



NEWSLETTER

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ASP - Newsletter

Xeroderma pigmentosum Registry

Xeroderma pigmentosum (XP) is a rare, autosomal recessive disease (frequency, one to four per million) in which affected individuals exhibit sun sensitivity, cutaneous pigmentary abnormalities, and a high incidence of skin cancer. In addition, some patients with XP have neurologic abnormalities such as mental deterioration or sensorineural deafness. Many of these symptoms may be manifestations of repeated environmental insults on a defective DNA repair system; cells from most patients with XP have been shown to have deficient excision repair of thymine dimers in ultraviolet (UV) - radiation damaged DNA. The XP patients without this defect ("XP variants") appear to have another, more subtle deficiency in DNA repair. Sun sensitivity and defective DNA repair is associated with mutagenesis and increased killing of XP cells following UV irradiation. XP is thus the best human model currently available for study of environmental - genetic interaction.

Using cell fusion techniques, seven different complementation groups of XP (named A,B,C, etc.) have been reported in addition to the variant group. At the molecular level, XP has proven to be far more complex than anticipated. The precise molecule that is defective has not yet been identified despite extensive research. Characteristic clinical and epidemiological features exist among these complementation groups; group C, for example, is the most common group in the United States and in Europe, but is rare in Japan, where group A predominates. Neurological defects have been found in two groups, A and D, but differ in age of onset between them. Melanoma is common in American and European patients, but is extremely rare in Japan. Furthermore, XP cells in vitro are also abnormally sensitive to a number of chemical carcinogens such as acetoxyacetoaminofluorene and nitroquinoline oxide, suggesting that XP patients might be expected to develop abnormally large numbers of internal neoplasms as well as skin cancers, but to date only a very few such tumors have been reported.

There is a large number of unanswered questions about XP that relate to disease symptoms and clinical course as well as to fundamental issues in carcinogenesis. In order to obtain answers to these questions, many of which are largely amenable to epidemiologic analysis, the Xeroderma Pigmentosum Registry has been formed.

The Registry is a data gathering organization and there is no intent to assume management of individual patients. Cooperation of physicians who know of patients with XP is essential for the Registry to accomplish its mission. Physicians who are aware of such patients should write to:

Xeroderma Pigmentosum Registry
c/o W. Clark Lambert, M.D., Ph.D.
Department of Pathology, Room C520
UMDNJ-New Jersey Medical School
100 Bergen Street
Newark, New Jersey 07103
(Telephone: (201) 456-5722 or 456-4841)

Positions Available

Postdoctoral positions (2) in the Division of Molecular Plant Biology, University of California, Berkely. One with Prof. A. Melis to conduct original research in the field of molecular plant biophysics-photosynthesis. Candidates should have understanding of physical procedures, instrumentation, and computer automation for research laboratory, and should be able to prepare manuscripts for research publications. The second position, with Prof. B.B. Buchanan, is for original research on the regulation of sucrose metabolism in C plants. Individual should have broad experience in working with plant enzymes, especially with enzymes of sucrose synthesis

and breakdown. Candidates should also be familiar with biochemical instrumentation and with modern biochemical methodology. Contact the appropriate professor at the Division of Molecular Plant Biology, Hilgard Hall, University of California, Berkeley, CA 94720. Application deadline is May 1, 1983.

Postdoctoral position in the Biology Division of Brookhaven National Laboratory. To study the biochemistry and biophysics of DNA photoreactivating enzyme. Ph.D. with strong background in molecular biology, photobiology, or biochemistry. Research may include studies of enzyme action on defined sequence oligonucleotides or cloned DNA fragments, or other areas of mutual interest. Starting salary \$16,000 for new Ph.D. Appointed period one year with possible renewal. Send vita and name of three referees to Dr. Betsy Sutherland, Biology Division, Brookhaven National Lab, Upton, Long Island, New York 11973.

From the New York Times

Nicholas Geacintov was attacked by two knife-wielding muggers at a Greenwich Village Bank automatic cash withdrawal outlet on February 4th. Dr. Geacintov managed to fight off his attackers but not before he was seriously wounded in the chest and left hand. An operation closed the two stab wounds near his heart. He is presently recovering from this incident.

Summer/Fall Institute 1983

This year the State University of New York at New Paltz will again sponsor a 1983 Summer Institute In Polymer Science And Technology program and a 1983 Fall Institute In Science And Technology program.

Summer Courses

- May 9-13 Advances in Polymer Synthesis, Modification and Characterization
- June 15-17 Conducting Polymers
- June 20-24 Advances in the Stabilization and Controlled Degradation of Polymers

Fall Courses

- Oct 17-21 Scanning Electron Microscopy and X-Ray Microanalysis: Theory and Practice - Materials Science
- Oct 24-28 Scanning Electron Microscopy and X-Ray Microanalysis: Theory and Practice - Biology and Medicine
- Oct 24-26 Advanced Scanning Electron Microscopy and X-Ray Microanalysis: Theory and Practice - Materials Science
- Oct 31-Nov 1 Water-Soluble Polymers: Synthesis, Structure and Applications
- Nov 2-4 Fundamentals of Adhesion: Theory, Practice and Applications

For further information contact: Dr. Angelos V. Patsis, Professor and Chariman, Chemistry Department, State University of New York, New Paltz, New York 12561, Telephone # (914) 257-2175

New Meeting Announcements

1983

- May 4-6 London, U.K. Biotech 83. First World Conference and Exhibition on the commercial applications and implications of biotechnology. Biotech 83 will be the world's first broad-based forum at which researchers, engineers, entrepreneurs, users and suppliers will meet to exchange ideas, to trade and to identify the realistic potential offered by this exciting technology. The event will comprise a three stream, three day international conference with an associated industrial exhibition. This brochure lists the conference program which comprises presentations from over 80 researchers, engineers and industrialists - including many of the world's most distinguished specialist in the various branches of biotechnology.

It is anticipated that the conference will draw a large attendance from all over the world. If you are involved in the rapidly expanding biotechnology industry or if you feel that your organisation could benefit by the adoption of its techniques, you should be at Biotech 83.

For more information contact: Online Conferences Ltd., Argyle House, Northwood Hills, Middlesex, HA6 1TS, UK. Phone: Northwood 28211 Fax: Northwood 20709; Telex: 923498 (STD code: 09724; International code: 44 9274)

July 19-23 European symposium - Photomorphogenesis in Plants - Frostavallen 19-23 July 1983 organized by the Universities of Lund and Goteborg. The 1983 Annual European Photomorphogenesis Symposium will be held between Tuesday July 19 and Saturday July 23. The meeting will take place at Frostavallen where also accommodation is provided. Frostavallen is a small resort situated in a lovely forestal area about 40 kilometers north-east of Lund in the south of Sweden.

For further information, please write to: Dr. Christer Sundqvist, Dept. of Plant Physiology, University of Lund, Box 7007, S-220 07 Lund 7, Sweden.

Aug 8-9 International Workshop on Mode of Action of Herbicides in Photosynthesis. Sponsored by the Federation of European Societies of Plant Physiology, Agricultural University, Wageningen, The Netherlands. From August 1-6, 1983 the 6th International Congress on Photosynthesis will take place at Brussels. Since almost 50% of all commercial herbicides are photosynthesis inhibitors there is a long-standing interaction between herbicide and photosynthesis research. Nevertheless, only at the first International Congress on Photosynthesis in 1968 was a large section devoted to herbicides.

Following the 6th International Congress on Photosynthesis a satellite meeting will be organized on "Mode of Action of Herbicides in Photosynthesis".

The workshop will cover the following aspects of modes of action of herbicides: action of Photosystem II-inhibiting herbicides; molecular biology of the herbicide receptor protein; resistance to herbicides; action of electron accepting herbicides; action of herbicides on pigment synthesis; structure-activity relationships.

The official language will be English. Presentations will be in the form of oral contributions and posters. Ample time will be reserved for general and detailed discussion of the above topics.

The workshop will be held on August 8 and 9, 1983 at the International Agricultural Centre at Wageningen, The Netherlands. This Centre has meeting and accommodation facilities available.

The number of participants will be limited to about 60.

Total expenses are not exactly known yet, but will not be more than 250.00 Dutch guilders per person (1 U.S. \$ is about 2.70 Dutch guilders). These costs will cover registration fee, accommodation, meals and coffee or tea. Travel expenses have to be paid by the participants.

For further information contact: Dr. J.J.S. van Rensen, Lab. of Plant Physiological Research, Agricultural University, 72, Gen. Foulkesweg, 6703 BW Wageningen, The Netherlands.

1984

Jan 4-7 Singlet Oxygen Conference. Clearwater Beach, Florida. For further information contact: Brian Stevens, Department of Chemistry, University of South Florida, Tampa, Florida, 33620.

1983 Calendar - see earlier Newsletters for details

- April 10-15 Federation of American Societies for Experimental Biology. Chicago, Illinois
- April 21-26 Biosynthesis of the Photosynthetic Apparatus: Molecular Biology, Development and Regulation. Keystone, Colorado
- April 24-28 The Clayton Foundation Symposium on Porphyrin Localization and Treatment of Tumors. Santa Barbara, California
- May Principles of Mutagenesis, Carcinogenesis, and Teratogenesis. Peoples Republic of China.
- May 26-28 International Symposium on Porphyrins in Tumor Phototherapy. Milan, Italy
- May 26-31 American Association for the Advancement of Science--Annual Meeting. Detroit, Michigan
- June 5-10 American Society of Biological Chemists. San Francisco, California
- June 8 IV Annual Meeting of the Italian Group of Photobiology. Padua, Italy
- June 9-11 International Symposium on: New Trends in Phototherapy Photobiochemistry of Tetrapyrrolic Pigments and Biomedical Applications. Padova, Italy
- June 13-16 DOE 7th Solar Photochemistry Research Conference. Berkeley, California
- June 26-30 American Society for Photobiology Meeting. Madison, Wisconsin
- June 17-18 Symposium on Infant Vision. Rotterdam, The Netherlands.
- July 3-8 7th International Congress of Radiation Research. Amsterdam, Netherlands
- July 7-11 American Institute of Biological Sciences - Annual Meeting. Grand Forks, ND
- July 25-29 XVI International Conference, International Society for Chronobiology. Royal College of Surgeons in Ireland, St. Stephens Green, Dublin 2, Ireland
- August 1-6 6th Photosynthesis Congress. Brussels, Belgium
- August 21-26 11th International Conference on Photochemistry. College Park, Maryland
- August 26-30 The Forsius Symposium on Colour Order Systems, a Mid-Term Meeting of the International Colour Association. Kungälv, near Gothenburg, Sweden

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