Yugoslavia)

September 1964 (no date)

World Health Organization, European regional committee, 14th session, Prague, Czechoslovakia. (WHO, 8 Scherfigsveg Ø, Denmark)

Rheumatology, 11th Czechoslovak congr., Piestamy. (I. J. Charvat, Czechoslovak Medical Soc., Albertov 7, Prague 2)

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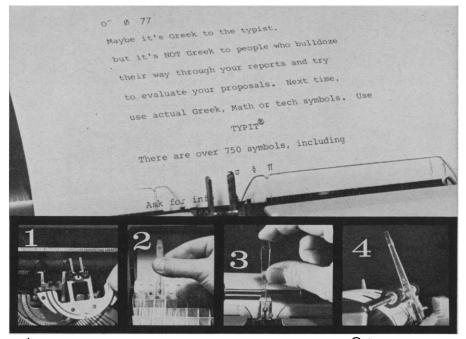
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Czechoslovak **Ophthalmological** Soc., 28th annual congr., Kosice. (Ophthalmological Diseases Clinic, Medical Faculty, P. J. Safarik University, Bratislavova 41, Kosice)

Prehistoric and Protohistoric Sciences, 7th intern. congr., Moscow, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Polarography in Chemotherapy, Biochemistry, and Biology, 2nd Jena symp., Jena, East Germany. (Inst. for Microbiology and Experimental Therapy. Reuthenbergstrasse 11, Jena)

September-October 1964

Pathophysiologists, 1st all-union congr., Tbilisi, U.S.S.R. (I. R. Petrov, All-Union Soc. of Pathophysiologists, Moscow, U.S.S.R.)

October 1964

7-9. Czechoslovak **Dermatological** Soc., symp. on structure and function of epidermal barriers, Brno. (Zd. Vlasin, Dermatological Clinic, Pekarska 53, Brno, Czechoslovakia)

October 1964 (no dates)

Iatrogenic Diseases, meeting, Internal Medicine Section of the Czechoslovak Medical Soc. (J. Berman, First Internal Medicine Clinic, U Nemocnice 2, Prague 2, Czechoslovakia)

Moorland Research, 9th intern. congr., Budapest and Keszthely, Hungary. (Hungarian Acad. of Sciences, Akademia-utca 2, Budapest)

November 1964 (no dates)

Progress in Treatment in Internal Medicine, meeting, Internal Medicine Section of the Czechoslovak Medical Soc. (J. Berman, First Internal Medicine Clinic, U Nemocnice 2, Prague 2, Czechoslovakia)

1964 (no dates)

International Congr. of Aeronautical Sciences, Warsaw, Poland. (Polish Acad. of Sciences, Palace of Culture and Sciences, Dworkowa 3, Warsaw)

Animal Blood Group, 9th conf., Czechoslovakia. (Czechoslovak Acad. of Sciences, Narodni tr. 3, Prague 1)

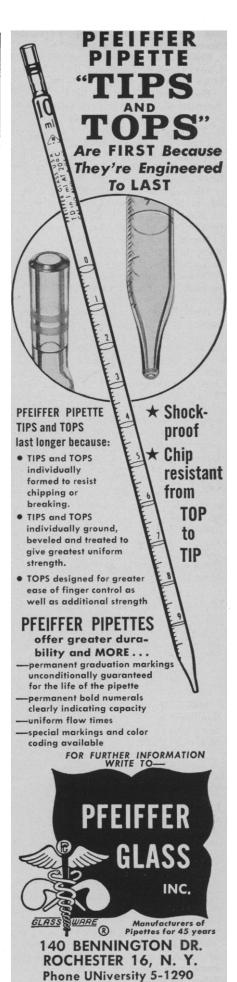
East German Chemical Soc., Processes Div., Freiberg, East Germany. (East German Acad. of Sciences, Mohrenstrasse 39, Berlin W.8)

Economic and Administrative Applications of **Digital Computers**, colloquium, Hungary. (A. Prekopa, "Bolyai Janos" Mathematical Soc., Szabadsag ter 17, Budapest 5, Hungary)

Electrochemistry of Organic Compounds, 5th conf., Moscow, U.S.S.R. (Institute of Chemistry, Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Electronics, 3rd biennial natl. conf., Prague, Czechoslovakia. (Czechoslovak Acad. of Sciences, Narodni tr. 3, Prague 1)

Technical and Scientific Films, 3rd intern. festival, Budapest, Hungary. (Scien-



tific Soc. of Mechanical Engineering, Szabadsag ter 17, Budapest 5)

Fracture Reservoirs, 3rd all-union conf., L'vov, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

French-Yugoslav Medical Meetings, Yugoslavia (Faculte de Medecine de Paris, 12, rue de l'Ecole de Medecine, Paris 6, France)

Legal Metrology, intern. committee, meeting, Bucharest, Rumania (closed). (Acad. of the Rumanian People's Republic, Calea Victoriei, 125, Bucharest)

Microelements and Natural Radioactivity in Soils, 4th conf., U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Neurocybernetics, 2nd all-union conf., Kiev, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Neurosurgery Conf., Prague, Czechoslovakia. (Czechoslovak Acad. of Sciences, Narodni tr. 3, Prague 1)

High Speed **Photography**, 7th intern. congr., Moscow, U.S.S.R. (Soc. of Motion Picture and Television Engineers, 55 W. 42 St., New York, N.Y. 10036)
High Energy **Nuclear Physics**, 12th in-

High Energy Nuclear Physics, 12th intern. conf., Moscow, U.S.S.R. (E. Tamm, Acad. of Sciences of the U.S.S.R., B. Kaluzhskaya 14, Moscow)

Ophthalmologists, 29th Polish congr, Krakow. (M. Wilczek, ul. Slawkowska m. 3, Krakow)

Czechoslovak Soc. of Orthopedics and Traumatology, congr., Bratislava. (Czechoslovak Acad. of Sciences, Narodni tr. 3, Prague 1)

European Seismological Commission, general assembly, Budapest, Hungary. (H. W. Sponheuer, Stellvetr., Inst. fuer Bodendynamik und Erdebebenforschung, Burgweg, 11, Jena, East Germany)

Zoologists, 2nd conf., Krasnodarsk, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

May 1965 (no date)

Czechoslovak Medical Soc., Ophthalmological Congr., Brno. (J. Kirzenecky, Mendel Museum, Brno)

June 1965 (no date)

Microwave Communications, 3rd colloquium, Hungary. (Microwave Research Inst., Hungarian Acad. of Sciences, Technica Haza, Szabadsag ter 17, Budapest 5)

September 1965

3-19. **Speleology**, 4th intern. congr., Ljubljana, Postajna, and Opatija, Yugoslavia. (Yugoslav Acad. of Sciences and Arts, Zrinski trg. 11, Zagreb 1)

September 1965 (no date)

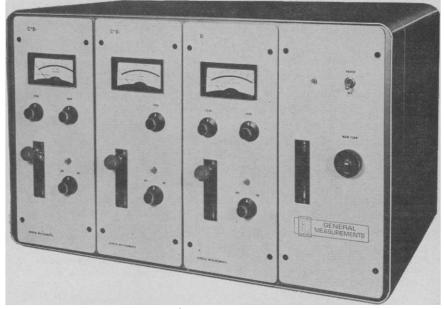
History and Philosophy of Science, 11th intern. congr., Poland. (Polish Acad. of Sciences, Palace of Culture and Sciences, Dworkowa 3, Warsaw)

Nematology, 8th intern. symp., Aschersleben, East Germany. (J. van Brande, Soc. of European Nematologists, Rijslandbonwhageschool, Coupure links 235, Ghent, Belgium)

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| 3 kc | 0.9 | 0.6 | |
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1965 (no dates)

Invariance in Automatic Control, 3rd all-union conf., U.S.S.R. (Inst. of Automatics and Telemechanics, Dept. of Technical Sciences, Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

International Union of Biological Sciences, theoretical and applied limnology, 16th congr., Poland. (Polish Acad. of Sciences, Palace of Culture and Sciences, Dworkowa 3, Warsaw)

Diseases and Parasitology, 6th conf., Dushanbe, U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Fatigue and Restoration Problems, congr., U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Geographic Soc. of the U.S.S.R., 4th congr., U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Information Theory, Statistical Decisions, Functions. and Random Processes, 4th conf, Czechoslovakia. (Czechoslovak Acad. of Sciences, Nardoni tr. 3, Prague 1)

Ionization Phenomena in Gases, 7th intern. symp., Belgrade, Yugoslavia. (Yugoslav Acad. of Sciences and Arts, Zrinski trg. 11, Zagreb 1)

Physico-Chemical Analysis, 5th all-union conf., Moscow. U.S.S.R. (Acad. of Sciences of the U.S.S.R., Lenin Prospekt 7, Moscow)

Forthcoming Events

December

11. Radioisotopes in the Life Sciences, Buffalo, N.Y. (R. F. Lumb, Western New York Nuclear Research Center, Inc., Power Dr., Buffalo 14)

11-13. Heterogeneous Combustion Conf., Palm Beach, Fla. (American Inst. of Aeronautics and Astronautics, 500 Fifth Ave., New York, N.Y. 10036)

13-14. Anatomists, Southern Society, 3rd annual meeting, Birmingham, Ala. (E. G. Hamel, Jr., Dept. of Anatomy, University of Alabama Medical Center, Birmingham 3)

16-17. Non-Linear Processes in the Ionosphere, conf., Boulder, Colo. (R. T. Frost, Natl. Bureau of Standards Boulder Laboratories, Boulder)

16-18. Thin Films, Electrical and Magnetic Properties in Relation to Their Structures, London, England. (Administration Assistant, Institute of Physics and the Physical Soc., 47 Belgrave Sq., London, S.W.1)

19-20. Radiation Emergencies in Medicine, Research and Industry, Chicago, Ill. (R. V. Wheeler, Argonne Natl. Laboratory, 9700 S. Cass Ave., Chicago)

19-21. American **Physical** Soc., Pasadena, Calif. (APS, Columbia Univ., New York 27)

26-28. National Council of Teachers of Mathematics, San Angelo, Tex. (H. T. Karnes, Dept. of Mathematics, Louisiana State Univ., Baton Rouge 3)

26-28. American Geophysical Union, western natl., Boulder, Colo. (W. W. Kellogg. Rand Corp., 1700 Main St., Santa Monica, Calif.)

26-30. American Assoc. for the Ad-

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