152 Stevens, P., and Shatzen, E. M., Synergism of basic fibroblast growth factor and interleukin-1 beta to induce articular cartilage-degradation in the rabbit. Agents Actions *34* (1991) 217–219.
153 Suzu, S., Ohtsuki, T., Yanai, N., Takatsu, Z., Kawashima, T., Takaku, F., Nagata, N., and Motoyoshi, K., Identification of a high molecular weight macrophage colony-stimulating factor as a glycosaminoglycan-containing species. J. biol. Chem. *267* (1992) 4345–4348.
154 Takii, T., Akahoshi, T., Kato, K., Hayashi, H., Marunouchi, T., and Onozaki, K., Interleukin-1 up-regulates transcription of its own receptor in a human fibroblast cell line TIG-1: Role of endogenous PGE_2 and cAMP. Eur. J. Immun. *22* (1992) 1221–1227.
155 Tan, E. M., Levine, E., Sorger, T., Unger, G. A., Hacobian, N., Planck, B., and Iozzo, R. V., Heparin and endothelial cell growth factor modulate collagen and proteoglycan production in human smooth muscle cells. Biochem. biophys. Res. Commun. *163* (1989) 84–92.
156 Tsujimoto, M., Yip, Y. K., and Vilcek, J., Interferon-gamma enhances expression of cellular receptors for tumor necrosis factor. J. Immun. *136* (1986) 2441–2444.
157 Tyler, J. A., Articular cartilage culture with catabolin (pig interleukin 1) synthesizes a decreased number of normal proteoglycan molecules. Biochem. J. *227* (1985) 869–878.
158 Tyler, J. A., Insulin-like growth factor 1 can decrease degradation and promote synthesis of proteoglycan in cartilage exposed to cytokines. Biochem. J. *260* (1989) 543–548.
159 Van Snick, J., Interleukin-6: an overview. A. Rev. Immun. *8* (1990) 253–278.
160 Vigny, M., Ollier Hartmann, M. P., Lavigne, M., Fayein, N., Jeanny, J. C., Laurent, M., and Courtois, Y., Specific binding of basic fibroblast growth factor to basement membranelike structures and to purified heparan sulfate proteoglycan of the EHS tumor. J. Cell Physiol. *137* (1988) 321–328.
161 Vlodavsky, I., Bar Shavit, R., Ishai Michaeli, R., Bashkin, P., and Fuks, Z., Extracellular sequestration and release of fibroblast growth factor: a regulatory mechanism? Trends biochem. Sci. *16* (1991) 268–271.
162 Vogel, K. G., Paulsson, M., and Heinegard, D., Specific inhibition of type I and type II collagen fibrillogenesis by the small proteoglycan of tendon. Biochem. J. *223* (1984) 587–597.
163 Vogel, K. G., and Trotter, J. A., The effect of proteoglycans on the morphology of collagen fibrils formed in vitro. Coll. relat. Res. *7* (1987) 105–114.
164 Watanabe, Y., Kashihara, N., Makino, H., and Kanwar, Y. S., Modulation of glomerular proteoglycans by insulin-like growth factor-1. Kidney Int. *41* (1992) 1262–1273.
165 Westergren-Thorsson, G., Schmidtchen, A., Särnstrand, B., Fransson, L.-Å., and Malmström, A., Transforming growth factor-β induces selective increase of proteoglycan production and changes in the copolymeric structure of dermatan sulphate in human skin fibroblasts. Eur. J. Biochem. *205* (1992) 277–286.
166 Wilbrink, B., Nietfeld, J. J., den Otter, W., van Roy, J. L., Bijlsma, J. W., and Huber Bruning, O., Role of TNF alpha, in relation to IL-1 and IL-6 in the proteoglycan turnover of human articular cartilage. Br. J. Rheum. *30* (1991) 265–271.
167 Xu, W. D., Firestein, G. S., Taetle, R., Kaushansky, K., and Zvaifler, N. J., Cytokines in chronic inflammatory arthritis. II. Granulocyte-macrophage colony-stimulating factor in rheumatoid synovial effusions. J. Clin. Invest. *83* (1989) 876–882.
168 Yahya, Z. A., Bates, P. C., and Millward, D. J., Responses to protein deficiency of plasma and tissue insulin-like growth factor-I levels and proteoglycan synthesis rates in rat skeletal muscle and bone. J. Endocr. *127* (1990) 497–503.
169 Yamaguchi, Y., Mann, D. M., and Ruoslahti, E., Negative regulation of transforming growth factor-beta by the proteoglycan decorin. Nature *346* (1990) 281–284.
170 Yaron, I., Meyer, F. A., Dayer, J. M., Bleiberg, I., and Yaron, M., Some recombinant human cytokines stimulate glycosaminoglycan synthesis in human synovial fibroblast cultures and inhibit it in human articular cartilage cultures. Arthritis Rheum. *32* (1989) 173–180.
171 Zimmermann, D. R., and Ruoslahti, E., Multiple domains of the large fibroblast proteoglycan, versican. EMBO J. *8* (1989) 2975–2981.

Announcements

Editorial Note: the information on the following training courses only reached our office at the end of April 1993.

UNESCO and ICRO (International Cell Research Organization) announce:

Theoretical and Practical Course on Molecular Genetics

Organization

The course will be held in November 1993 (1st–13th); Faculty of Biology, University of La Habana, Cuba.

The language of the course will be English.

The theoretical part of the course addresses a limited number of participants (around 50) but of various origins (scientists and advanced students, teachers, engineers). It will cover the recent advances in molecular genetics as well as the specificity of problems of interest to the participants and to their countries.

The practical course is organized along two lines: The first one is the use of methods to analyze nucleic acids' structures and sequences using techniques that do not involve sophisticated laboratory conditions both for research and diagnostic activities (non-radioactive labelling of nucleic acids, probe manipulations). The second topic is the implementation, the characterization and the evaluation of the genetic diversity of populations of interest. It provides the fundamental basis for genetic resources identification and management. The audience to this practical part will be restricted to 20 persons.

Organizers

Dr. M. Oliva-Suarez, Facultad de Biologia, Universidad de Habana, Cuba.

Dr. G. Bernardi, Laboratoire de Génétique Moléculaire, Institut Jacques Monod, Paris, France.

Dr. J.C. Mounolou, Université de Paris-Sud, C.G.M. - CNRS, 911 198 Gif-sur-Yvette, France.

Faculty

S. Arnaise, Orsay; J. Benitez, La Habana; G. Bernardi, Paris; V. Berovides-Alvarez, La Habana; G. Cohen, Paris; M. Duquet, Orsay; M. Fellous, Paris; A. Garcia-Bellido, Madrid; L. Jouanin, Versailles; G. Macay, San-José; M. Monnerot, Gif; J.C. Mounolou, Gif; M. Oliva-Suarez, La Habana; J.L. Rossignol, Orsay; C. Scazzocchio, Orsay; M. Solignac, Gif.

Participants
The audience to this course is essentially expected to come from Central and Southern America. Cuban participants will not exceed 50 %. The examination of applications will be carried out by the organizers with the help of the faculty.
Applications
A CV with publication list, a note indicating scientific and personal interests with regard to the course are to be sent before **June 20, 1993,** to:

Centre de Génétique Moléculaire
Attn. J.C. Mounolou
CNRS
F-91198 Gif / France.

Course fee including accommodation will be 210 US $ per week. A number of grants are available and applicants are encouraged to ask for them when they apply for the course.

UNESCO and ICRO (International Cell Research Organization) announce:

Second International Training Course on Genetic and Cell Engineering:
Principles, Techniques and Application in Modern Biotechnology

Institute of Molecular Biology, Riga, Latvia

September 12–19, 1993

Objectives
The aim of the training course is to acquaint the participants with the theoretical basis and experimental methods in the construction of recombinant DNA, as well as the use of DNA in transformation of procaryotic and eucaryotic cells. Lectures will include: analysis of genome structure and organization, chemical and enzymatic synthesis of genes, protein engineering, gene expression in bacteria, yeast, plant and mammalian cells, monoclonal antibodies and their hybrids.
Some topics could be supplemented by video film demonstration using commercial videorecordings.

Programme
Three laboratory experiments are offered for each participant:

A. cDNA library and PCR technique
B. RNA synthesis in vitro
C. Immunological screening and double radial immunodiffusion, Western blotting
D. Construction of hybridomas

All the experiments will be carried out in the genetic and protein engineering, immunochemical and cell culture laboratories of the Institute of Molecular Biology (located in the same building as the lecture hall). Applicants are asked to select three experiments they would like to perform.

Organizers
Viesturs Baumanis, Valdis Berzins, Elmars Grens (Chairman), Zinaida Shomshtein (Secretary), Valdis Taurins.

Teaching Staff
A. Avots (Latvia), E. Avota, (Latvia), V. Baumanis (Latvia), Yu Berlin (Russia), V. Berzins (Latvia), V. Bichko (Latvia), E. Grens (Latvia), L. Kiselev (Russia), M. Ustav (Estonia), P. Pumpens (Latvia), P. Pushko (Latvia), K. Sasnauskas (Lithuania), R. Saarma (Finland), V. Skrivelis (Latvia), K. Skryabin (Russia), A. Tsimanis (Latvia), R. Ulrich (Germany), E. Yankevits (Latvia), I. Sominskaja (Latvia).

Venue
Institute of Molecular Biology
University of Latvia and Latvian Academy of Sciences
Krustpils 53
LV-1065 Riga

Language: English

Participants
The course is intended for graduate students and research fellows. Participation will be restricted to 20 students. Applicants are strongly urged to obtain travel grants from their own institutions or governments. Exceptional travel grants will be available to participants unable to secure funds from local sources.

Applications should be sent in English to:

Prof. Elmars Grens
Institute of Molecular Biology
University of Latvia and Latvian Academy of Sciences
Krustpils 53
LV 1065 Riga / Latvia

Fax 70132 138 683
Telex 161174 DUGLA SU
Tel. 104261, 139495

Deadline for application: **May 20, 1993.**

The letter of application should include:

(a) Name, age, address and academical affiliation
(b) Curriculum vitae detailing previous scientific training
(c) One reference letter of recommendation
(d) Proficiency in English
(e) Brief statement on why this course would be useful to the applicant
(f) Statement of the financial aid the applicant would have from local sources toward travel and living expenses

The accepted applicants will be notified by July 20, 1993.

UNESCO, ICRO (International Cell Research Organization) and FEBS (Federation of European Biochemical Societies) announce:

International Training Course on Biochemistry of Membrane Transport

Lake Balaton, Hungary; September 5–12, 1993

Objectives
The course is intended for graduate and post-doctoral students and research workers who wish to obtain concentrated information on experimental approaches and recent results in the field of membrane transport. The course will cover both basic knowledge and the most recent findings and provide ample possibility for discussions.

Participants
The course fee is DM 800 which includes registration, accommodation, meals and local transportation. A limited number of fellowships will be available for participants under the age of 31 years.
The deadline for application is **April 30, 1993.**

For information on possible belated applications please contact:

Dr. B. Sarkadi
Hungarian Biochemical Society
P.O. Box 7
H-1518 Budapest / Hungary
Fax 36-1-1665-856