



# PASPCR

## Newsletter

Volume 8 Number 4

December, 2000

### Introduction . . .

The **PASPCR Newsletter** is published quarterly and is intended to serve as a means of communication for the members of our Society. As such, we invite our membership to actively contribute to it. If you attend a scientific meeting and heard results which you think will be of interest to the membership of the **PASPCR**, please write a few paragraphs summarizing what was presented and share it with us. Any information on up-coming meetings of interest will also be included. We also want to note any change of affiliation or address that you may have had to help us keep our membership list up-to-date. This is **your Newsletter**, and we depend upon you to help us make sure it best serves the Society's needs. Contributions and comments can be sent to Bill Oetting, preferably by Email, to [bill@lenti.med.umn.edu](mailto:bill@lenti.med.umn.edu).

The **PASPCR Web** page is the major, up-to-date source of current information for the PASPCR membership. The URL address to our home page is <http://www.cbc.umn.edu/paspcr>. The PASPCR Web page contains information about the PASPCR including the goals, ByLaws and Rules of the Society, future meetings, past issues of the **PASPCR Newsletter** as well as links to other related sites including the InterPig DataBase, the International Federation of Pigment Cell Societies (IFPCS) and the regional Pigment Cell Societies from Europe and Japan. In addition, an updated PASPCR membership directory is available on the PASPCR Web page; please notify us if you wish any or all of your information to be modified or deleted on that site. The PASPCR home page also includes positions available and positions wanted. Postings for **Positions Available** are open to all individuals so long as the position is related to pigment cell research. Postings for **Positions Wanted** will be open only to members of the PASPCR or its sister societies (JSPCR and ESPCR). Please provide an expiration data for any submitted postings. If there is additional information that you wish to have added to this web page, please let us know. Send any comments and/or suggestions to the PASPCR WebMaster, Bill Oetting at [bill@lenti.med.umn.edu](mailto:bill@lenti.med.umn.edu).

**Note:** The **IFPCS** webpage can be found at [www.cbc.umn.edu/ifpcs](http://www.cbc.umn.edu/ifpcs).

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**Calendar of Events :**

**Dec 5-6, 2000** 13th Meeting of the Japanese Society for Pigment Cell Research, to be held in Sapporo, Japan,  
**Contact:** K Jimbow

**Feb 28, March 3, 2001** 5th World Conference on Melanoma : Venice, Italy, February 28 - March 3  
**Contact:** Dr Mario Santinami Secretary General  
5th World Conference on Melanoma Casa di Cura S. Pio X Via F. Nava 31 I - 20159 Milano  
Phone/Fax: 39-02-69516449  
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**April 27-29, 2001** International Workshop on Molecular Mechanisms of Tanning, Nice, France.  
**Contact:** IWMMT Congress Office – Maryse Clappier – Hôpital l'Archet 2 - Service de dermatologie – BP 3079 – 06202 Nice cedex 3 – Tel 33 (0)4 92 03 61 19 – Fax 33 (0)4 92 03 65 32 - E.mail: maryse.clappier@unice.fr

**Jun 25 - 28, 2001** X<sup>th</sup> Annual Meeting of the PanAmerican Society for Pigment Cell Research, to be held in Minneapolis, MN  
**Contact:** Dr. Richard A. King, Department of Medicine, Box 485 Mayo, 420 Delaware St. S.E., Minneapolis, MN 55455;  
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**2002** The XVIIIth International Pigment Cell Conference, to be held in The Hague, Holland.  
**Contact:** Dr. Stan Pavel, President ESPCR, University Hospital Leiden, Dept of Dermatology, PO Box 9600, NL - 2300 RC LEIDEN  
Phone: 31-(71) 526 1952  
Fax: 31-(71) 524 8106;  
E-mail: SPavel@algemeen.azl.nl

**Sept 3-7, 2003** XI<sup>th</sup> Annual Meeting of the PanAmerican Society for Pigment Cell Research, to be held in Wood's Hole, MA.

## Welcome to New Members

by James J Nordlund

No new members for this quarter. If you know of anyone who may be interested in joining our Society or wishes to sponsor a member, application forms can be obtained from Dr. James J. Nordlund at the PASPCR Secretary/Treasurer's office.

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## Corporate Sponsors

by James J Nordlund

The PASPCR would like to acknowledge and thank our Corporate Sponsors; the list below reflects contributions over the past 2 years. Financial gifts from these sponsors have allowed our Society to increase benefits to the membership far out of proportion to the actual dues collected from members. Monies contributed by these sponsors have been used over the years to support various PASPCR functions including our Young Investigator Award program, meeting travel stipends, annual meeting expenses and this Newsletter.

### ***GOLD Corporate Patrons***

Procter and Gamble Co  
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### ***SILVER Corporate Patrons***

Avon Products, Inc  
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Combe, Inc.

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## From the Editor - ***Pigment Cell Research***

***Vince Hearing***, Editor

**Announcement** - Anyone interested in obtaining a limited number of back issues of the journal ***Pigment Cell Research***, please take note. The former Editors of the journal, Profs. Joseph Bagnara and Jiro Matsumoto, have forwarded all their extra copies of past issues of ***Pigment Cell Research*** to the current Editorial Office. Anyone who is missing a back issue or two of the journal from their collection can contact the office to request those. Not all back issues are available and they will be provided when available on a first-come, first-served basis. Contact the Editorial Office by Email (editor@pigment.org) and state the issue(s) needed; be sure to provide your full shipping address.

## **Award for Publication Excellence - 2000**

At its recent business lunch held during the PASPCR Meeting in College Station, the Editorial Board of ***Pigment Cell Research*** established an annual award for **The Most Outstanding Contribution** published in ***Pigment Cell Research*** each year. The top paper published this year 2000 (Volume 13) will be determined and awarded following distribution of the last issue this year. All Original Research Articles will be considered for the Award, which will be decided by the Editorial Board. The winner will be announced early in 2001 and will receive a year's free subscription to the journal as well as an Award of Achievement. The winner will also be featured in a brief article in the journal next Spring that will present a summary of the victorious study and the reasons behind its selection as the best in Volume 13. This **Outstanding Contribution Award** is dedicated in this Inaugural year to the memory of Profs. Yoshiaki Hori and Bengt Larsson, two ardent supporters of ***Pigment Cell Research*** over the years. Good Luck to all authors.

# The PASPCR Annual Meeting in 2001 Has been set!

June 14-17, 2001  
Regal International Hotel  
Minneapolis, Minnesota USA



Theme in 2001:  
*New Approaches to the Pigment Cell*

The 10th Annual Meeting of the PanAmerican Society for Pigment Cell Research will be held in Minneapolis, Minnesota on June 14-17, 2001, and we hope that you will attend. The PASPCR was established in Minneapolis in 1987, and the ensuing years have brought amazing advances to pigment cell biology. The 10th meeting offers an opportunity to highlight some of these advances and to look into the future. The meeting will be devoted to new approaches to the pigment cell, and symposia, paper presentations and social events have been organized to make this a memorable and exciting occasion.

Minneapolis is wonderful in June (<http://www.ci.minneapolis.mn.us/about/about.html>). The weather is warm and the mosquitoes are few. We will take full advantage of the surrounding lakes and rivers during the meeting, a tradition in Minnesota. The hotel is located on the downtown Nicollet mall and a short walk to Loring park (and lake), the Walker Art Museum and the Minneapolis Sculpture Garden. A reception at the spectacular Gehry-designed modern art museum on the campus of the University of Minnesota (and the shores of the Mississippi River) will start the meeting. One evening will be spent riding through Minneapolis on a riverboat on the Mississippi to the sounds of a Dixieland band. The banquet will be held in the glass-covered rooftop dining room of the hotel, with great views of the Minneapolis skyline at night.

The meeting will be organized around five symposia, and investigators from around the world who are at the forefront of work in their area will participate. Symposia topics include comparative biology and evolution; intracellular trafficking and organelle biogenesis; genetic susceptibility to melanoma; phenoloxidases, melanogenesis and evolution; and new approaches to the pigment cell. Each will present new and exciting information on the development and evolution of normal and abnormal melanogenesis, and should be a good format for exploring future ideas and approaches with our wonderful pigment cell.

We hope to see you in Minneapolis in June 2001.

# PanAmerican Society for Pigment Cell Research Annual Meeting

## SYMPOSIUM PROGRAM

### THURSDAY JUNE 14

#### **1:00P – 3:00P Symposium I: Comparative Biology and Evolution**

Chairs: Giselle Thibaudeau and Nels Granholm

##### **"Genetic Polymorphism at the Melanocortin 1 Receptor"**

Wen-Hsiung Li, PhD, George Beadle Professor, Ecology and Evolution, University of Chicago

##### **"The Importance of Being Red"**

Jonathan Rees, MB BS, Professor and Chair, Department of Dermatology, University of Edinburgh,

##### **"Mapping Human Pigmentation and Skin Response Genes"**

Mark D. Shriver, PhD, Assistant Professor, Department of Anthropology, Pennsylvania State University

#### **6:00P-8:00P Reception at Weisman Museum**

### FRIDAY JUNE 15

#### **8:00A – 10:00A Symposium II: New Approaches to the Pigment Cell**

Chairs: Jean Bologna and Murray Brilliant

##### **"Using Gene Expression Patterns to Characterize Biological Diversity"**

Charles P. Perou, PhD, Assistant Professor, Department of Genetics  
University of North Carolina at Chapel Hill

##### **"The Role of Stem Cells in Development of the Retine"**

Thomas Reh, PhD, Professor, Department of Biologic Structure,  
University of Washington

##### **"Modulation of Melanogenesis *in vitro*: Importance of Keratinocyte-Melanocyte Interactions"**

Rainer Schmidt, PhD, Head, Department of Skin Care Biology, L'Oréal

#### **1:00P – 3:30P Symposium III: Intracellular Trafficking and Organelle Biogenesis**

Chair: Miri Seiberg and Vijaysaradhi Setaluri

##### **"The Molecular Machinery for Lysosome Biogenesis"**

Juan Bonifacino, PhD, Chief, Cell Biology and Metabolism Branch, NIH

##### **"Essential Role for the AP3 Adaptor Complex and Vps41 in Cargo Selective Protein Transport to the Yeast Vacuole"**

Scott D. Emr, PhD, Professor, Department of Cellular and Molecular Medicine, Investigator, HHMI,  
University of California San Diego School of Medicine

##### **"A Genetic Approach to Vesicle Transport in the Mouse"**

Nancy A. Jenkins, PhD, Mouse Cancer Genetics Program,  
National Cancer Institute, Frederick Cancer Research and Development Center

##### **"Vesicular Transport Defects in Human Disease"**

William Gahl, MD, PhD, Chief, Biochemical Genetics Section, Human Genetics Branch  
National Institute of Child Health and Human Development, NIH

#### **6:30P-9:30P Riverboat Ride and Dinner – Minneapolis**

**SATURDAY JUNE 16**

**1:30P – 3:30P Symposium 4: Genetic Susceptibility to Melanoma**

Chair: Hee-Young Park and Meenhard Herlyn

**"The Genetics of Melanoma Susceptibility"**

Julia Newton Bishop, MD, Reader in Dermatological Oncology,  
University of Leeds

**"Functional Consequences of Polymorphism within the Melanocortin-1-Receptor for Human Pigmentation and Melanoma"**

Richard A. Sturm, PhD, Senior Research Fellow, Institute for Molecular Biosciences,  
University of Queensland, Brisbane, Australia

**"Microarray Characterization of Melanoma"**

William Pavan, PhD, Senior Investigator,  
National Human Genome Research Institute, NIH

**7:00P Reception and Banquet (hotel)**

**SUNDAY JUNE 17**

**8:00A – 9:30A Symposium 5: Phenoloxidases, Melanogenesis, and Evolution**

Chair: Ruth Halaban and Vincent Hearing

**"Evolution of Phenoloxidases"**

Austin Hughes, PhD, Professor, Department of Biological Sciences  
University of South Carolina

**"Structure, Function and Evolution of Hemocyanin and Tyrosinase"**

Heinz Decker, PhD, Professor and Head, Institute for Molecular Biophysics  
University of Mainz, Germany

**"Functional Differences Between Vertebrate and Invertebrate Phenoloxidases"**

Manickam Sugumaran, PhD, Professor, Department of Biology  
University of Massachusetts - Boston

## **And now for the rest of the story.**

I have always been interested in how a particular line of research began. Was it well planned out, did it come to the investigator in a dream, or was it just serendipity? In this section of the PASPCR Newsletter I plan to publish stories on the background of discoveries in pigment research. In this issue, Dr. Seymour Pomerantz writes about the production of the 'Pomerantz Antibody'. I know that many of you have used this anti-tyrosinase antibody and will be interested in how this valuable reagent came into being.

If you wish to know how a particular line of investigation got started, please email me at bill@lenti.med.umn.edu, and I will try to get **the rest of the story**.

### **Preparation of Antibody against Tyrosinase from Hamster Melanoma**

I want to begin by expressing by thanks to Bill Oetting for inviting me to write this recollection.

During the years 1959 to about 1973 I was engaged in perfecting a purification of tyrosinase from hamster melanoma. This spontaneous melanoma was discovered by Harry Green of the Department of Pathology at Yale and was given to me by Aaron Lerner, then Head of the Department of Dermatology at Yale. Even with partially purified preparations it was possible to determine the usual properties, including the  $K_m$  values for tyrosine and dopa and various other possible substrates,  $K_i$  values for a number of inhibitors, tests of various electron donors other than dopa, heat stability, pH optimum, and to confirm that Cu (2+) was necessary for activity although other metal ions could substitute in part.

By around 1969 my student Jean Peh-Chen Li and I had developed a purification scheme that showed the presence of four tyrosinase isozymes and this was published in *Methods in Enzymology*, vol 17, PtA, 620-26, 1970. The apparent purification of the major activity, E1, about 6000 fold, was probably overstated by a factor of two since the dark pigment present in the crude supernatant interfered with the protein determination. On acrylamide gel it was clear that the enzyme was still not homogeneous. At about this same time Jean Burnett (*J Biol Chem*, 246, 3079-91, 1971) reported the presence of several tyrosinase isozymes in mouse melanoma and the preparation of one isozyme to homogeneity.

We later added an additional step, preparative acrylamide gel electrophoresis, to get our best preparation (*Yale J of Biol and Med*, 46, 541-52, 1973). By loading 100 $\mu$ g of enzyme protein on the analytical gel we saw a weak contaminating band that we judged was less intense than 5 $\mu$ g of protein and thus our sample was greater than 95% pure by this standard. The specific activity was 52 units/mg and other preparations over a period of several years gave activities between 50 and 60 units/mg. A molecular weight of 54,000 was determined by gel electrophoresis and the amino acid composition gave a formula weight of 55,356.

At this time I thought immediately about using this almost pure enzyme to generate antiserum in rabbits. I did not think very deeply about possible uses. I was pretty sure that the outcome would be successful but I did not think through a plan of how I would use the antibody.

We injected the above protein- adjuvant mixture into rabbits to obtain antibody. We found that the antibody-tyrosinase complex did not precipitate and that the enzyme was still active in the complex. However, the complex was pelleted by high speed centrifugation and this aided in determining the titers of antibody. Over the years we used many different tyrosinase preparations of highest purity in order to accumulate high titer antibody from a number of good rabbits.

I first used the antibody to test cross reactivities with tyrosinases from other sources. As reported in Arch Biochem Biophys, 160, 73-82, 1974, VV Murthy and I found that there was no cross reactivity between the enzyme from *Vibrio tyrosinaticus* and antibody from hamster tyrosinase. The antibody was used about the same time ( Nature, 252,241-43, 1974) to detect tyrosinase protein in the skins from 5-7 day-old albino hamsters and a strain of albino mice. Later it was shown in unpublished results by me and also by Ruth Halaban that tyrosinase solubilized from human circumcision skin cross reacted with the hamster antibody. Ruth Halaban also found that the antibody cross reacted with chicken tyrosinase. As expected K Lerch found in unpublished experiments that the hamster antibody did not cross react with *Neurospora tyrosinase*. It seems clear from all of these results that the animal tyrosinases are quite similar but differ from tyrosinases of lower forms.

Ruth Halaban and collaborators used the antibody in three important studies (J Cell Biol, 97, 480-88, 1982; Arch Biochem Biophys, 230, 383-7, 1984; Proc Natl Acad Sci USA, 85, 7241-45, 1988) to study the regulation of tyrosinase in human melanocytes grown in culture; the abundance, processing, and degradation of tyrosinase in Cloudman mouse melanoma cells; and a comparison of the characteristics of tyrosinases from skin melanocytes from wild type mouse B10.BR and four mutants at the albino locus. This last set of experiments securely established that the C-locus encodes the structural gene for tyrosinase.

Perhaps the most significant work that involved the use of this antibody and that I was associated with was work by Byoung Kwon and collaborators ( P Natl Acad Sci USA, 84, 7473-77; Mol Biol Med, 4, 339-55, 1987; and Adv Pigment Cell Res, 273-82, 1988 ). These papers described for the first time the isolation and characterization of the cDNA clone for human tyrosinase that maps at the mouse C-albino locus and the isolation of another clone from normal human melanocytes, termed Pmel 17-1, that is related to tyrosinase but does not map at or near the C-albino locus of mice.

The antibody has been sent over the years to many investigators. My files are in some disarray but I am able to note that some of the recipients have been Seth Orlow, Helen Kemp, Andrej Slominski, Alan Stokes, and Ashok Chakraborty.

My career in pigmentation began in the dark ages when it was a great accomplishment to purify an enzyme to homogeneity and study its properties and I ended it at the beginning of the era of molecular biology and everything that it implies about genetics, DNA, regulation, and protein synthesis. I was fortunate indeed to have many mentors who were extremely helpful to me and made it possible for a mostly lone investigator to make some modest contributions to the field. As I look on from the sidelines and read with great interest the contributions from the teams of



investigators now working in a mature field I cheer them on and expect to see great discoveries in the future.

## Announcement

### International Workshop on Molecular Mechanisms of Tanning

#### Hotel Plaza Concorde – Nice, France – 27-29 April 2001

Organisers: Prof. J.P. Ortonne – Dr R. Ballotti (Service de Dermatologie CHU Nice ; Inserm U 385)

This workshop will gather specialists to discuss of aspects of the biological effects of ultraviolet radiation on normal skin with special emphasis on photo-induced melanogenesis.

**Topics:** The melanocyte system; Transcriptional control of melanogenesis; Role of the camp and PKC; signalling pathways in melanocyte differentiation; Melanosome biogenesis and transport; Effects and ..; signalling of UV; UV and melanogenesis; Photoprotection and future strategies to modulate melanogenesis and melanin photoprotection.

**Invited speakers :** : Heinz **ARNHEITER** (USA); Philippe **BAHADORAN** (FRANCE); Corinne **BERTOLOTTO** (FRANCE); Roser **BUSCA** (FRANCE); Benoît **DERIJARD** (FRANCE); Mark **ELLER** (USA); David **FISHER** (USA); Gary **FISHER** (USA); Colins R. **GODING** (UK); John **HAMMER** (USA); Vincent J. **HEARING** (USA); Meenhard **HERLYN** (USA); Nancy **JENKINS** (USA); Jean **KRUTMANN** (GERMANY); Nicole **LE DOUARIN** (FRANCE); Thomas **LUGER** (GERMANY); James **NORDLUND** (USA); Hee-Young **PARK** (USA); William J. **PAVAN** (USA); Giuseppe **PROTA** (ITALY); Johnatan **REES** (UK); Alain **SARASIN** (FRANCE); Rainer **SCHMIDT** (FRANCE); Thomas **SCHWARZ** (GERMANY); Miri **SEIBERG** (USA); Shigeki **SHIBAHARA** (JAPAN); Richard **SPRITZ** (USA); Anthony **THODY** (UK).

The number of participants is limited to 150. The workshop will start on Friday 27 april 2001 at 8.00am and will finish on Sunday 29 April at noon. Information for registration and abstract submission (for poster presentation only) can be obtained from the congress office

For more information, contact the IWMMT Congress Office – Maryse Clappier – Hôpital l’Archet 2 - Service de dermatologie – BP 3079 – 06202 Nice cedex 3 – Tel 33 (0)4 92 03 61 19 – Fax 33 (0)4 92 03 65 32 - E.mail: [maryse.clappier@unice.fr](mailto:maryse.clappier@unice.fr)

## International Federation of Pigment Cell Societies

**Officers:** Shosuke Ito (JSPCR, *President*); Stan Pavel (ESPCR, *Vice-President*); Richard A. King (PASPCR, *Secretary/Treasurer*)

**COUNCIL MEMBERS:** Dorothy C. Bennett (ESPCR); Jose C. García-Borrón (ESPCR); Sally Frost-Mason (PASPCR); Masako Mizoguchi (JSPCR); James J. Nordlund (PASPCR); Shigeki Shibahara (JSPCR); Vincent J. Hearing (*Ex Officio* member as the Editor of *Pigment Cell Research*) and Stan Pavel (*Ex Officio* member as Organizer of the 18th IPCC)

### A Letter from the IFPCS President to the PASPCR members

At the end of the 20th century, I found this past year a remarkable one for pigment cell biologists. Scientists have made incredible advances in many disciplines of pigment cell biology, and those are now being disseminated to broader fields of biology and medicine. As the President of the IFPCS, I am glad to hear that the annual meetings of the PASPCR (in College Station, Texas), the ESPCR (in Ulm, Germany), and the JSPCR (in Sapporo) were excellent ones covering a broad range of topics in the pigment cell field. I wish to congratulate the Chairs of those meetings: Drs. Lynn Lamoreux, Estela Medrano, Ralf U. Peter, and Kowichi Jimbow for their successful meetings. In addition to the good news, however, we must recall sad news as well: the deaths of two prominent pigment cell scientists, Dr. Fritz Anders who died last December and Dr. Yoshiaki Hori who died last March. Dr. Anders will be remembered not only for his great contribution to the genetics of melanoma but also for the cheerful, yet successful 12th IPCC that was held in Giessen, 1983. Dr. Hori had been among the leaders of the pigment cell field in Japan for many years and served as the Vice-President of the IFPCS from 1996 to 1999. He will also be sorely missed by all who knew him.

The IFPCS has established the following goals for the Federation (also available on the **IFPCS Web page** at <http://www.cbc.umn.edu/ifpcs>):

1. To encourage the dissemination of knowledge related to pigment cells by the establishment, sponsorship and support for the publication of books, bulletins, newsletter, journal, reports or other means.
2. To organize a tri-annual international meeting, to honor outstanding contributions in the field by awarding the Myron Gordon award at that meeting, and to select a scientist who has made recent and significant advances in the field to present the Seiji Memorial lecture.
3. To foster and enhance research on pigment cells and pigmentation among the regional Societies and to foster scientific collaboration, cooperation and communication among the regional Societies.

Goal #1 was achieved by establishing an official IFPCS-sponsored journal, *Pigment Cell Research* (<http://www.pigment.org>). The journal is now in the 13th year of publication. I wish to congratulate Dr. Vincent J. Hearing for his success in further raising the reputation of the journal in such a short time after succeeding as *Editor* at the beginning of this year from Dr. Jiro Matsumoto. To further promote the growth of the journal, it is essential that the numbers of subscribers and submitted papers be increased. I wish to urge all PASPCR members to subscribe to *Pigment Cell Research*, to make sure your Institution's library is subscribing, to submit papers to it, and to cite its pertinent references in your publications.

Goal #2 may be the most visible one among the several efforts that the IFPCS has been making; The *International Pigment Cell Conference (IPCC)* has been held every three years since 1946 when Dr. Myron Gordon held the first meeting in New York. Since the inauguration of the IFPCS in Kobe in 1990, the IFPCS and one of the regional Societies have co-organized the IPCC on a rotating basis among the ESPCR, PASPCR, and JSPCR. The 15th IPCC was thus held in London in 1993, the 16th IPCC in Anaheim, California in 1996, and the 17th IPCC in Nagoya last year. I am happy to inform you that the venue of the 18th IPCC is a splendid, five star hotel in Scheveningen on the North Sea coast. The Chair of the next 18th IPCC, Dr. Stan Pavel, and his

Organizing Committee, are working hard to welcome you to the Netherlands in September 8-13, 2002. The basic framework of the scientific program is now being planned, and will be finalized after consultation with the International Program Committee; you will receive the first announcement early next year. I wish to urge each of you to start planning to attend this exciting and stimulating Conference and to present your new findings.

Goal #3 is being achieved through related and important initiatives that the IFPCS has taken in the past several years. *Special Interest Groups* have been established and are providing substantial benefits to our scientific community, as shown on our Web page. We now have Special Interest Groups in the subdisciplines of **Biology of Melanoma, Pigment Cell Development, Genetics of Pigmentation, Hypo/Hyperpigmentation, Ocular/Extracutaneous Pigmentation, and Vitiligo**. The Federation Council has decided to continue these Interest Groups as a mechanism to promote pigment cell research. We expect that some of those Groups will hold their own Satellite symposia at the next IPCC, as they did at the Nagoya IPCC. The Pigment Cell Development group is also organizing an open workshop on April 4-6, 2001 at the NIH, Bethesda, USA. Further information will be available from Drs. Dorothy Bennett and Bill Pavan.

Another initiative to achieve Goal #3 was the establishment of the *IFPCS Visiting Scientist Award*. The grants, established in 1997, are intended to support investigators from one of the regional Societies who wish to visit the laboratory of an investigator in another regional Society to learn specialized techniques and/or to establish inter-Society collaborations. You will find a full description of that program, the name of generous corporate donors, and the name of awardees on the IFPCS web page. The initial 3-year period of the program will end this year with 9 awardees being selected, but as the program has been quite successful, we hope to continue this program with a renewal of corporate donations.

I sincerely hope that we will see healthy and steady progress in our 3 regional Pigment Cell Societies, ESPCR, JSPCR, and PASPCR at the beginning of the new 21st century. In this respect, I wish to welcome new faces to the IFPCS Council; Drs. Dorothy Bennett (new President of the ESPCR) and Jose Garcíá-Borrón (new Secretary of the ESPCR). Finally, I urge each of you to contribute to your Society in any way you can: submitting your abstracts to the regional Society meetings, publishing your papers in *Pigment Cell Research*, collaborating with other members, and recruiting others scientists and clinicians to join us. Let me take this opportunity to wish each of you and your colleagues a wonderful and successful year 2001, the beginning of the 21st century.

*Shosuke Ito*  
*President, IFPCS*

## **Positions - Wanted and Available :**

### **Principal Scientist- Clinical Research - Skin Science Research**

Unilever employs over 200 scientists at our New Jersey Laboratory who are dedicated to innovative and scientifically rigorous skin research programs. Our world sales exceed \$40 billion so our programs have solid financial funding allowing for an innovative and challenging research culture. We currently have a full time opening that provides a unique opportunity to apply your basic science skills to human studies that impact the condition of skin for hundreds of millions people worldwide. We are seeking an expert in pigment biology or photobiology who can advance our knowledge and link laboratory research to clinically defined improvements of consumer skin problems. As a member of our skin research team, you will have an opportunity to work with other scientific experts in many fields including cell biology, biochemistry, measurement science and physical chemistry. You will also be encouraged to establish and maintain close ties to research in academic and government research communities.

We offer a competitive salary, benefits including tuition assistance and relocation, and a dynamic environment filled with learning and discovery beyond conventional scientific boundaries. Applicants must be authorized to work in the USA. For consideration please forward your CV to: Human Resources, Dept. CR-SID, Unilever Research US, 45 River Road, Edgewater, NJ 07020 or E-Mail: job.mca@unilever.com . Please place only the letters "CR-SID" as the subject of your e-mail. Unilever is an Equal Opportunity Employer m/f/d/v.

**Postdoctoral Fellows - Cancer and Developmental Biology** - Two NIH-funded positions are available for fellows interested in studying the Hedgehog signaling pathway in development and disease using skin as a model system. One project centers on defining the function of the Hedgehog pathway during skin appendage morphogenesis (Dev. Biol. 205: 1-9, 1999); a second project focuses on understanding how deregulated activation of this pathway gives rise to basal cell carcinomas (Nature Genet. 24: 216-7, 2000). Applicants should have a solid background in molecular and cell biology, with experience in transgenic animal models desirable but not required. Interested individuals should send a CV, letter of interest, and names of three references to: Dr. Andrzej Dlugosz, University of Michigan, Department of Dermatology and Comprehensive Cancer Center, 3310 CCGC, Box 0932, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0932 Email: dlugosza@umich.edu. The University of Michigan is an Equal Opportunity Employer.

**Postdoctoral Research Associate** - Position available to study the biology of human inherited disorders of pigmentation using gene transfer technology. The successful applicant will have a Ph.D. and/or M.D. with experience in cell biology and molecular biology. Experience in gene transfer/genome manipulation is preferred. Please send curriculum vitae along with the names of three references to Dr. Richard King, Division of Genetics, Department of Medicine, Box 485 Mayo, 420 Delaware St. S.E., University of Minnesota, Minneapolis, MN 55455. Equal Opportunity Employer.

**Postdoctoral Position** - Ph.D. in molecular biology, biophysics, genetics or biochemistry. Position available to conduct research on molecular mechanisms of cellular response to oxidative stress in human melanocytes and melanoma cells and its regulation for preventive and therapeutic indications. Contact Dr. Frank L. Meyskens Jr., Director, University of California-Irvine, Chao Family Clinical Cancer Research Center, 101 The City Drive, Orange, CA 92668, USA. Fax (714) 456-5039 Email flmeyske@uci.edu

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The Bibliography published in this issue covers the period May through July, 2000. If you notice a paper that was not detected by this search that should be included, please send it to us and we will include it in the next issue. By its very nature, assignment of a reference to a particular category is arbitrary and we urge you to read through all categories to make sure you don't miss any pertinent to your field. We have attempted to highlight any publications which include a member of the PASPCR with a star (*sorry if we missed you but let us know and you'll get a free marked repeat in the next issue*).

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