PANAMERICAN SOCIETY for PIGMENT CELL RESEARCH

PASPCR Newsletter

Volume 2 Number 3 September, 1994

Introduction . . . by DeWayne Townsend

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 the *Newsletter*; help us to update the Job Listings, Calendar of Events, Meeting Reports, Abstracts in press and other items of general membership interest. If you attend a scientific meeting at which you heard about work 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. If you should have a change of affiliation or address, we'd like to know that, too. 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 any of the members of the Publications Committee.

The Publications Committee wants to make collaboration between members of the Society as easy as possible and toward that goal we are encouraging the use of E-mail and other forms of electronic communications. We encourage everyone who has an E-mail address to forward it to the Publications Committee. The Publications Committee is willing to help any member of the PASPCR get you in touch with the individuals who can set up your E-mail account and to some extent will help you get started.

The PASPCR has a Gopher server running that contains items of interest to the membership, such as a directory of members, By Laws and text of past Newsletters. If you have any ideas for what sort of information you would like to be able to access please let us know. We are currently working with the IFPCS to develop a list of resources that will be available to PASPCR members.

- - - continued on page 3 - - -

PanAmerican Society for Pigment Cell Research

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Calendar of Events

Oct 18 - 22, 1994 44th Annual Meeting of the American Society of Human Genetics, to be held in Montreal, Canada, (contact: Administrative Office, 9650 Rockville Pike, Bethesda, MD 20814-3998, FAX: 301/530-7079)

Oct 19 - 22, 1994 5th ESPCR Annual Meeting, to be held in Vienna, Austria, (contact: ESPCR '94, Vienna Academy of Postgraduate Medical Education and Research, Alser Straße 4, A-1090 Vienna, Austria, FAX: 43-1-42-138323)

Oct 30- Nov 5, 1994 16th International Cancer Congress, to be held in New Delhi, India (contact: Congress Secretariat, Tat Memorial Centre, Parel, Bombay 400 012, India, FAX: 91/22/412-9937)

Dec 9 - 10, 1994 Annual Meeting of the Japanese Society for Pigment Cell Research, to be held in Tokyo, Japan (contact: Department of Dermatology, Nihon University School of Medicine, FAX: 81/3/5995-9841)

Dec 10 - 14, 1994 34th Annual Meeting of the American Society for Cell Biology, to be held in San Francisco, CA (contact: ASCB National Office, phone: 301/530-7153)

Feb 22 - 25, 1995 2nd International Conference on Advances in the Biolgy and Clinical Management of Melanoma, to be held in Houston, TX (contact: MD Anderson Cancer Center, Conference Services, 1515 Holcombe Blvd, Houston, TX, 77030-4095, phone: 713/792-2222)

Mar 18 - 22, 1995 Annual Meeting of the American Association for Cancer Research, to be held in Toronto, Canada (contact: AACR National Office, FAX: 215/440-9313)

May - , 1995 Melanoma '95, to be held in Brighton, United Kingdom (contact: Dr. N. Kirkham, Histopathology, Royal Sussex County Hospital, Eastern Road, Brighton BN2 5BE, United Kingdom, phone: 44/273-696955)

June 25 - 28, 1995 VIth PASPCR Annual Meeting, to be held in Kansas City, Kansas, (contact: Dr. Sally Frost-Mason, Department of Physiology, University of Kansas, 3038 Hayworth Hall, Lawrence, KS 66046-2106, FAX: 913/864-5321)

Oct 29 - Nov 3, 1996 XVIth International Pigment Cell Conference, to be held in Anaheim, California, (contact: MMC/UCI Center for Health Education, P.O. Box 1428, Long Beach, California 90801-1428, FAX: 310/933-2012)

- - - Introduction (continued from page 1) - - -

If you have any ideas for what sort of information you would like to be able to access please let us know. The **PASPCR** information will soon be found using Gopher under "International Federation of Pigment Cell Societies" under "International Organizations", but for now the immediate path is: Host=lenti.med.umn.edu., port 70, Path=1/Departments/Medicine, Department of/Division of Genetics and Metabolism/International Federation of Pigment Cell Societies.

Welcome to New Members

We welcome the following new members to the **PASPCR** . . . .

Mary K. Cullen	David E. Elder
Sungbin Im	Jeffery M. Tosk

If anyone is interested in joining our Society or wishes to sponsor a member, application forms can be obtained from Dr. Richard King at the PASPCR Secretary/Treasurer' office.

Corporate Sponsors

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 Sponsors	*SILVER Sponsors*	*BRONZE Sponsors*
Ortho Pharmaceutical Corp	Avon Products, Inc	Galderma Laboratories, Inc
	Bristol-Myers Squibb Co	Lawrence M Gelb Research
	Dermik Laboratories	Foundation of Clairol, Inc
	Schering-Plough Corp	Procter and Gamble Co

1994 Council Elections

The following members (listed below in alphabetical order) have been nominated to the 1994 ballot as candidates for three Council positions by the 1994 PASPCR Nominating Committee. We would like to take this opportunity to remind all members that other names can be placed on the ballot by petition of the general membership; anyone wishing to do this must file the nomination in the PASPCR Secretary/Treasurer's office within 60 days (i.e. by November 15, 1994). The letter of petition ballot must be signed by at least five (5) active members of the PASPCR, and must be accompanied by a statement from the candidate that he/she is willing to be so nominated.

Miles Chedekel	Ruth Halaban	William Oetting
Magdalena Eisinger	Alan Houghton	Walter Quevedo

Bryan Fuller

1994 PASPCR Vth Annual Meeting

by Frost-Mason, Hearing, King and Nordlund

The Vth Meeting of the PASPCR was held in Philadelphia, Pennsylvania from June 26-29, 1994. Dr. Gert Jacobsohn was the Organizer of this meeting, and all those who attended the meeting know that it was an outstanding one. The scientific program was an interesting and exciting one and the social program was immensely enjoyable - those present at the Conference Banquet will long remember the Mummer's band among the dinosaurs! The Society presented a number of awards during the meeting that are summarized following:

PASPCR Career Achievement Award

Dr. Walter Quevedo was honored as the first recipient of the PanAmerican Society for Pigment Cell Research Career Achievement Award. At the PanAmerican meeting in Philadelphia hosted by Gert and Myra Jacobsohn, the first Career Achievement Award was presented to Dr. Walter Quevedo of Brown University by Dr. James J Nordlund. A special Committee had been established by the PASPCR President last year to establish criteria for an award to be the highest recognition given by the Society to an individual whose professional career has been devoted intensively and successfully to the study of pigment cell biology.

The award is to be given only to a senior investigator, usually an individual who has achieved professorial level or equivalent, a member of the Society whose work is unique in its contributions to our understanding of pigment cell physiology. The award is given for a life time of successful participation, not merely a single observation. The award itself is a unique plaque designed specially for the Society and composed of wood, bronze and decorative glass.

Dr. Quevedo was the first recipient chosen by an anonymous awards committee. It was given to him to acknowledge his longstanding advocacy of pigment cell research reflected by his numerous research contributions to the discipline in a career spanning 40 years. He has worked with many collaborators, in particular Thomas J. Holstein. Together they elucidated fundamental mechanisms into genetic influences on radiation-induced tanning of mammalian skin. With Drs. Szabo, Pathak and Fitzpatrick, he studied the age dependent changes in melanocyte populations of exposed and covered skin. More recently he investigated with Drs. Dyckman and Nordlund the influence of melanin on susceptibility of mammalian skin to depigmentation by genetic and chemical mechanisms, and with Drs. Dyckman and Jimbow the induction of melanotic tumors. He has collaborated with Drs. Burnett and Wong on cyclic replacement of pigmented hair in various strains of mice. He also has dedicated his administrative abilities to the organization of the International Pigment Cell Society and its successor, the PanAmerican Society for Pigment Cell Research.

Dr. Quevedo is a model for young investigators by his persistence in his studies that have led to the publication of successful research, by his collaborative interactions with so many other scientists, and his willingness to give extra time for some of the administrative needs that make our Society and the Federation such wonderful organizations.

The Society again extends its congratulations to him as well as its gratitude and thanks and extends a special invitation to him to continue his active participation in its activities.

PASPCR Honorary Member

Dr. Elizabeth Russell was inducted as the first Honorary Member of the PanAmerican Society for Pigment Cell Research at the Conference Banquet in Philadelphia. The award was presented by Dr. Murray Brilliant and Dr. Russell's many achievements that led to her selection for this honor have been summarized in a previous Newsletter [Vol 1, #3, 1993]. A formal announcement of the award, a photograph and Dr. Russell's research summary were

publishedas an acknowledgement of this honor in a recent issue of ***Pigment Cell Research*** [Vol 7(3):129-130, 1994].

PASPCR Special Lectureship sponsored by the Lawrence M Gelb Research Foundation

Dr. Beatrice Mintz presented the first PASPCR Special Lecture; she was introduced by Dr. Sally Frost-Mason, as follows:

As a long-time student and practitioner of developmental biology, it was a great pleasure for me to introduce this year's special lecturer, Dr. Beatrice Mintz. All of us who study development know of Dr. Mintz's seminal work on genetic mosaicism in mice, which includes her elegant studies of chimeric mice published in Science, PNAS, and other leading scientific publications.

Dr. Mintz has had a long and very prestigious career, beginning with an undergraduate degree from Hunter College in New York City, and followed by graduate work at the University of Iowa. In addition to her Ph.D. from Iowa, she holds a number of honorary degrees, including honorary doctorates from New York Medical College, The Medical College of Pennsylvania, Northwestern University, and her alma mater, Hunter College. In 1973, she was elected to the National Academy of Sciences, and among the great many awards and honors that have been bestowed upon her, Dr. Mintz has also been a AAAS fellow, a fellow of the American Academy of Arts & Sciences, and a member of the American Philosophical Society. She has participated actively as a member of a number of Presidential and governmental national advisory committees, beginning with President Ford's Biomedical Research Panel and most recently as a member of the National Academy of Sciences Council and the Committee on Science, Engineering and Public Policy.

Throughout the years, Bea Mintz's research has focused on various aspects of mouse development including early development of embryos, the immunological consequences of genetic mosaicism, teratocarcinoma development, and, of course, pigment cell development. She has pursued these research interests, initially at the University of Chicago, and from 1960 through the present, at the Fox Chase Cancer Center in Philadelphia. It was thus a great privilege and an honor for me to introduce this outstanding woman of science, and to have her speak to our society on the topic of "Transgenic Mouse Models of Melanoma."

Young Investigator Awards

Three Young Investigator Awards were selected based on presentations made at the PASPCR meeting in Philadelphia. The awardees were selected by an anonymous Committee and were presented by Dr. Richard King at the end of the meeting. These awards honor young scientists in our field, and attempt to select a recipient at the predoctoral, the postdoctoral and the junior faculty level for recognition. Awardees receive an engraved scroll and a $250 honorarium. This year's awardees (and the titles of their presentations) were:

David Granholm (predoctoral), "Effects of the lethal yellow allele on cysteine and GSH concentrations in regenerating hair follicles of *agouti* mutant mice" (coauthored by RN Reese and NH Granholm)

Deborah Nagle (postdoctoral), "Characterization of the genomic region responsible for pigmentation defects in *W*, *Ph* and *Rw* mutations in mice" (coauthored by RB Hough, BW Nicuwenhuijse, CW Lo, V Chapman and M Bucan)

Philip J Fernandez (junior faculty), "Bright-colored pigmentation in amphibians"

Travel Stipends

The PASPCR Council was again able to promote attendance at our meeting by students and junior faculty by approving travel stipends. This year, 17 such stipends were awarded that were approximately $250 each. Awardees were:

Lisa Austin	Victoria Kimler	Sreekumar Pillai
Diane Barker	Catherine LePoole	Susana Rosemblatt
Tricia Cooley	Randall Morrison	Eirikur Steingrimsson

Phillipe Donatien	J. Michael Newton	Loren Wipf
Donna Durham-Pierre	William Pavan	Huiquan Zhao
David Granholm	David Parichy	

1995 PASPCR VIth Annual Meeting Site : by Sally Frost-Mason

Announcement - Sixth Meeting of the PASPCR, June 25-28, 1995, Kansas City, MO

From the 25th through the 28th of June, 1995, the Sixth Meeting of the PASPCR will be held at the Ritz-Carlton Hotel on the Country Club Plaza in Kansas City, Missouri. Planning is well underway for these meetings. The local organizing committee, headed by Sally Frost-Mason, is comprised of Ken Mason, Elizabeth Topp, and Robert Palazzo, all faculty members at the University of Kansas in nearby Lawrence, Kansas. Dr. Shirley Tilghman from Princeton University and Dr. Garth Nicholson from M.D. Anderson Cancer Center in Houston have already agreed to be keynote speakers at next year's meeting, and a third keynote speaker has been invited as well. A number of individuals have agreed to organize symposia and minisymposia on topics ranging from cell, molecular and developmental pigment cell
biology to melanoma biology. If you have suggestions for the meeting organizers or if you would like to participate please call Sally Frost-Mason at 913-864-3661 or 913-864-3296.

The Ritz-Carlton Hotel is one of the finest and most elegant hotels in Kansas City. It is located adjacent to the premier shopping and dining area in Kansas City, known as the Country Club Plaza. From the Plaza, it is a short walk to the Nelson-Atkins Museum of Art, and a tourist trolley ferries people to the Westport and Crown Center shopping and entertainment centers at regular intervals all day long.

As entertainment, a jazz-pub crawl is planned, so you can experience the jazz heritage that is part of the Kansas City tradition. The banquet for these meetings will consist of a variety of KC's best barbecue, music and dancing, and casual western attire.

Stay tuned for more information on these meetings, and please plan on joining us next June!

XVI IPCC (International Pigment Cell Conference) by Roger Bowers, Frank Meyskens

The XVIth International Pigment Cell Conference will be held from October 29th to November 3, 1996 at the Disneyland Hotel in Anaheim, California. Frank Meyskens is the Organizer of this meeting with Roger Bowers and Alistair Cochran serving as co-chairs of the Organizing Committee. More information regarding this meeting (and its interesting venue) will be forthcoming in future Newsletters and in separate mailings. Dr. Meyskens has asked that the following announcements be included in our Newsletter.

Satellite Conferences: No satellite conferences will be supported by the local organizing committee that are held within the time frame of the XVIth International Pigment Cell Conference, Tuesday, October 29, 1996; 6:00 pm to Sunday, November 3, 1996; 8:00 am. There are a wide number of venues possible to hold small or large satellite conferences either before or after the main pigment cell meeting. Our Memorial/UCI Educational Foundation will be happy to work with you in planning, for a small fee, and we request that we be notified of the intent of any satellite conference no later than June 1, 1995. If we are notified later than this date, accommodations and planning availability cannot be guaranteed.

Competitive Stipend for Travel Support: The Organizing Committee will provide funds in a competitive manner for graduate students, post-doctoral fellows and those within five years of

formal academic appointment. The number of stipends will depend on the availability of funds and further information will become available during the second and subsequent informational mailings.

Future PASPCR Meeting Sites ?

by Vincent Hearing / Richard King

The VIth Annual Meeting of the PASPCR is set to be held in Kansas City in June, 1995 (cf above) and the following year the XVIth International Pigment Cell Conference will be held in Sept, 1996 in Anaheim. We will soon be considering sites for our 1997 and 1998 PASPCR annual meetings (1999 will be another IPCC). The PASPCR Council would like to receive applications from those interested in hosting future meetings, and all such applications must be received in the PASPCR Secretary/Treasurer's office by January 1, 1995. That application should state the proposed time for the meeting (we traditionally have them in June), the proposed location for where it would be held, what type of funding support could be, or has been, obtained, points of scientific emphasis for the meeting and any other information you think relevant. Please contact Dr. Richard King (Secretary/Treasurer) for more information. The PASPCR Council will discuss and potentially approve 1 or more future meeting sites early next year, so all interested parties should be sure the relevant paperwork is complete in his office by the first of the year.

PASPCR Secretary / Treasurer's Report :

by Richard King

Following is a synopsis of the PASPCR Council Meeting held by telephone conference call on May 5, 1994. . . .

Hearing opened the meeting and the minutes of the Council meeting of January 27, 1994, were accepted. The treasurer reported that 97 members had renewed their dues for 1994 and that 19 new members has joined the society in 1994.

The Nominating Committee, chaired by President-Elect Frost-Mason, has prepared a slate of nominees for the three Council positions that will start in 1995, and all have agreed to be candidates. The nominees are: M. Chedekel, M. Eisinger, B. Fuller, R. Halaban, A. Houghton, W. Oetting, W. Quevedo. The election will be held in the fall of 1994. Frost-Mason reviewed the selection process for the 1994 PASPCR Career Achievement Award to be given to Walter Quevedo. It was noted that the award was an excellent activity of the society, but need not be given each year.

The Publication Committee report was given by Townsend, chair. The Newsletter is in the process of being available on E-mail. Future newsletters should include the lists of awards and honors given to various members of the society, and information on career moves when members relocate. Townsend proposed that postcards be sent to the membership before each newsletter to elicit information to be included in the newsletter.

The Membership Committee report was given by Pawelek, chair. A brochure for the society, emphasizing communication in science is being prepared.

The 1994 Travel Award requests were reviewed. A total of $4,200 is available for each annual meeting with no more that $300 per person, and 17 graduate students and post-doctoral fellows who meet the eligibility criteria have applied for travel awards for 1994. An attempt is to be made to provide
travel awards for all 17 applicants based on travel, hotel and meeting registration expenses; with equal distribution, each applicant should receive approximately $265.

Hearing reviewed the past history of the Vitiligo Award and the connection between the PASPCR and the American Skin Association. The Awards Committee (President, President-Elect and Secretary-Treasurer) nominated James Nordlund for 1994, and was informed that the nomination was after the closing date for nominations. The Awards Committee will make a nomination in 1995.

Frost-Mason presented a proposal for the lectureship supported by the Laurence Gelb Research Foundation: (1) the lectureship will be known as the PASPCR Special Lectureship sponsored by the Lawrence M. Gelb Research Foundation of Clairol, Inc., a division of Bristol-Meyer Squibb; (2) A committee consisting of the officers of the PASPCR and a representative of the Lawrence M. Gelb Research Foundation, and the person organizing the next PASPCR annual meeting will be responsible for selecting the lecturer; (3) The lecturer will be an active and outstanding researcher who is currently making a significant impact in the field of pigment cell research; (4) The lecturer does not need to be a member of the PASPCR or any other pigment cell society; (5) Each lecturer will be given a plaque of recognition; (6) An officer of the PASPCR and a representative of the Lawrence M. Gelb Research Foundation will present the plaque to the lecturer and will deliver to the membership in attendance a
synopsis of the accomplishments of the lecturer that lead to his or her selection for this honor. The proposal as was accepted as a rule and regulation by the council.

Jacobsohn reviewed the plans for the 1994 Philadelphia meeting, and the Council thanked him for organizing an excellent meeting.

The minutes have been prepared by R. King, Secretary-Treasurer

Meeting Report :

by Julian M Menter

22nd Annual Meeting of the American Photobiology Society - Scottsdale, AZ June 22-25, 1994

There were 25 symposia, 79 contributed papers, 68 posters, 8 special lectures, 1 school, 2 short courses, and 2 works-in progress sessions. These papers covered virtually all aspects of photobiology. The following is condensed from papers which were deemed by this reporter to be of interest to pigment cell biologists. This list undoubtedly reflects the personal prejudice of the reporter; a full listing of abstracts is available on request.

Symposium #1: Induction of Cytokines by UV. N Levine discussed the Sun, Melanogenesis, and Cytokines. Proposed models are (1) a direct UVL mitogenic model, where UVL itself causes melanocyte melanization as well as proliferation, (2) an eicosanoid model, where UVL-induced eicosanoid production may lead to melanocyte cell-cycle arrest and MSH-receptor expression, (3) vitamin D model, where vitamin D stimulated by UVL may cause an increase in tyrosinase, (4) growth factor model, in which UVL increases IL-1 production, which in turn increases MSH receptor expression on melanocytes. MSH produced locally may bind to the receptors and lead to increased melanin sythesis through a second messenger such as cAMP and/or diacylglycerol, (5) a dendritic extension factor, produced by macrophages, which may enhance melanogensis by causing an extension of dendrites on melanocytes, and therefore and increase in melanin tranfer to keratinocytes, and (6) a UV-produced increase in MSH receptor expression on melanocytes.

Symposium #4: Molecular Biology of Melanoma: N Levine stood in for F Urbach and gave an overview of the relationship between solar UV and malignant melanoma. JM Menter discussed the double-edged sword nature of melanins viv-a-vis melanoma. The remarkable binding and electron transfer properties of melanins may either be protective or deleterious. For example, selective melanin binding of carcinogenic compounds may lead to increased susceptibility to melanoma. on the other hand, melanin-assisted generation of cytotoxic quinones *in situ* via electron transfer may be beneficial from the standpoint of malignant melanoma therapy. F Anthony studied the UVA-induced photoaddition between 8-methoxypsoralen (8-MOP), and S-91 mouse melanoma cell phospholipids. They showed that resulting 8-MOP fatty acid adducts activate protein kinase C, and suggested that

such adducts can effect this response by substituting for diacylglycerol, and thus mimicing the latter's effect on melanocytes. E Sutherland discussed the factors neccesary in developing and quantitating the transformation of normal melanocytes to melanoma cells *in vitro*. Such quantitation of transformation frequencies in melanocytes treated with a damaging agent requries determining the number of survivors as well as to neoplastic growth. To quantitate melanocyte growth, non-destructive electron imaging techniques were used. Cells were grown both under conditions which were permissive to growth of normal melanocytes, and those which were permissive only to transformed melanocytes. Non-permissive conditions can be used to quantitate transforming effects of chemical and physical agents, including UV. A Albino studied the relationship between UV radiation, the p53 tumor suppressor gene, and malignant melanoma. These workers showed that p53 protein levels are transiently increased 5-10 fold in normal melanocytes by UVB radiation. The increase is due to p53 stabilization by a putative UVB-induced protein, and not to any other known protein. The increase in p53 levels correlates with temporary suppression of cell replication and ability to survive UVB-induced damage. Cell-cycle analysis reveals a temporary block in the G_2/M compartment in UV-treated cells with wild-type p53 protein, and a permanent block in cells with mutant p53. These data suggest that the ability of melanocytes to increase levels of p53 protein is critical for protecting against UVB-induced DNA damage, and that this mechanism is defective in melanoma cells. P Wolf studied the ability of sunscreens to protect against UV-induced immune suppression in mice as measured by the ability of these mice to reject antigenic melanoma cells. Sunscreen preparations containing o-PABA, methoxycinnamate, or benzophenone-3 completely protected mice against-induced skin edema, and nearly gave complete protection against histologic alterations. However, they gave no protection against UV-induced immune suppression. R Setlow offered a new action spectrum for melanoma induction, using a fish model (Xiphophorus). Inter- and intra-specific hybrids of this genus are very light-sensitive. Their action spectrum has a relatively large component in the UVA component, compared to erythema. These authors speculate that if the human action spectrum for melanoma induction is similar to fish, sunscreens that prevent erythema may have relatively little effect in preventing the induction of melanoma.

Direct and Spin Trapping Studies of Melanin: T Sarna All melanins contain persistent free radicals which are easily detected by electron paramagnetic resonance (EPR) spectroscopy. Due to the high selectivity and sensitivity of EPR, melanin detection and quantitation in biological materials is possible without the necessity of pigment extraction and purification. The EPR signal of melanin depends on the polymer redox state, its structural integrity, the nature of the monomer units, and also its characteristic responses to transition metal binding. Recent advances in EPR studies of natural melanins from human substantia nigra are presented. a hypothesis is that these melanins act as an antioxidant in scavenging active oxygen intermediates.

Dihydroxyacetone: Tanning and Photorotection: BC Nguyen, IE Kochevar and RR Anderson Dihydroxyacetone (DHA), a browning agent present in several commercial "tanning" preparations produces a skin coloration that absorbs in the low end of the visible region with overlap into the long-wavelength UVA. The present studies were undertaken to investigate the chemical reactions responsible for "tanning" and to correlate "tanning" with effective photoprotection. Initial experiments demonstrated that "tan" developed on skin treated with DHA and left exposed to the environment, but not on occluded DHA-treated skin areas. Subsequent removal of occlusion led to "tanning". Factors influencing this response are O_2, humidity, temperature, fillagrin breakdown. Rates of DHA reaction with lysine, histidine, and glutamine have been determined. Binding sites of DHA are located only on the outermost layer of the stratum corneum. DHA is highly substantive, and avoids the risk of sensitization because it does not reach living cells.

Photoprotection of UVC Induced DNA-Protein Cross-Links (DPC) in Cloudman S91 Melanoma Cells Treated with Isobutyl Methyl Xanthine (IBMX) and Melanocyte-Stimulating Hormone (MSH): RM Goodman, HZ Hill, K Cieszka and GJ Hill Pigment Melanin has been reported to have both protective and photosensitzing properties. Cloudman melanoma cells are a good model for studying the photobiology of melanin, since they can be induced to high pigment levels. Lines S91/amel and S91/mel were treated for 3 days with 0.1 mM IBMX and 0.2 uM MSH. DNA was prelabeled with ^{3}H-dThd, and the cells were irradiated with UVC. Thereafter the cells were analyzed for DPC (Costa et al, Cancer Res. 53 460, 1993). Melanin levels increased from 1 to 4 pg/cell in the

S91/amel and from 3.5 to 49 pg/cell in the S91/mel. There was no difference in the induction of DPC in the untreated vs IBMX-MSH treated S91/amel cells, wheras IBMX-MSH treatment of S91/mel cells resulted in 50% reduction of DPC. These results indicate that high, but not low levels of pigmentation are photoprotective for DPC, probably by decreasing the flux that reaches the cell nucleus.

Induced Cutaneous Melanotic Lesions: RD Ley and DF Kusewitt: Four groups of age-, sex-, and litter-mate-matched opossums maintained on a diet containing various levels and types of fat were exposed 3 x per week to 250 J/m^2 from an unfiltered FS-40 lamp (280-400 nm). Diet 1: 3.5% corn oil(polyunsaturated fat); Diet 2: 7.0% corn oil; Diet 3: 14% corn oil; and Diet 4: 4-14% lard (saturated fat). The time to appearance of non-melanoma skin tumors (NMS) was similar in all dietary groups. In contrast, No UV-induced melanotic lesions were observed in animals maintained on a lard diet, wheras the development of such lesions was similar in all the corn oil diets. The life span of animals on the saturated fat diets was shorter than that on the unsaturated fat diets. The mechanisms for these observations are unclear.

UV-Responsive Element-Binding Proteins in Xeroderma Pigmentosum and Melanoma Cells: Z Ronai, YM Yang and A Schaffer: The UV-responsive element (URE) is an octamer sequence which shares homology with AP1 and CRE target sequences. Analysis of URE binding proteins in human melanoma cells led to the identification of ATF and AT1 family members. Binding to URE is diminished in UV-treated melanoma cells. The latter is attributed to a UV-inducible transcriptional inhibitor, a 12-14 kD protein which inhibits formation of protein-DNA complexes. The inhibitor activity is not limited to URE or its bound proteins, and is thought to occur prior to the interaction of of transcription factor with the target sequence. Analysis of URE binding proteins in XP cells of different complementation groups revealed a large variation in both expression and binding activites of AP1 and ATF families.

Pigment Cell Research

by Hanne Freno / Munksgaard Publishers

1995: A year of change for *Pigment Cell Research* as Professor Joseph T. Bagnara's term as Editor expires and Professor Takuji Takeuchi assumes Editorship.

Pigment Cell Research, now in its seventh year, is about to undergo a planned change of editorship. It is a change that Founding Editor Joseph T. Bagnara sees as a natural evolution in the history of the journal.

Joseph T. Bagnara's first and foremost reason for starting *Pigment Cell Research* was to fill the need for a first-rate outlet for original papers in the field of pigment cell biology. In 1986 he took the idea to the late Alan R. Liss and in 1987 the first issue was published. The purchase in 1988 of Alan R. Liss, Inc., by John Wiley and Sons, Inc., momentarily brought some uncertainty to the journal's future, but Munksgaard International Publishers saw an opportunity in the publication. With Munksgaard's purchase of the journal, Joseph T. Bagnara entered into the new cooperation with an enthusiastic and open mind. We at Munksgaard quickly learned to appreciate his deep involvement with and concern for the journal.

In 1991 the Agreement between the International Federation of Pigment Cell Societies and Munksgaard International Publishers was formalized and the journal has since been sponsored by the Federation, which consists of the European, the Japanese and the PanAmerican Societies for Pigment Cell Research.

Joseph T. Bagnara is now completing seven years as Editor-in-Chief. By building the strengths and traditions of the journal, he has played a major part in placing *Pigment Cell Research* in its present esteemed position. It is with profound respect and admiration that I express the publisher's gratitude for Joe's excellent and invaluable work as Founding Editor of *Pigment Cell Research*.

The editorship of the journal will pass to Professor Takuji Takeuchi, a renowned scientist within the field of pigment cell research who has a strong background in molecular biology, developmental

biology, and genetics. We are confident that the journal will continue to improve under his leadership and it is with great pleasure that we welcome Professor Takuji Takeuchi as the new Editor-in-Chief of *Pigment Cell Research*.

With immediate effect, contributors are kindly requested to submit their papers to:

Takuji Takeuchi, DS, Editor-in-Chief, *Pigment Cell Research*, Nihon Gene Research Laboratories, Inc., 3-11-18 Tsubamesawa-higashi, Miyagino-ku, Sendai 983 Japan. Telephone: +81 22 251-4055 FAX: +81 22 251 0481

Members in the News

Walter Quevedo was honored as the first recipient of the PanAmerican Society for Pigment Cell Research Career Achievement Award (cf article above)

Beatrice Mintz presented the first PASPCR Special Lecture at the Annual Meeting held recently in Philadelphia (cf article above)

Yutaka Mishima received the Purple Ribbon Decoration for outstanding contributions to science or art from His Majesty the Emperor, Akihito, at the Imperial Palace of Japan, on May 13, 1994. The award was presented to him for his innovative discoveries in the control of melanin and melanoma growth, including discovery and success of selective melanoma therapy using atomic reactor and melanogenesis-seeking ^{10}B-compound. It is the first time a dermatologist has ever received this national medal of merit.

Elizabeth Russell was inducted as the first honorary member of the PanAmerican Society for Pigment Cell Research (cf article above)

Randall Morrison has moved to Hood College. His new address is: Department of Biology, Hood College, 401 Rosemont Avenue, Frederick, MD 21701; phone: 301/696-3659; FAX: 301/694-7653; E-mail: RMORRISON@NIMUE.HOOD.EDU

David Granholm, Deborah Nagle and **Philip Fernandez** each won the PASPCR Young Investigator Awards during the Philadelphia PASPCR Meeting (cf article above)

Positions - Wanted and Available :

Opportunity available to do graduate studies towards a doctoral degree at the University of Cincinnati College of Medicine. Graduate program is through the Department of Cell Biology, Neurobiology, & Anatomy. Dissertation project would focus on molecular biology of the melanocyte physiology and pigmentary diseases. For information contact: Raymond E. Boissy, Ph.D., Department of Dermatology, University of Cincinnati College of Medicine, 231 Bethesda Avenue ML-592, Cincinnati, Ohio 45267-0592; (513)558-6242 [TEL]; (513)558-0198 [FAX]; boissyre@ucbeh.san.uc.edu [eMAIL].

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The Bibliography published in this issue covers the period May through July, 1994. 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. We have attempted to highlight any publications which include a member of the PASPCR with a star.

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MSH, POMC, GROWTH FACTORS & RECEPTORS

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