



PASPCR

Newsletter

Volume 6 Number 2

June, 1998

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; help us to update the Job Listings, Calendar of Events, Meeting Reports, and other items of general interest. If you attend a scientific meeting at which you heard 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 Vince Hearing, preferably by Email to hearingv@nih.gov.

The **PASPCR Web page** is the major, up-to-date source of current information for the PASPCR membership. The **new** URL address for the home page is: <http://www.cbc.umn.edu/paspcr>. Please update your existing PASPCR link to this new address (the old one will disappear in a few months). The PASPCR site contains information on 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 Pigment Cell Conference in Nagoya, the International Federation of Pigment Cell Societies (IFPCS), and the regional Pigment Cell Societies from Europe and Japan. In addition, the PASPCR membership directory is available on that page; please notify us if you wish any or all of your information to be deleted or modified on that site.

Please check out the **PASPCR Web page** and send any comments and/or suggestions to the PASPCR WebMaster, Bill Oetting at bill@lenti.med.umn.edu or to Vince Hearing at hearingv@nih.gov.

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**PanAmerican Society for
Pigment Cell Research**

c/o **Dr. James J. Nordlund / Raymond Boissy**
Department of Dermatology
University of Cincinnati
231 Bethesda Avenue
Cincinnati, OH 45267-0592
FAX: (513) 558-0198

Officers

Sally Frost-Mason
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David A. Norris
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John M. Pawelek

IFPCS Representative

Vincent J. Hearing
past-President

The **PASPCR Newsletter** is published quarterly;
for further information or to submit articles, contact:

Publications Committee:

Dr. Jean L. Bologna
Department of Dermatology
Yale University School of Medicine
333 Cedar Street
New Haven, CT 06510
Phone: (203) 785-4092
FAX: (203) 785-7637

Dr. Estela E. Medrano
Veterans Administration Medical Center
Research Service (5)
2002 Holcombe Drive
Houston, TX 77030
Phone: (713) 791-1414 ext 4174
FAX: (713) 794-7978

Dr. William J. Pavan (chair)
Laboratory of Genetic Disease Research
Building 49 Room 4A66
National Center for Human Genome Research
National Institutes of Health
Bethesda, MD 20892
Phone: (301) 496-7584
FAX: (301) 402-2170

Calendar of Events :

Aug 15 - 18, 1998 VIIIth PASPCR Annual Meeting, to be held in Snowmass, CO (contact: Dr. David Norris, Dermatology Dept, Univ of Colorado Medical Center, Denver, CO 80262 USA; FAX: +1 303/372-1159)

Sept 11 - 13, 1998 Cutaneous Neuroimmunomodulation: The Proopiomelanocortin System, to be held in Munster, Germany (contact: Science & Technology Meetings Dept, New York Academy of Sciences, 2 East 63rd St, New York, NY 10021 USA; FAX: +1 212 838-5640)

Sept 23 - 26, 1998 8th ESPCR Annual Meeting, to be held in Prague, Czech Republic (contact: Dr. Jan Borovansky, Department of Biochemistry, Charles University, 1st Faculty of Medicine, U nemocnice 5, 128 53 Prague 2 Czech Republic; FAX: + 42 2-2491-5449)

Oct 1 - 4, 1998 Frontiers in Melanoma, to be held in Vienna, Austria (contact: Scientific and Administrative Secretariat, Vienna Academy of Postgraduate Medical Education and Research, Alserstrasse 4, A-1090 Vienna, Austria; FAX: +43 1 405-138323)

Dec 5 - 6, 1998 13th JSPCR Annual Meeting, to be held in Kobe, Japan (contact: Dr. Masamitsu Ichihashi, Department of Dermatology, Kobe University School of Medicine, 5-1 Kusunokicho, 7-chome, Chuo-ku, Kobe 650 Japan; FAX: +81 78 382-2497)

Dec 12 - 16, 1998 American Society for Cell Biology, Annual Meeting to be held in San Francisco, CA (contact: <http://www/faseb.org>)

Oct 30 - Nov 3, 1999 XVIIth International Pigment Cell Conference, to be held in Nagoya, Japan (contact: Dr. Shosuke Ito, Fujita Health University School of Health Sciences, Toyoake, Aichi 470-11, Japan; Phone: +81-562-93-2595; Fax: +81-562-93-4595; Email: sito@fujita-hu.ac.jp)

Welcome to New Members**by James J Nordlund / Raymond Boissy**

We welcome the following new member to the PASPCR . . .

Carol A. Bosco**Vaishali A. Chaubal****Sung Woo Choi****Sumayah Jamal****Proshiela Manga**

If anyone is 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.

Corporate Sponsors**by James J Nordlund / Raymond Boissy**

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

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Call for Applications – 1998 IFPCS Travel Awards**by James J Nordlund / Raymond Boissy**

The IFPCS has again offered each of the regional Pigment Cell Societies an IFPCS Travel Award to promote international collaborations. Details of this program can be found on the IFPCS Web Site, which can be readily accessed from the PASPCR home page. The deadline for 1998 applications will be August 1st, 1998 and decisions will be announced by the end of that month. Again, applications will be competitive and can be up to 1 page in length and should note the laboratory to be visited, the project or collaboration to be performed, estimate the expenses involved (Travel Stipends can be for up to \$3,000) and the time frame of the proposed travel. Applications should be submitted to the office of Dr. James J. Nordlund, Secretary-Treasurer of the PASPCR.

Invitation to the 8th ESPCR Meeting in Prague**by Jan Borovansky**

The 8th Meeting of the European Society for Pigment Cell Research will be organized by 1st Faculty of Medicine, Charles University in Prague, September 23-26, 1998. In addition to usual topics (melanin, melanogenesis, melanosome, melanocyte, melanoma, disorders of pigmentation) two special sessions devoted to Photoprotection and Phototherapy will be scheduled in cooperation with the European Society for Photobiology. Details on the scientific program can be obtained from dr J. Borovansky (fax: +42 2 2491-5449; Email: jborov@lf1.cuni.cz); registration forms can be obtained from the Congress Office, KAHLEN spol, Vlkova 24, 130 00 Prague 3, Czech Republic (fax +42 2 6719-5304; Email: kahlen@kahlen.cz).

Invitation to the XVIIth IPCC (International Pigment Cell Conference)

by Shosuke Ito

Invitation to the XVIIth International Pigment Cell Conference Nagoya Congress Center
Nagoya, Japan October 30 - November 3, 1999

Dear Colleague:

After the inauguration of the International Federation of Pigment Cell Societies (IFPCS) in Kobe in 1990, the International Pigment Cell Conferences (IPCC) rotate among the European, American, and Asian continents, hosted by one of the three regional societies: the ESPCR, the JSPCR, and the PASPCR. The 15th IPCC was thus held in London in 1993, chaired by Professor Patrick A. Riley, and the 16th IPCC was recently held in Anaheim, California, chaired by Professor Frank L. Meyskens, Jr.

It is our great honor and real pleasure to inform you that the next 17th IPCC will be held in Nagoya, Japan in 1999, co-organized by the IFPCS and the JSPCR. We heartily hope that pigment cell biologists and clinicians will join together in Nagoya in October 1999 to present their latest achievements in the exciting world of pigment cell research. Your participation will be most important for the scientific success of this meeting.

The city of Nagoya, the 4th largest in Japan, enjoys a rich history of traditional culture and a reputation for world-renowned high-tech industries. Nagoya is located at the center of Japan and is easy to access: the Nagoya International Airport is directly connected with 30 cities around the world. The conference site, the Nagoya Congress Center, is newly built and has ample spaces for the participants to discuss and exchange ideas, which we believe will certainly bring about fruitful collaborations.

We will follow the good tradition of the IFPCS leadership in directing scientific programs to unify the three regional societies. Within such a framework, we wish to place special emphasis on poster presentations. We hope to provide a certain number of travel grants for young investigators to attend this meeting. In order to be eligible for such a grant, an applicant has to be a member of one of the three regional societies for at least one year prior to the meeting. We are also planning banquet and social activities in such a way to make your visit to Nagoya most enjoyable and memorable. It will be our great privilege to welcome you and your colleagues to Nagoya in 1999.

Shosuke Ito, Ph.D.
Chair, IPCC Nogoya

Kazumasa Wakamatsu, Ph.D.
Secretary-General, IPCC Nagoya

For further information please contact us at: Fujita Health University School of Health Sciences, Toyoake,
Aichi 470-11, Japan; **Phone:** +81-562-93-2595; **Fax:** +81-562-93-4595; **Email:** sito@fujita-hu.ac.jp

Positions - Wanted and Available :

Research Associate Position. Successful candidate should have experience with and interest in mouse genetics. Position includes organizational responsibilities with opportunity also to undertake own research projects so long as they relate to the mouse genetics. For further information please contact Lynn Lamoreux at: 409-845-6084 (leave message) or LLamoreux@cvm.tamu.edu

Postdoctoral Positions. in the Department of Cell Biology at the NYU School of Medicine are available to study the biogenesis of melanosomes using a combined cellular, molecular and genetic approach. Prior experience in molecular or cell biology required. Applications from those with prior experience with yeast, *Drosophila* etc. interested in applying their skills to a mammalian system with strong genetics are especially welcome. A track record of productivity is essential. Send CV, brief description of experience and names of 3 references to: Seth J. Orlow, MD, PhD, NYU Medical Center, 560 First Avenue Room H-100, New York, NY 10016. Fax 212-263-5819, email: orlows01@mcr.cr.med.nyu.edu

Postdoctoral Research Associate - Position available to study the biology of human inherited disorders of pigmentation using mouse knockout technology. The successful applicant will have a Ph.D. and/or M.D. with experience in cell biology and molecular biology. Experience with production of knockout mice using ES cell technology 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 - position with the pigmentation team at the J&J Skin Research Center. The Skin Research Center is located in Skillman, NJ, and is responsible for research leading to new

prescription drugs and consumer skin products. Current research involves the understanding of keratinocyte-melanocyte interactions and their regulatory role in melanogenesis. A novel, receptor-mediated pathway that affects melanogenesis has been identified, which is dependent on keratinocyte-melanocyte contact. We are looking for a molecular and cellular biologist to investigate this pathway. The candidate will be challenged to develop model systems, to study molecules involved in the regulation of melanogenesis, and to investigate keratinocyte-melanocyte interactions and their role in pigmentation. The position requires a PhD in biological science, preferably in molecular and cellular biology. Skills in the area of skin biology and pigmentation are preferred, but not required. If you, or someone you know, might be interested this position, please discuss this opportunity with them. Please contact Dr. Miri Seiberg for additional details of the position at: Johnson & Johnson, 199 Grandview Road, Skillman, NJ 08558-9418; Phone: 908-874-2325; Fax 908-874-2323; Email: MSEIBER@CPIUS.JNJ.COM. J&J provides a competitive salary and comprehensive benefits. We are an equal opportunity employer and support diversity in the workplace. This program provides basic and industrial research experience to the individual, whether they plan to pursue academic or industrial careers.

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

Predocctoral and Postdoctoral Positions - available for molecular biologists in the areas of drug discovery and metabolism research. Requires experience in gene cloning, DNA sequencing, recombinant protein expression and cell culture methods. Prior experience in dermatology research is desirable. Southern Research Institute is a diversified research and development organization. Our Life Sciences Division provides comprehensive preclinical drug development and testing capabilities as well as basic research in drug design and synthesis, pharmaceutical formulations, toxicology, virology, microbiology, and pharmacology. To apply, send resume or curriculum vitae to: Southern Research Institute, Attention: Suzann Allen, Human Resources, Department 118, P.O. Box 55305, Birmingham, AL, 35255-5305.

Faculty Position - Massachusetts General Hospital, Harvard Medical School, Cutaneous Biology Research Center. The Cutaneous Biology Research Center (CBRC) seeks a molecular, cellular or developmental biologist to establish a program in fundamental research relevant to skin pigmentation. Areas of research can include but are not limited to pigment synthesis and transfer in melanocytes, genetics of mouse coat color and development/migration of neural crest cells. Applicants must have a Ph.D. and/or M.D. degree and relevant postdoctoral experience. Only applicants with a strong research record and the potential to develop extramurally supported research programs will be considered. Individuals with a demonstrated ability to develop imaginative approaches to important biological questions are particularly encouraged to apply. Rank/salary/start-up funds and space are negotiable depending on experience and qualifications. The CBRC occupies 45,000 square feet of fully equipped laboratory space in a new multidisciplinary research facility. Interested individuals should send curriculum vitae, reprints, a statement of research and future directions, along with the names, addresses and telephone numbers of three references to: Dr. Paul F. Goetinck, Chair, Faculty Search Committee, Cutaneous Biology Research Center, Massachusetts General Hospital - East, Building 149, 13th Street, Charlestown, MA 02129

Meeting Report -

by Estela E. Medrano

Genetics of Aging, Cold Spring Harbor Laboratory, April 2 - 5, 1998

This meeting was organized by Judith Campisi (University of California, Berkeley), Leonard Guarente (Massachusetts Institute of Technology) and Calvin Harley (Geron Corporation).

Although "a priori" the reader may think that the subject of this meeting was beyond his/her scope of interest, I believe that some of you will find that recent findings on the function of genes involved in Blooms' (BS) and Werner syndromes (WRN) are of importance to the understanding of aberrant melanocyte behavior observed in these diseases. Additionally, one paper specifically dealt with melanin and the melanocyte's cell cycle.

One entire session was dedicated to WRN-like genes. BS is a rare autosomal recessive disorder characterized by sun-sensitivity, hypo-hyperpigmented spots, diabetes and predisposition to developing

cancer. The BS gene, *BLM*, was recently cloned and shown to encode a 1417 aminoacid protein homologous to the bacterial DNA helicase RecQ that catalyzes DNA strand-displacement and DNA-dependent ATP-hydrolysis reactions. **Ellis et al.** reported that BLM protein expressed and purified from yeast cells has DNA helicase activity. **Neff et al.**, reported that loss of helicase activity in Bloom's patients causes genetic instability characterized by chromosome breaks, gaps, translocations and sister chromatid exchange. Werner syndrome, a segmental progeria, is an autosomal recessive disorder characterized by premature aging. Werner's patients present hypo-hyperpigmentation in the skin and excess number of melanomas compared to age-matched controls, particularly in Japanese patients. The gene mutated in WRN is also homologous to the RecQ helicases. The **Loeb and Campisi** labs provided evidence that the WRN protein has, in addition to the helicase activity, a 3'->5' exonuclease activity within the N-terminal one-third of the molecule. This strongly suggests a role of WRN protein in DNA repair. Another topic presented in the meeting was the role of eumelanin in melanocyte terminal differentiation. **Medrano et al.** presented evidence showing that melanocytes from black skin individuals respond to -MSH by accumulating large amounts of brown/black melanin which results in cell cycle exit and terminal differentiation. The peak of melanin accumulation correlates with increased levels of the cyclin-dependent kinase inhibitors p27Kip1 and p16INK4 bound to Cdk2 and Cdk4, respectively, and with loss of expression of the transcription factors and cell cycle regulators E2F1 and E2F2.

Travel Report - Japan, October 9 - 11, 1997

by Lynn Lamoreux

An Open Letter from Lynn Lamoreux

Thank You to the PanAmerican Society for Pigment Cell Research and everyone else who participated

In December of 1997, the PanAmerican Society for Pigment Cell Research provided a grant which I used to visit several research laboratories in Japan.

Before we start, I want to say that I feel badly omitting the names of most of the gracious people who made this trip so memorable, and many of the sights they showed to me, but there's no way I can fit them all into so small a space of writing. Reluctantly, therefore, I'll limit mentions primarily the heads of the labs actually visited, but please ask to see my diary, with pictures of many of the other people and places. It's 30 pages, single spaced, not counting pictures. See you at Snowmass -- and of course Nagoya.

The trip was a smashing success. And the food was GREAT! It tastes like -- FOOD. Most American food tastes of -- pepper, salt, sugar, catsup, marjorum, or chilis -- disguising the sumptuous flavors of whatever food may accompany the above. With the exception of that large mouthful of green horseradish, all the Japanese food was delicious, and all tasted of itself, not of some common denominator additive. Innumerable different, delicious flavors.

I went to Japan to talk about mice. Of course, when I say talk about mice, what I really mean is talk about the many enlightenments for which we can thank the mutant mouse. These include the cloning of several genes -- notably, endothelin 3, *ednrb*, *c-kit*, SCF as Steel factor is mostly referred to in Japan, and *mitf* -- which when abnormal variously bring about inherited defects such as white spotting (piebaldism, or absence of melanocytes), megacolon, anemia, reduced fertility, mast cell defects, microphthalmia, vitiligo, osteopetrosis and more. I hoped to learn as much as possible about the ways in which mice in Japan are helping to answer questions about the above conditions, to find mice in Japan that we here need, and to provide any that may be needed there.

First stop, the lab of Dr. Tomohisa Hirobe. We discussed white spotting and how it is affected differently under different conditions following exposure of embryos to irradiation. And the eumelanin/pheomelanin switch mechanism, which of course is always a favorite topic, and his robustly healthy mice. (And I will not forget the elegant sushi, or the luscious pork cutlets.)

Next event was the meeting of the Japanese Pigment Cell Society. When Vince Hearing presented in English -- or Sungbin Im, formerly of Ray Boissy's lab, now back in Korea -- presented in English, the entire meeting swung over to English. Not only the presenter, but the introductions, the audience questions -- everyone switched to English. Unfortunately, I was unable to accomplish the reverse.

Fortunately there were also abstracts in English, and you have copies of these in your Pigment Cell Research Journal. (The culinary high point was octopus during the evening party, interesting in both texture and taste. But you have heard enough of the food, and my memory will begin to fail, there were so many special treats.)

Then to Kawasaki, to the lab of Dr. Masako Mizoguchi. I had brought with me the new paper out of Heinz Arnheiter's lab (Opdecamp Karin, Nakayama Atsuo, Nguyen Minh-Thanh T, Hodgkinson Colin A, Pavan William J, Arnheiter Heinz. **MELANOCYTE DEVELOPMENT IN VIVO AND IN NEURAL CREST CELL CULTURES - CRUCIAL DEPENDENCE ON THE MITF BASIC-HELIX-LOOP-HELIX-ZIPPER TRANSCRIPTION. DEVELOPMENT. 1997; 124(12): 2377-2386**), which I eagerly pulled out to show the folks at the same time they pulled out their copy of the same paper to show me, and a vigorous debate in semi-sign language ensued. Dr. Yoko Kawa was particularly interested in this work and its relationship to the mice. So interested that she came to visit my mouse room (yes, in Texas) soon thereafter. (But she was in Texas anyhow, with other members of her family, to visit her brother who lives in Austin. We also had lunch (kolaches) at my little ranch with the horses, the shetland sheep, and the Great Pyrenees, Ice, who particularly enjoyed meeting Yoko's nephew. Ice prefers people whose heads are close to the same height as his own).

Check out: Mizoguchi M, Murakami F, Ito M, Asano M, Baba T, Kawa Y and Kubota Y. 1997. Clinical, pathological and etiologic aspects of acquired dermal melanocytosis, *Pigment Cell Res*, 10:176-183.

But back to Japan. During the course of this trip I presented my "informal seminar" on the subject of genes that modify the expression of neural crest patterning, probably about six times, in the process weeding out a lot of superfluous verbiage.

The concept of the mouse can be stretched rather broadly. For example, Dr. Jiro Matsumoto, whom you know to be the editor of our journal, described Medaka melanosomes whose structure resembles that of pheomelanosomes until they are provided with a mouse tyrosinase gene, after which the structure of the melanosomes is similar to those of mammalian eumelanosomes. (I also remember an extravagantly delicious Chinese meal, a tempura feast in a wonderful little eatery that boasted what surely must be the most expressive daruma in existence, some excellent home cooking, the people at Keio University, and pleasant time spent with Jiro and Akiko Matsumoto.) And Dr. Ono checking through a tome the size of the New York City yellow pages to figure out the train schedules I needed. (Look for Ono H, Hirose E, Miyazaki K, Yamamoto H, Matsumoto J. 1997. Transgenic medaka fish bearing the mouse tyrosinase gene: expression and transmission of the transgene following electroporation of the orange-colored vairant. *Pigment Cell Research*, 10:168-175.)

Did I say "stretch" the concept of mouse? How about if I travelled to a marine biology station all the way to the top of Japan's biggest island, to the town of Asamushi Onsen -- so reminiscent of the area around The Jackson Laboratory where I spent so many years -- to learn about Ascidians? I think that counts as the study of mouse if I also injected mouse tyrosinase promoter into one or two of the embryos -- especially if the experiment is successful. Reiko Toyoda, a student of Dr. Hiroaki Yamamoto, was my gracious hostess, and the night spent in the dorm was the coziest, soundest sleep of the trip. Ascidians are our relatives, though they look a good bit more like seaweed than chordate. They know what to do with the tyrosinase (Sato S, Masuya H, Numakunai T, Satoh N, Ikeo K, Gojobori T, Tamura K, Ide H, Takeuchi T and Yamamoto H. 1997. Ascidian tyrosinase gene: Its unique structure and expression in the developing brain, *Developmental Dynamics*, 208:363-374).

Back in Sendai, with Dr. Yamamoto and his cheerful band of bodyguards, we discussed mitf and the complex mechanisms of regulatory factor function (Sato, S, Roberts K, Gambino G, Cook A, Kouzarides T and Goding Cancer Research. **CBP/P300 AS A CO-FACTOR FOR THE MICROPHTHALMIA TRANSCRIPTION FACTOR. Oncogene 14:3083-3092. 1997**). (Dinner at the; who knows what was in all those delicious platters full of food that we demolished before they kicked us out.) And a mouse that I crave.

And then on to Nagoya to visit Drs. Ito and Wakamatsu and more discussion of yellow and the problem - which the mouse will tell you is obvious - that there must be more regulating eumelanin vs. pheomelanin than simply MSH and MCR1 receptor. (Alison Graham, Kasumasa Wakamatsu, Gillian Hunt, Shosuke Ito and Anthony J. Thody. 1997. Agouti protein inhibits the production of eumelanin and phaeomelanin in the presence and absence of a-melanocyte stimulating hormone. *Pigment Cell Research* 10:298-303.) It's time to look again to the mouse on that one. Inbred mouse/carefully selected strain at

this time may tell us more than the test tube about factors that regulate pheomelanin. Mahogany and mahoganoid (see papers out of the labs of Barsh and Cone) as well as other loci are trying to tell us something. And I hear that diet has recently been shown to influence the eumelanin/pheomelanin switch in mice mutant at the agouti locus. Another insight my mice had already told me. That's why I closely control source of food on the yellow mice.

And we discussed slaty (TYRP2). We could benefit by a slaty knockout. If four or five of us get together to attack different parts of the project, we should be able to share the rewards. We can do the injection and manage the mice at TAMU. Meanwhile, I've been backcrossing slaty-light onto C57BL/6J so it's now available for study on a comparable background. The phenotype is much more extreme than that of slaty and the mouse deserves a better look. (The pre-new-years parties in Japan are noisy fun. Jellyfish is good, but I was particularly interested in sea urchin eggs - also good. At times like this it's fun to be a biologist so as to appreciate what one is eating.)

On to Osaka and the lab of Dr. Kitamura and his many associates, who are studying mostly mast cells in mice mutant at the *mi* and *w* loci. I'm particularly fascinated by the parallels and lack thereof that are coming out of the mast cell studies compared with the melanocyte studies, which I believe will be most illuminating. Also, a very nice implicating kit overexpression in human gastrointestinal tumors (Kitamura Y, Hirota S, Isozaki K, Moriyama Y, Hashimoto K, Nishida T, Ishiguro S, Takeda M, Muhammad G, Tunio G. Gain-of-function mutations of c-kit in human gastrointestinal stromal tumors. *Science*. 1998. 279:577-580). (Have you ever tried eel? How about fresh fruit with a beautiful wafer-thin slice of beef? Mmmmm!)

Their animal care facilities are the most modern I have seen, and they have an internet page which has inspired me to proceed with ours and hopefully link up.

Last and very rewarding was my visit to the lab of Shin-ichi Nishikawa and his wife Satomi. Given my background, you know that I am more than a little impressed by the work of Hisahiro Yoshida and others in the lab, elegantly using the mouse mutants and modern technology to describe melanocyte migration during embryogenesis. I especially enjoy the confirmation of a basic tenant of Tom Mayer's work and the visualization of one of my favorite mouse-generated hypotheses that couldn't be published because -- well, let's face it folks, people tend not to believe what the mouse says unless it's confirmed by something more - ah - human? Of course, it is. The mouse is always right. (Yoshida, Hisahiro; Kunisada, Takahiro; Kusakabe, Moriaki; Nishikawa, Satomi and Nishikawa, Shin-Ichi. **DISTINCT STAGES OF MELANOCYTE DIFFERENTIATION REVEALED BY ANALYSIS OF NONUNIFORM PIGMENTATION PATTERNS. DEVELOPMENT, 122, 1207-1214. 1996.**) I hope this work will benefit and benefit from a mapping project in progress in my lab. I look forward to the results of their collaboration with Weston.

And so a final dinner with the students in a nice little place on the busy eve of the Emperor's birthday. Aside from nearly choking on something quite slippery -- I enjoyed ALL the meals-- and have felt food withdrawal from that day till this. And I lost three pounds.

I left Japan at 4:30 in the afternoon on December 24, and arrived in San Francisco at 8:30 in the morning on December 24, after a full night's sleep.

Failures? Two. First was the inability to visit all the people I wanted to meet and talk with; second, the failure to locate an inbred KSB mouse I'm looking for. Can anyone help? I only need DNA. Successes? Beyond anything I had anticipated.

It has taken more than three months for me to put these thoughts on paper for our newsletter. Because I was so far behind my work upon return?? Well, but also because, while my professional vision was considerably broadened, the personal rewards of this trip were also very great, and so -- personal -- that words fail me in trying to tell you how much I benefited from this opportunity. It was difficult and exhausting and some prices had to be paid back in the States, and it was all more than worth it. I hope others benefit at least as much as I.

Travel grants are once again available, folks. GO FOR IT!

AND DON'T MISS NAGOYA IN 1999. You'll love it.

Bibliography :

The Bibliography published in this issue covers the period February, 1998 through April, 1998. 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 (*sorry if we missed you but let us know and you'll get a free marked repeat in the next issue*). **Beginning this issue, in consultation with Lynn Lamoreux (of the Development Biology Expert Group), we have divided the section formerly known as "Molecular Biology" into 2 subsections entitled "Developmental Biology" and "Differentiation"; more search keywords are used and the distinction between those 2 sections is not always perfect, so a look at both sections is suggested.**

MELANINS, MELANOGENS & MELANOGENESIS

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