PASPCR Newsletter

June 2003
Vol. **11** Number **2**

Introduction...
by Bill Oetting

The abstracts have been received, the scientific program has been set, and the pit is being dug to bake the clams for the 11th Annual Meeting of the PASPCR. In this issue of the ***PASPCR Newsletter*** you will find the scientific program for the 2003 Annual Meeting, to be held at Cape Cod, Massachusetts, on September 4th -7th. If you have not done so, you should register for both the meeting and your hotel room. Hotel reservations must be made **before July 25th** to receive the guaranteed conference rate. The deadline for requesting a travel stipend from the PASPCR is **August 1st**. More information can be found at the PASPCR web site (**paspcr.org**). This will be a great meeting as well as being lots of fun. I hope to see you at Cape Cod.

The ***PASPCR Newsletter*** is published quarterly and is intended to serve as a means of communication for the members of our Society. You are invited to contribute articles, or other information you feel will be of interest to members of the **PASPCR**. If you attend a scientific meeting and have 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 upcoming meetings of interest will be added to the "Calendar of Events". 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 me, preferably by E-mail, to bill@lenti.med.umn.edu.

The **PASPCR Web Site** is the major, up-to-date source of current information for the PASPCR membership and for individuals who are interested in the PASPCR. If there is additional information that you would like to see on the Web site, or you would like to include information of past PASPCR activities, please let me know and I will add them.

The PASPCR Web Site can be found at:

http://www.paspcr.org

There has been a major update of the IFPCS Mouse Coat Color Gene Table. See page 3 in this newsletter for more information.

The IFPCS web site can now be reached by using the domain name **ifpcs.org**. The domain name **ipcc.info** will take you to the IPCC web site, providing you the most up to date information on the International Pigment Cell Conference which will be held on September 18 - 23, 2005 in the Natcher Conference Center at the National Institutes of Health in Bethesda, MD. Pictures of the Natcher Conference Center and a preliminary scientific program have just been added.

There is a possibility that the URLs for the PASPCR and IFPCS web sites will be changed, due to a transfer of the web pages to a new web server. I do not know what the future URLs will be, but I will keep you informed. If you have bookmarks that link directly to specific pages (such as the mouse coat color gene page), they will not work once the URLs have been altered. Remember, the PASPCR home page will always be available at paspcr.org and the IFPCS home page will be available at ifpcs.org.

In this Issue . . . . .

PASPCR Officers.....2
Calendar of Events.....2
Corporate Sponsers.....3
Welcome new PASPCR members.....3
Revised Mouse Coat Color table.....3
Letter from the 19th IPCC Organizer.....4
11th Annual Meeting of the ESPCR.....5
American Thoracic Society.....5
Positions Wanted/Available.....6
Program - 11th Annual PASPCR Meeting....8
Bibliography.....15

The PanAmerican Society for Pigment Cell Ressarch

C/O Dr. Raymond E. Boissy
Department of Dermatology
University of Cincinnati
231 Bethesda Avenue
Cincinnati, OH 45267-0592

Officers:

Zalfa Abdel-Malek,
President
John Pawelek
President-elect
Raymond E. Boissy
Secretary/Treasurer

Council Members:

Gisella Erf
Bryan Fuller
Ruth Halaban
Thomas J. Hornyak
Manickam Sugumaran
Brian Potterf
Glynis Scott
Miri Seiberg
Richard Swank

IFPCS Represenative:

Richard A. King
past-President PASPCR

Calendar of Events:

Sept. 3-7, 2003 XI[th] Annual Meeting of the PanAmerican Society for Pigment Cell Research, to be held in Cape Cod, MA.
Contact: Dr. Jean Bolognia.
E-mail: jean_bolognia@qm.yale.edu.

Sept. 17-20, 2003 XI[th] Annual Meeting of the European Society for Pigment Cell Research, to be held in Gent, Belgium.
Contact: Prof. JeanMarie Naeyaert.
E-mail: JeanMarie.Naeyaert@rug.ac.be.

2004 XII[th] Meeting of the PanAmerican Society for Pigment Cell Research, to be held in Irvine, California.
Contact: Frank Myskins.
E-mail: flmeyske@uci.edu

2004 XII[th] Meeting of the European Society for Pigment Cell Research, to be held in Paris, France.
Contact: Dr. Lionel LaRue
E-mail: Lionel.Larue@curie.fr

2005 XIVth International Pigment Cell Conference (IPCC), to be held in Bethesda, MD, USA.
Contact: Dr. Vince. Hearing
E-mail: hearingv@nih.gov

Note: Go to the PASPCR Web page for the most recent up-dates for meetings of interest.

The *PASPCR Newsletter* is published quarterly by the PanAmerican Society for Pigment Cell Research. All views are those of the authors. For further information or to submit articles, please contact members of the Publications Committee.

Publications Committee:

William S. Oetting, Ph.D.
Editor
University of Minnesota
Department of Medicine- Genetics
MMC 485
420 Delaware St. SE
(612) 624-1139
bill@lenti.med.umn.edu

Manickam Sugumaran, Ph.D.
Univ of Massachusetts at Boston
Department of Biology
100 Marrissey Boulevard
Boston, MA 02125
(617) 287-6600
manickam.sugumaran@umb.edu

Richard T. Swank, Ph.D.
Roswell Park Cancer Institute
Department of Molecular & Cell Biology
Elm and Carlton Streets
Buffalo, NY 14263
(716) 845-3429
richard.swank@roswellpark.edu

Corporate Sponsors
by Raymond E. 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
Procter and Gamble Co.
Shiseido Co, Ltd.
Combe, Inc.

SILVER Corporate Patrons
Avon Products, Inc.
Galderma Laboratories, Inc
Stiefel Laboratories

Welcome New Members
by Raymond E. Boissy

The PASPCR would like to welcome these new members to the Society:

Valerie Kempf - Duke University, Durham, NC
Yan Liu - Duke University, Durham, NC
Michael Olshavsky - Procter & Gamble, Cincinnati, OH
Isabel Santana - Unilever Research, Edgewater, NJ
Shelia Rocha - Unilever Research, Edgewater, NJ
Cloris Faraco - Universidade Federal Do Parana, Curitiba Parana, Brazil
Hyung Sik Yoon - Soeul, Korea
Francis Noonan - George Washington University Medical Center, Washington, DC
Patrick Farmer - University of California-Irvine, Irvine, CA

Update of the Coat Color Table
by Bill Oetting

The IFPCS Coat Color Table is an attempt to bring together information on genes that affect the type, and distribution of melanin pigment in the mouse coat. For several years, the Coat Color Table has slowly increased in size as new mouse and human loci have been cloned and published in the literature. With the help of Dot Bennett (who provided most of the new information), the IFPCS Coat Color Table has been expanded to include all known coat color genes. This information will be formally published in: Bennett D.C. and Lamoreux M.L. The Color Loci of Mice - A Genetic Century. *Pigment Cell Res* 16: 2003.

Links to this table can be found in the IFPCS web site or the PASPCR web site within the PASPCR information page. You can also directly link to the table using the URL: http://www.cbc.umn.edu/ifpcs/micemut.htm (Note: this URL may change).

The table focuses on mouse coat color loci, but also includes the human homologues and associated human genetic diseases when known. For many of the entries, there are links to The Jackson Laboratories' Mouse Genome Informatics web page and to OMIM, to provide expanded information on those loci. Currently there are 127 loci described in this table.

Most loci within the table are obvious coat color genes. Some loci, such as *bcl2* and *brca1*, are not obvious candidates for coat color loci, but mutations in these genes (sometimes as observed in a mouse knockout) do result in a dilution or alteration of coat color, and thus have been included in this table.

Many of these coat color mutations can be obtained from the Wellcome Trust Functional Genomics Mouse Pigmentary Mutants Repository, a repository for mouse pigmentary mutants under the direction of Dr. Lynn Lamoreux in association with Dr. Jim Womack, Distinguished Professor, and Dr. Richard Ermel, Director of Laboratory Animal Research and Resources, at the College of Veterinary Medicine, Texas A&M University, College Station, Texas.

We hope that this table is of use to you. If you notice any errors, or loci that have been missed, please contact either myself at bill@lenti.med.umn.edu, or Dot Bennett at dbennett@sghms.ac.uk.

Dear Members of the ESPCR, JSPCR and PASPCR :

Time has a way of moving on and although it has only been about 6 months since the highly successful International Pigment Cell Conference (***IPCC***) held in the Netherlands last year, it won't be that long before it's time to start thinking about planning to attend the next one. Each ***IPCC*** has tended to become more and more useful and important to attend for active scientists in the field (or those thinking of becoming so) and there is great pressure on us to continue that tradition at the 19th ***IPCC***. We fully intend to do our best to meet that expectation

The 19th ***IPCC*** will be held at the Natcher Conference Center at the National Institutes of Health in Bethesda, MD from September 18 - 23, 2005. This area is slightly north of Washington DC (by about 20 km) and is readily accessible by any of our 3 local airports. You will find that the Natcher Conference Center is a spectacular venue to hold such a meeting, and with NIH being the current home of at least a dozen independent research groups studying pigmentation at various levels, you can imagine that we are all excited about this opportunity to showcase NIH as an exciting place to visit and an even better place to call your research home.

We have established an active Local Organizing Committee and an International Scientific Program Committee, both of which have met as a group once and by email on many occasions. We are working from all angles to make this meeting as affordable, as interesting and as productive as possible for all scientists in the field, senior and junior alike.

We have established a Web Site (**www.ipcc.info**) that is in its infancy but which will be developing quickly. Please bookmark that site in your Web browser and revisit it from time to time to see the meeting mature. We already have there a summary of the meeting, contact information, some information about the Conference center (with photos), preliminary travel information about how best to get here and how best to sneak out of the meeting to visit the Smithsonian and Art Museums when you have time (along with maps of how to do that), the members of our Scientific Committees, and even an overview of the meeting program.

I would like to take this occasion to invite each of you to plan to attend the 19th IPCC and we are always open for useful suggestions on what topics and information you would like to see on the Web site or featured in the scientific or social program. I'll look forward to welcoming you to the 19th IPCC in mid-September, 2005.

Best regards,

Organizer, ***19th IPCC - 2005***

11th ESPCR Meeting, 17-20 September, 2003, Gent, Belgium

On behalf of the Scientific and Organising Committee we are delighted to invite you to participate in the 11th meeting of the ESPCR to be held in Gent next September. Our scientific programme will certainly excite every scientist and clinician with an interest in pigment cell research. World-class speakers will tackle hot items during the invited lectures. Six special lectures have been programmed. For the first time, some of these will be presented by outstanding scientists not working in our field. Undoubtedly, their papers will be a source of scientific inspiration for many pigment cell researchers. The clinical Satellite Meeting on Saturday is also the official autumn meeting of the Royal Belgian Society of Dermatology and will undoubtedly attract both scientists and clinicians with an interest in pigmentation disorders. Prominent speakers will deliver state of the art lectures on the pathogenesis and treatment of pigmentation disorders in the morning. In the afternoon, Belgian dermatologists will present papers with a focus on pigmentary disorders and melanoma. This meeting will also be the occasion to commemorate Professor Giuseppe Prota (1938 - 2003), a founder of the ESPCR and a giant in the field of the biochemistry of melanins. A "G. Prota session on the chemistry of melanins" has been introduced into the programme to honour this distinguished scientist.

For information, please visit the website **www.espcrgent2003.org** or contact the meeting secretariat by e-mail mediscon@iae.nl

American Thoracic Society Meeting, Seattle, WA, May 16-21

by Dick Swank

Among the myriad lectures and posters presented by the >16,000 clinicians and scientists attending the 2003 ATS Society meeting, I found a very exciting topic that may be of interest to PASPCR members. That topic involves the plasticity of bone marrow stem cells – or the ability of injected bone marrow stem cells to migrate to and differentiate into cells of a wide variety of tissues. You may know that this has been a very controversial area. While several laboratories have reported positive engraftments, others have obtained negative results. There are still considerable uncertainties and wide variations in the reported degrees of differentiation of donor cells into various tissues of recipients. Nevertheless, a positive consensus occurred at the ATS meetings, where at least 6 laboratories reported successful differentiation of injected bone marrow stem cells into several tissues types.

For example, Diane Kraus of Yale University finds that intravenously injected bone marrow stem cells differentiate into liver parenchymal cells in irradiated mouse recipients, with 5-14% of liver cells of recipients being donor-derived. Peter Quesenberry of Brown Univ. finds that 15-30% of muscle fibers of recipient mice with muscle wounds were donor-derived. In the most extraordinary report, the laboratory of L. Brown of Emory Univ. reported that up to 60% of recipient mouse lung alveolar cells were donor-derived. Dr. Brown found the same high percentage of donor cells in purified recipient epithelial cells, thus verifying they were indeed differentiated epithelial cells rather than simply contaminating hemopoietic cells. Darwin Prockop of Tulane Univ. reported that 19% of recipient lung epithelial cells were donor-derived. Significantly, Dr. Prockop has recently obtained an NIH grant to distribute standardized preparations of human, rat and mouse marrow stem cells to other laboratories.

All laboratories emphasized that prior injury of recipient tissues, by irradiation or other means, is essential for successful transfer and differentiation of marrow stem cells. Current protocols include a wide variety of methods of purification of marrow stem cells, a likely explanation for the wide variation in the degree of successful transfer and differentiation.

Thoracic Society continued

Clearly, much of the excitement in this field derives from the potential of bone marrow stem cells to replace diseased cells/tissues in recipient patients having a wide variety of inherited and acquired diseases. Toward this end at least four clinical trials in a variety of diseases are in progress.

Stay tuned.

Positions - Wanted and Available

Postings for **Positions Available** will be open to all individuals and institutions so long as the position is related to pigment cell research. Postings for **Positions Wanted** will be open only to members of the PanAmerican Society for Pigment Cell Research or its sister societies (JSPCR and ESPCR). Send postings to Bill Oetting at bill@lenti.med.umn.edu. Please provide an expiration date for any submitted postings. Final decisions will be made by the Publications Committee of the PASPCR.

Postdoctoral Research Associate

Fox Chase Cancer Center.

Two NIH-funded postdoctoral positions are available to work on the development of neural crest–derived melanocytes and enteric neurons in mice. We are interested in the signals required for proper migration and differentiation of these lineages during mouse embryogenesis and use various genetic manipulation techniques and existing mutants for our studies. Fox Chase Cancer offers competitive salaries to its postdocs and was recently named one of the best places to work for Postdocs (http://www.fccc.edu/news/2003/Best-Places-for-Postdocs-02-20-2003.html). Candidates with a recent PhD or MD/PhD with strong background in molecular biology, genetics or developmental biology are encouraged to apply. Please submit CV, and names of 3 references to:

Dr. Myung K. Shin
Program in Cellular and Developmental Biology
Fox Chase Cancer Center
Philadelphia, PA 19111, USA.
Email: MK_Shin@fccc.edu

Postdoctoral Position

Polarized Kit-ligand expression in the epidermis: Its role in human melanocyte homeostasis

A postdoctoral position (fully funded for the first year with the possibility of a 2 year extension) is immediately available in the Department of Pathology, Centre Medical Universitaire at the University of Geneva, Switzerland. The project is supervised by Dr. Bernhard Wehrle-Haller and Prof. Beat Imhof and is within the frame of a collaboration between the University of Geneva and Industry.

The aim of this project is to understand the role of kit-ligand in melanocyte homeostasis in the adult epidermis and how manipulation of kit-ligand expression or localization in keratinocytes affect melanocyte behavior. The project will employ cell-biological, pharmaceutical, biochemical as well transgenic approaches (mouse) to develop methods to modify Kit-ligand localization (polarity and cell surface expression) in vivo and to study melanocyte behavior in response to such altered Kit-ligand presentation. For references and rational see Wehrle-Haller and Imhof (2001, J. Biol. Chem. 276, 12667-74) and Grichnik et al., (1998, J. Invest. Dermatol. 111, 233-38).

The Centre Medical Universitaire provides a stimulatory research environment located within the City of Geneva. Research in the department is centered around problems of autoimmunity, wound healing, inflammation, cell-cell junctions and cell migration. Geneva, located at the lake of Geneva in close proximity to the French Alps, provides a rich multicultural environment facilitating social integration.

Interested candidates preferably having experience in one or more of the aforementioned domains should send their CV (e.g. e-mail) including names and contacting information of two references to:

Bernhard Wehrle-Haller PhD
Department of Pathology
Centre Medical Universitaire
1. Rue Michel-Servet
1211 Geneva 4
Switzerland
Tel/Fax: 0041 22 702 5735 / 5746
Bernhard.Wehrle
Haller@medecine.unige.ch

Postdoctoral Research Position

A postdoctoral position is available immediately to study the transcriptional co-repressor and co-activator activities of the oncogenic protein Ski in human melanomas (PNAS (USA) 97:5924-5929,

2000). Seeking individuals with experience in EMSA, *in vitro* transcription-translation, site-directed mutagenesis and yeast two-hybrid screening. Interested individuals should send inquiries and applications (including CV, a brief description of past experience and future research interests, and the name of three references) to:

Estela E. Medrano, Ph.D.
Huffington Center on Aging
Baylor College of Medicine
One Baylor Plaza N-803.01
Houston, TX 77030

Baylor College of Medicine is an Equal Opportunity Employer

Research Associate/Post Doctoral Fellow Position Available

Position available for either an entry level postdoctoral fellow or a more senior research associate to study the molecular and cellular biology of the melanocyte in general and the pathophysiology of vitiligo in specific. The research project will focus globally on the role of survival factors and apoptotic regulators on the viability of melanocytes in the skin and in culture. In addition, the project will focus on the genetic and cellular susceptibility of melanocytes from patients with vitiligo to under apoptosis in response to various stimuli. Postdoctoral fellow candidate should have experience with routine molecular and cellular techniques including cell culturing, site directed mutagenesis, and protein biochemistry. Research Associate candidate should have similar experiences utilizing the melanocyte system. Candidate will become part of an interactive research group focusing of various aspects of pigmentation in the Department of Dermatology and on skin physiology in the Skin Sciences Institute within the University of Cincinnati College of Medicine. Send curriculum vitae and list of three references to:

Raymond E. Boissy, Ph.D.
Professor of Dermatology and Cell Biology, Neurobiology, & Anatomy
Department of Dermatology
University of Cincinnati College of Medicine
231 Albert Sabin Way, ML-0592
Cincinnati, OH, 45267-0592
TEL: 513-558-6242
FAX: 513-558-0198
E-mail: boissyre@email.uc.edu

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 Fellow - Postdoctoral positions are available immediately to study post-embryonic development in zebrafish. NIH-funded research is aimed at identifying the genetic and cellular bases for development of the adult pigment pattern and somatic metamorphosis. The lab uses a wide variety of methods including genetic screening, genetic mapping and positional cloning, gene expression analysis, cell transplantation and classical histology. Postdoctoral fellows would be expected ultimately to develop independent research programs and would have the opportunity to participate in ongoing genetic screens for mutants affecting post-embyronic development.

For more information see:
http://www.biosci.utexas.edu/IB/faculty/parichy/research.htm
http://www.biosci.utexas.edu/IB/faculty/parichy/pubs.html
Applications including CV and contact information for three references should be sent to:

David M. Parichy, Ph.D.
Assistant Professor
Sections of Integrative Biology and
Molecular, Cell and Developmental Biology
1 University Station, C0930
University of Texas
Austin TX 78712
dparichy@mail.utexas.edu
512 232-9143 T
512 471-3878 F

The 11th Annual Meeting of the PanAmerican Society for Pigment Cell Research
The Sea Crest Resort Conference Center
Cape Cod, MA

September 4-7, 2003

Conference organizers: **Jean Bolognia, Chair**
John Pawelek
Ruth Halaban

Department of Dermatology
Yale University School of Medicine
New Haven, CT

Thursday, September 4, 2003

REGISTRATION - 4:00 - 8:00 PM

Council meeting - 5:00 – 6:30 PM

7:00 PM WELCOME REMARKS: Jean Bolognia, John Pawelek

Session #1: Melanocortin/MSH/agouti protein

Moderator: Zalfa Abdel-Malek

7:05 Overview lecture – *Genetics and genomics of pigment type-switching*
Gregory Barsh, Dept of Genetics, Stanford Univ School of Medicine, Stanford, CA
7:35 Q&A

7:45 – 8:45 Oral presentations

7:45 **Z.A. Abdel-Malek**, A.L. Kadekaro, R.J. Kavanagh, S. Schwemberger, G. Babcock. Department of Dermatology, University of Cincinnati, Cincinnati, OH 45267; Department of Surgery, University of Cincinnati; Shriners Burns Hospital
Human melanocytes expressing loss-of-function mutations in the melanocortin 1 receptor gene exhibit increased sensitivity to UV-induced apoptosis

8:05 **F. Rouzaud,** G.E. Costin, V.J. Hearing. Laboratory of Cell Biology, NIH, Bethesda, MD
Expression and regulatory elements of the human MC1R

8:25 **C.D. Van Raamsdonk,** C K.R. Fitch, K.A. McGowan, G.S. Barsh. Genetics, Stanford University, Stanford CA
G protein signaling expands the embryonic population of dermal melanocytes

8:45 Cocktail reception

Friday, September 5, 2003

7:30 AM - Continental breakfast

8:00 AM -12:30 PM

Session #2: Subcellular Organelles and Protein Trafficking

Moderators: Seth Orlow, John Pawelek

8:00 Overview lecture - *Tyrosinase and Tyrp1 Trafficking in Melanocytes and Melanomas*
Daniel Hebert, UMASS, Dept. of Biochemistry and Molecular Biology, Amherst, MA
8:30 Q&A

8:40 Overview lecture – *The motors in melanosome movement on cytoskeletal tracks*
John A. Hammer III, Laboratory of Cell Biology, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, Bethesda, MD
9:10 Q & A

9:20 Overview lecture – *Genetic Regulation of Melanosomes and other Lysosome-Related Organelles*
Robert Swank, Dept of Molecular and Cellular Biology, Roswell Park Cancer Inst, Buffalo, NY
9:50 Q&A

10:00 Coffee break

10:30 -12:30 Oral presentations

10:30 **J.C. Valencia**, H. Watabe, V.J. Hearing. Pigment Cell Research Section, NIH, Bethesda, MD
The melanosomal protein GP100 is partially glycosylated in the cis-Golgi compartment in MNT-1 melanoma cells

10:50 **R. Rupani,** S. Sodi, J. Pawelek. Dermatology, Yale School of Medicine, New Haven, CT
Aberrant melanosomal packaging and Beta 1,6-branched glycans in human melanoma cells and macrophage/melanoma fusion hybrids

11:10 **H. Watabe,** J.C. Valencia, K. Yasumoto, H. Ando, W.D. Vieira, M. Mizoguchi, E. Appella, V.J. Hearing. Laboratory of Cell Biology, NIH, Bethesda, MD; St. Marianna University
Regulation of melanogenesis in amelanotic melanoma cells by pH and by proteasome activity

11:30 **A. Greatens,** R.R. Wickett, R.E. Boissy. Dermatology & Pharmacology, Univ of Cincinnati College of Med, Cincinnati, OH 45267-0592; Univ of Cincinnati College of Pharmacy
Effective melanosome transfer by niacinamide and lectins is reversible

11:50 **D.T. Spaulding**, J.C. Valencia, K. Yasumoto, H. Ando, W.D. Vieira, M. Mizoguchi, E. Appella, V.J. Hearing. Laboratory of Cell Biology, NIH, Bethesda, MD 20892; St. Marianna University
The regulation of tyrosinase activity by melanosome pH in Black and Caucasian melanocytes

12:10 **R.A. King,** J. Pietsch, J.P. Fryer, S. Savage, M.J. Brott, I. Russell-Eggitt, C.G. Summers, W.S. Oetting. Medicine/Institute of Human Genetics, University of Minnesota, Minneapolis, MN; Great Ormond Street Hospital, London UK
Tyrosinase gene mutations in oculocutaneous albinism 1 (OCA1): definition of the phenotype

1:00 Bus leaves to Woods Hole, 4:15 bus returns

Free afternoon – visit to Woods Hole (buses arranged by the conference)

Gathering at Aaron and Millie Lerner's home ~2-4 pm

5:00 - 8:00 PM

Session #3: Cellular Interactions and Signal Transduction

Moderators – Glynis Scott, Mira Sieberg

5:00 Overview lecture - *Symbiosis in Cellular Evolution*
Lynn Margulis, Department of Geosciences, UMASS, Amherst, MA

5:30 Q&A

5:40 Overview lecture - *ERK Signaling and Proteomic Profiling*
Natalie G. Ahn, Howard Hughes, Medical Institute Investigator at the Depts of Chemistry and Biochemistry, University of Colorado, Boulder, CO

6:10 Q&A

6:20 *Aaron B. Lerner Honorary Lecture*

Ruth Halaban, Dept. of Dermatology, Yale School of Medicine, New Haven, CT

7:00 - 8:30 Oral presentations

7:00 **V. Setaluri,** T. Liu, G. Kandala, N. Sangha. Dermatology, Wake Forest Health Sciences, Winston-Salem, NC 27157

Role of phosphatidyl-3-kinase and AKT2 signaling in melanosome biogenesis

7:20 **A.L. Kadekaro,** H. Kanto, R.J. Kavanagh, S. Schwemberger, G. Babcock, Z.A. Abdel-Malek. Dermatology, University of Cincinnati, Cincinnati, OH 45267; Department of Surgery, University of Cincinnati ; Shriners Burns Hospital

A novel role for the paracrine factors endothelin-1 and alpha-melanocortin as survival factors for human melanocytes

7:40 **B. Kasraee,** O. Sorg, J.H. Saurat. Department of Dermatology, Geneva University Hospital, Geneva, Switzerland

Hydrogen peroxide in the presence of cellular antioxidants mediates the first and key step of melanogenesis: a new concept introducing melanin production as a cellular defense mechanism against oxidative stress

8:00 **K. Jimbow,** M. Endo, H.H. Rad, K. Hirosaki, A. Kamada, T. Yamashita. Department of Dermatology, Sapporo Medical University, School of Medicine, Sapporo, Japan

Role of tyrosinase-related protein for tyrosinase-mediated cytotoxicity and mutational analysis of their functional domains

8:30 Barbecue

Saturday, September 6, 2003

7:30 AM - Continental breakfast

8:00 AM – 12:00 PM Concurrent sessions

Session #4: Melanoma, Epidemiology, Vaccine, and Apoptosis

Moderators: Menash Bar-Eli

8:00 Overview lecture - *The epidemiology of melanoma*
Marianne Berwick, Dept of Epidemiology and Biostatistics, Memorial Sloan-Kettering Cancer Center, New York, NY

8:30 Q&A

8:40 Overview lecture - *Vaccines and immunotherapy*
Walter Storkus, Dept of Molecular Genetics and Biochemistry, Univ of Pittsburgh School of Medicine, Pittsburgh, PA

9:10 Q&A

9:20 Overview lecture - *Inactivation of apoptotic signals*
Maria S. Soengas, Dermatology Department, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI

9:50 Q&A

10:00 - 11:00 AM POSTER VIEWING (coffee break)

11:00 - 12:00 Oral presentations

11:00 **V. Alexeev**, M. Endo, H.H. Rad, K. Hirosaki, A. Kamada, T. Yamashita. Department of Dermatology, Sapporo Medical University, School of Medicine, Sapporo, Japan
Constitutive activation of the cKit receptor-tumorigenicity or induction of apoptosis?

11:20 **D.C. Bennett**, E.V Sviderskaya, M.L. Lamoreux, L. Plowright, S.P. Hill. Basic Medical Sciences (Anatomy & Developmental Biology), St George's Hospital Medical School, London, UK; Laboratory Animal Resources and Research, Texas A&M University, College Station, TX, USA
Efficient generation of immortal mutant mouse melanocyte lines using an Ink4a-Arf deletion

11:40 **K.R. Fitch**, D. Lee, D. Threadgill, H. Fuchs, M. Hrabe de Angelis, G.S. Barsh. Genetics, Stanford University, Stanford, CA 94305; University of North Carolina, Chapel Hill; GSF, Neuherberg, Germany
A hypermorphic mutation in Egfr results in dark skin and epidermal hyperplasia

8:00 AM – 12:00 PM

Session #5: Genetic and Comparative Pigment Cell Biology

Moderators: Joseph Bagnara, Lynn Lamoreux

8:00 Overview lecture - *Membrane spanning melanosomal transporters*
Seth Orlow, The Ronald O. Perelman Dept of Dermatology and Cell Biology, NYU School of Medicine, New York NY

8:30 Q&A

8:40 -10:00 Oral presentations

8:40 **M. Huizing,** M. Endo, H.H. Rad, K. Hirosaki, A. Kamada, T. Yamashita. Department of Dermatology, Sapporo Medical University, School of Medicine, Sapporo, Japan

New findings in Hermansky-Pudlak syndrome

9:00 **Y. Tomita,** T. Suzuki, K. Inagaki, Y. Miyamura, H. Shimizu. Department of Dermatology, Nagoya University Graduate School of Med, Nagoya, Japan; Hokkaido University Graduate School of Medicine

An autosomal dominant oculocutaneous albinism may be caused by a mutation in OCA4 gene, AIM-1

9:20 **G.E. Costin,** J. C. Valencia, W. D. Vieira, M. L. Lamoreux, V. J. Hearing. Laboratory of Cell Biology, Pigment Cell Biology Section, NIH, Bethesda, MD 20892; Department of Veterinary Pathobiology, Texas A&M University, College Station, TX.

Characterization of two new mouse melanocyte lines carrying the slaty and slaty light mutations

9:40 **M. Sugumaran,** Biology, University of Massachusetts Boston, Boston, MA 02125

Molecular interactions of insect phenol oxidase

10:00 - 11:00 AM POSTER VIEWING (coffee break)

11:00 - 12:30 Oral presentations

11:00 **P. Manga**, D. Sheyn, Z. Abdel- Malek, R. E. Boissy. Dept. of Dermatology, Univ. of Cincinnati, Cincinnati, OH 45267

A role for Tyrp1 in determining melanocyte sensitivity to 4-(tert)butylphenol

11:20 **H. Le Poole,** L.S. Stennett, R. Mestril, I.C. Le Poole. Oncology and Cardiovascular Institutes, Loyola University Chicago, Maywood, IL 60153

HSP70 and the response of melanocytes to 4-TBP

11:40 **G.F. Erf,** B. R. Lockhart, R. L. Griesse, V. H. Konjufca, X. Wang. Poultry Science, University of Arkansas, Fayetteville, AR 72701

Circulating melanocyte-specific autoantibodies and feather infiltrating lymphocytes in young Smyth line chickens prior to visible onset of vitiligo

12:00 **T. Morrison,** R.L. Morrison. Biology, McDaniel College, Wesminster, MD 21157

An analysis of skin color in panther chameleons from different regions of madagascar using reflectance spectrophotometry

Lunch (on your own)

1:30 - 6:00 PM

Session #6: Melanoma, Genetics, Animal Models and Angiogenesis

Moderators: Suzie Cheng, Vince Hearing

1:30 Overview lecture - *Genomic analyses of melanocytic neoplasms: insights into biology and opportunities for classification*

Boris Bastian, Depts of Dermatology and Pathology Univ of CA, San Francisco, CA

2:00 Q&A

2:10 Overview lecture - *Animal models for melanomas*
Lynda Chin, Dana-Farber Cancer Center, Boston, MA
2:40 Q&A

2:50 - 4:30 Oral Presentations

2:50 **J.A. Recio,** F. Noonan, G. Merlino. Laboratory of Molecular Biology, National Cancer
Institute, Bethesda, MD 20892; George Washington University
Mouse model for human malignant melanoma: a genetic and biochemical marriage

3:10 **K.A. Cohen-Solal,** P. M. Pollock, R. Sood, J. J. Martino, S. Shin, Y. Marin, K. R. Mackason, W. J. Pavan, J. M. Trent, S. Chen. Chemical Biology, Rutgers Univ, Piscataway, NJ 08854; Cancer Genetics Branch, National Human Genome Research Institute, NIH
Ectopic expression of Grm1 in melanocytes induces melanocytic neoplasia

3:30 **Y.E. Marin,** S. H. Choi, J. Ruiz, S. Chen. Chemical Biology, Rutgers University, SLC-Lab Cancer Research, Piscataway, NJ 08854
Implication of NF-kappa B in mediating the transforming activity of Grm1 in mouse melanoma cells

3:50 – Overview lecture - *Angiogenesis*
Michael Detmar, Cutaneous Biology Research Center, Dept of Dermatology, MASS. General Hospital and Harvard Medical School, Charlestown, MA
4:20 Q&A

4:30 - 5:00 POSTER VIEWING (coffee break)

5:00 – 6:00 Oral presentations

5:00 **J.M. Pawelek**, T. Handerson. Dermatology, Yale Sch Med, New Haven, CT 06520-
Beta 1,6-branched oligosaccharides and coarse vesicles: a common, pervasive trait associated with progression in melanoma and other human cancers

5:20 **T. Hoashi,** K. Kikuchi, S. Watanabe, H. Nanko, K. Tamaki. Laboratory of Cell Biology, National Cancer Institute, NIH, Bethesda, MD 20892; Dept of Dermatology, Faculty of Medicine, Univ of Tokyo, Tokyo, Japan; Dept of Dermatology, Faculty of Medicine, Teikyo Univ, Tokyo, Japan; Dept of Dermatology, Tokyo Koseinenkin Hospital, Tokyo, Japan
Matrix metalloproteinase-9 expression in desmoplastic malignant melanoma

5:40 **S. Ito,** A. Takasaki, K. Wakamatsu, T. Kageshita, D. Nezirevic, B. Kagedal, Fujita Health Univ Sch of Health Sci, Toyoake, Japan; Kumamoto Univ Sch of Med; Linkoping Univ
Determination of pheomelanin in serum and urine of melanoma patients

6:30 – 9:00 Clam Bake - presentations of awards, honorary membership, PASPCR Career Achievement Award

Sunday, September 7, 2003

8:00 AM - Continental breakfast

8:30 AM - 12:00 PM

Session #7: Transcriptional Regulation

Moderators: Raymond Boissy, Bill Pavan

8:30 Overview lecture - *Genomic analysis of melanocyte development and disease*
Bill Pavan, Genetic Disease Research Branch, NIH, National Human Genome Research Institute, Bethesda, Maryland

9:00 Q&A

9:10 Overview lecture - *Transcriptional Regulation of Melanocyte Differentiation and Growth*
David E. Fisher, Dana-Farber Cancer Inst, Harvard Medical School, Boston, MA

9:40 Q&A

10:00 - 10:30 BUSINESS MEETING

10:30 - 12:00 Oral presentations

10:30 **T.J. Hornyak**, D. Zhang, L. A. Beyer, L. Kabara, K. E. Halsey, Y. Raphael, D. F. Dolan. Department of Dermatology, Henry Ford Health System, Detroit, MI 48202; University of Michigan

Hearing dysfunction in microphthalmia white heterozygous mice, a model for human, Waardenburg and Tietz syndromes

10:50 **L. Larue,** S. Martinozzi, V. Delmas, S. Carreira, D. Champeval, C. Goding. Developmental Genetics of Melanocytes, Institut Curie, Orsay, France; Marie Curie Research Institute

The overexpression of beta-catenin affects the proliferation and migration of melanoblasts

11:10 **D. Chen**, Weidong Xu, Elise Bales, Clemencia Colmenares, Maralice Conacci-Sorrell, Shunsuke Ishii, Ed Stavnezer, Judith Campisi, David Fisher, Avri Ben-Ze'ev, Estela E. Medrano. Baylor College of Medicine, Houston, TX; The Cleveland Clinic Foundation, Cleveland, OH; The Weizmann Institute of Science Rehovot, Israel, RIKEN Tsukuba Institute, Japan; Case Western Reserve, University Cleveland, OH; Lawrence Berkeley National Laboratory, Berkeley, CA; Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA

SKI regulates ²-catenin signaling and targets MITF and Nr-CAM in human melanoma

11:30 **L. Weiner,** R. Han, B. Scicchitano, D. Lee, J.L. Brissette. Cutaneous Biology Research Center, Mass. General Hosp/Harvard Med. School, Charlestown, MA 02129

Foxn1 and the acquisition of pigmentation

Bibliography:

The Bibliography published in this issue covers the period March, 2003 through May, 2003. 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.

MELANINS, MELANOGENS & MELANOGENESIS

Blanco M, Valverde I: Chiral and non chiral determination of Dopa by capillary electrophoresis. J PHARMACEUT BIOMED ANAL 31:431-438 (2003).

Borges CR, Roberts JC, Wilkins DG, Rollins DE: Cocaine, benzoylecgonine, amphetamine, and N-acetylamphetamine binding to melanin subtypes. J ANAL TOXICOL 27:125-134 (2003).

Fasano M, Giraudo S, Coha S, Bergamasco B, Lopiano L: Residual substantia nigra neuromelanin in Parkinson's disease is cross-linked to -synuclein. NEUROCHEM INT 42:603-606 (2003).

Frangioni G, Borgioli G, Bianchi S: Melatonin, melanogenesis, and hypoxic stress in the newt, Triturus carnifex. J EXP ZOOL PART A 296A:125-136 (2003).

Ikeda R, Sugita T, Jacobson ES, Shinoda T: Effects of melanin upon susceptibility of Cryptococcus to antifungals. MICROBIOL IMMUNOL 47:271-277 (2003).

Koeberle MJ, Hughes PM, Wilson CG, Skellern GG: Development of a liquid chromatography-mass spectrometric method for measuring the binding of memantine to different melanins. J CHROMATOGR B 787:313-322 (2003).

Langfelder K, Streibel M, Jahn B, Haase G, Brakhage AA: Biosynthesis of fungal melanins and their importance for human pathogenic fungi. FUNGAL GENET BIOL 38:143-158 (2003).

Littrell KC, Gallas JM, Zajac GW, Thiyagarajan P: Structural studies of bleached melanin by synchrotron small-angle X-ray scattering. PHOTOCHEM PHOTOBIOL 77:115-120 (2003).

Nosanchuk JD, Casadevall A: The contribution of melanin to microbial pathogenesis. CELL MICROBIOL 5:203-223 (2003).

Rizner TL, Wheeler MH: Melanin biosynthesis in the fungus Curvularia lunata (teleornorph: Cochliobolus lunatus). CAN J MICROBIOL 49:110-119 (2003).

Sarna T, Burke JM, Korytowski W, R¢zanowska M, Skumatz CMB, Zareba A, Zareba M: Loss of melanin from human RPE with aging: possible role of melanin photooxidation. EXP EYE RES 76:89-98 (2003).

Scanavez C, Silveira M, Joekes I: Human hair: color changes caused by daily care damages on ultra-structure. COLLOID SURFACE B 28:39-52 (2003).

Turick CE, Caccavo F, Tisa LS: Electron transfer from Shewanella algae BrY to hydrous ferric oxide is mediated by cell-associated melanin. FEMS MICROBIOL LETT 220:99-104 (2003).

Wilkins DG, Mizuno A, Borges CR, Slawson MH, Rollins DE: Ofloxacin as a reference marker in hair of various colors. J ANAL TOXICOL 27:149-155 (2003).

Yamashita M, Ohta N, Shimizu T, Matsumoto K, Matsuura Y, Kawasaki I, Tanaka T, Maezaki N, Ohta S: First total synthesis of (ñ)-Linderol A, a tricyclic hexahydrodibenzofuran constituent of Lindera umbellata bark, with potent inhibitory activity on melanin biosynthesis of cultured B-16 melanoma cells. J ORG CHEM 68:1216-1224 (2002).

Zhang A, Lu P, Dahl-Roshak AM, Paress PS, Kennedy S, Tkacz JS, An Z: Efficient disruption of a polyketide synthase gene (pks1) required for melanin synthesis through Agrobacterium-mediated transformation of Glarea lozoyeasis. MOL GENET GENOMICS 268:645-655 (2003).

MELANOSOMES, MELANOCYTES & KERATINOCYTES

Abdel-Naser MB: Mitogen requirements of normal epidermal human melanocytes in a serum and tumor promoter free medium. EUROPEAN J DERMATOLOGY 13:29-33 (2003).

Acikel C, Ulkur E, Celikoz B: Carbon dioxide laser resurfacing and thin skin grafting in the treatment of "stable and recalcitrant" vitiligo. PLAST RECONSTR SURG 111:1291-1298 (2003).

Ackerman AB: "Dysplastic nevus" syndrome: Does a survey make it real? J AMER ACAD DERMATOL 48:461-463 (2003).

Bahadoran P, Ballotti R, Ortonne JP: Hypomelanosis, immunity, central nervous system: No more "and," not the end. AM J MED GENET PART A 116A:334-337 (2003).

Barr RJ, Linden KG, Rubinstein G, Cantos KA: Analysis of heterogeneity of atypia within melanocytic nevi. ARCH DERMATOL 139:289-292 (2003).

Biddle DA, Evans HL, Kemp BL, El Naggar AK, Harvell JD, White WL, Iskandar SS, Prieto VG: Intraparenchymal nevus cell aggregates in lymph nodes - A possible diagnostic pitfall with malignant melanoma and carcinoma. AMER J SURG PATHOL 27:673-681 (2003).

Briganti S, Camera E, Picardo M: Chemical and instrumental approaches to treat hyperpigmentation. PIGM CELL RES 16:101-110 (2003).

Bystryn JC: Dermoscopic and histopathologic diagnosis of equivocal melanocytic skin lesions - An interdisciplinary study on 107 cases. CANCER 97:1817 (2003).

Cucchi ML, Frattini P, Santagostino G, Preda S, Orecchia G: Catecholamines increase in the urine of non-segmental vitiligo especially during its active phase. PIGM CELL RES 16:111-116 (2003).

Drukala J, Rajwa B, Pietrzkowski Z, Korohoda W: Comparison of daunomycin effects on human keratinocytes and melanoma HTB 1410 cells. Image cytometry study. ANTICANCER RES 23:419-426 (2003).

Durda PJ, Dunn IS, Rose LB, Butera D, Benson EM, Pandolfi F, Kurnick JT: Induction of "antigen silencing" in melanomas by oncostatin M: Down-modulation of melanocyte antigen expression. MOL CANCER RES 1:411-419 (2003).

Ferrara G, Argenziano G, Cerroni L, Soyer HP: Dermoscopic and histopathologic diagnosis of equivocal melanocytic skin lesions - An interdisciplinary study on 107 cases - Author reply. CANCER 97:1817-1818 (2003).

Ferrara G, Argenziano G, Soyer HP: Melanocytic nevi of palms and soles. AMER J SURG PATHOL 27:411-412 (2003).

Govindarajan B, Bai XH, Cohen C, Zhong H, Kilroy S, Louis G, Moses M, Arbiser JL: Malignant transformation of melanocytes to melanoma by constitutive activation of mitogen-activated protein kinase kinase (MAPKK) signaling. J BIOL CHEM 278:9790-9795 (2003).

Grahn JC, Reilly DA, Nuccitelli RL, Isseroff RR: Melanocytes do not migrate directionally in physiological DC electric fields. WOUND REPAIR REGEN 11:64-70 (2003).

Grieco P, Rossi C, Colombo G, Gatti S, Novellino E, Lipton JM, Catania A: Novel -melanocyte stimulating hormone peptide analogues with high candidacidal activity. J MED CHEM 46:850-855 (2003).

Herndon LW, Williams RD, Wand M, Asrani S: Increased periocular pigmentation with ocular hypotensive lipid use in African Americans. AMER J OPHTHALMOL 135:713-715 (2003).

Hoogduijn MJ, Smit NP, vanderLaarse A, vanNieuwpoort AF, Wood JM, Thody AJ: Melanin has a role in Ca2+ homeostasis in human melanocytes. PIGM CELL RES 16:127-132 (2003).

Ide F, Mishima K, Saito I: Melanin pigmentation in the juxtaoral organ of Chievitz. PATHOL INT 53:262-263 (2003).

Johnson RN, McDonald HR, Ai E, Jumper JM: Camera artifacts producing the false impression of growth of choroidal melanocytic lesions. AMER J OPHTHALMOL 135:711-713 (2003).

Kageshita T, Ishihara T, Tokuo H, Funasaka Y, Ichihashi M, Dong J, Nakajima M, Ono T: Widespread expression of parathyroid hormone-related peptide in melanocytic cells. BRIT J DERMATOL 148:533-538 (2003).

Kang HY, Kang WH: Bilateral type of nevus of Ota presenting as agminated lentigines. EUROPEAN J DERMATOLOGY 13:205-206 (2003).

Lee DY, Lee JH, Lee ES, Cho KH, Yang JM: Fibroblasts play a stimulatory role in keratinocyte proliferation but an inhibitory role in melanocyte growth and pigmentation in a skin equivalent system from skin type IV. ARCH DERMATOL RES 294:444-446 (2003).

M,garban, A, Haddad J, Lyonnet S, Clayton-Smith J: Child with overgrowth, pigmentary streaks, polydactyly, and intestinal lymphangiectasia: Macrocephaly-cutis marmorata telangiectatica congenita syndrome or new disorder? AM J MED GENET PART A 116A:184-187 (2003).

MacLennan R, Kelly JW, Rivers JK, Harrison SL: The Eastern Australian Childhood Nevus Study: Site differences in density and size of melanocytic nevi in relation to latitude and phenotype. J AMER ACAD DERMATOL 48:367-375 (2003).

Magro CMB, Rehder J, Taube MBP: Melanocyte transplantation for the treatment of vitiligo: effects of different surgical techniques. EUROPEAN J DERMATOLOGY 13:34-39 (2003).

Manuskiatti W, Sivayathorn A, Leelaudomlipi P, Fitzpatrick RE: Treatment of acquired bilateral nevus of Ota-like macules (Hori's nevus) using a combination of scanned carbon dioxide laser followed by Q-switched ruby laser. J AMER ACAD DERMATOL 48:584-591 (2003).

Marks R: Comparison of melanocytic naevi with photographs, a recommended method. BRIT J DERMATOL 148:365 (2003).

Marles MAS, Gruber MY, Scoles GJ, Muir AD: Pigmentation in the developing seed coat and seedling leaves of Brassica carinata is controlled at the dihydroflavonol reductase locus. PHYTOCHEMISTRY 62:663-672 (2003).

Mart¡nez C, Y…£ez J, Vicente V, Alcaraz M, Benavente-Garc¡a O, Castillo J, Lorente J, Lozano JA: Effects of several polyhydroxylated flavonoids on the growth of B16F10 melanoma and Melan-a melanocyte cell lines: influence of the sequential oxidation state of the flavonoid skeleton. MELANOMA RES 13:3-9 (2003).

Miao XL, Wu QY, Wui GF, Zhaol NM: Changes in photosynthesis and pigmentation in an agp deletion mutant of the cyanobacterium Synechocystis sp. BIOTECHNOL LETT 25:391-396 (2003).

Michel JL: Laser therapy of giant congenital melanocytic nevi. EUROPEAN J DERMATOLOGY 13:57-64 (2003).

Mundy NI, Kelly J: Evolution of a pigmentation gene, the melanocortin-1 receptor, in primates. AMER J PHYS ANTHROPOL 121:67-80 (2003).

Ng WT, Toohey MG, Mulhall L, Mackey DA: Pigmentary retinopathy, macular oedema, and abnormal ERG with mitotane treatment. BRIT J OPHTHALMOL 87:500-501 (2003).

Norgauer J, Dichmann S, Peters F, Mohkenhaupt M, Schraufst„tter I, Herouy Y: Tumor necrosis factor induces upregulation of CXC-chemokine receptor type II expression and magnifies the proliferative activity of CXC-chemokines in human melanocytes. EUROPEAN J DERMATOLOGY 13:124-129 (2003).

Ongenae K, VanGeel N, Naeyaert JM: Evidence for an autoimmune pathogenesis of vitiligo. PIGM CELL RES 16:90-100 (2003).

Raposo GA, Fevrier B, Stoorvogel W, Marks MS: Lysosome-related organelles: a view from immunity and pigmentation. CELL STRUCT FUNCT 27:443-456 (2002).

Rodrigo MJ, Marcos JF, Alf,rez F, Mallent MD, Zacar¡as L: Characterization of Pinalate, a novel Citrus sinensis mutant with a fruit-specific alteration that results in yellow pigmentation and decreased ABA content. J EXP BOT 54:727-738 (2003).

Schallreuter KU, Kothari S, Hasse S, Kauser S, Lindsey NJ, Gibbons NCJ, Hibberts N, Wood JM: In situ and in vitro evidence for DCoH / HNF-1 transcription of tyrosinase in human skin melanocytes. BIOCHEM BIOPHYS RES COMMUN 301:610-616 (2003).

Schempp CM, Winghofer B, M•ller K, Schulte-M"nting J, Mannel M, Sch"pf E, Simon JC: Effect of oral administration of Hypericum perforatum extract (St. John's Wort) on skin erythema and pigmentation induced by UVB, UVA, visible light and solar simulated radiation. PHYTOTHER RES 17:141-146 (2003).

Scott G, Leopardi S: The cAMP signaling pathway has opposing effects on Rac and Rho in B16F10 cells: Implications for dendrite formation in melanocytic cells. PIGM CELL RES 16:139-148 (2003).

Shriver MD, Parra EJ, Dios S, Bonilla C, Norton H, Jovel C, Pfaff C, Jones C, Massac A, Cameron N, Baron A, Jackson T, Argyropoulos G, Jin L, Hoggart CJ, McKeigue PM, Kittles RA: Skin pigmentation, biogeographical ancestry and admixture mapping. HUM GENET 112:387-399 (2003).

Smith APL, Henze M, Osborn KG, Lee JA, Bortner DM, Rosenberg MP, Reed SI: Switching of melanocyte pigmentation associated with pituitary pars intermedia tumors in Rb+/- and p27(-1-) female mice with yellow pelage. COMPARATIVE MED 53:75-80 (2003).

Sumner P, Mollon JD: Colors of primate pelage and skin: Objective assessment of conspicuousness. AMER J PRIMATOL 59:67-91 (2003).

Takata M, Maruo K, Kageshita T, Ikeda S, Ono T, Shirasaki F, Takehara K, Bastian BC: Two cases of unusual acral melanocytic tumors: Illustration of molecular cytogenetics as a diagnostic tool. HUM PATHOL 34:89-92 (2003).

Tsao H, Bevona C, Goggins W, Quinn T: The transformation rate of moles (melanocytic nevi) into cutaneous melanoma - A population-based estimate. ARCH DERMATOL 139:282-288 (2003).

Watanuki H, Sakai M, Takahashi A: Immunomodulatory effects of alpha melanocyte stimulating hormone on common carp (Cyprinus carpio L.). VET IMMUNOL IMMUNOPATHOL 91:135-140 (2003).

Yoon TJ, Hearing VJ: Co-culture of mouse epidermal cells for studies of pigmentation. PIGM CELL RES 16:159-163 (2003).

Zankl A, Rampa A, Schinzel A: Brachmann-de Lange syndrome (BDLS) with asymmetry and skin pigmentary anomalies: A result of mosaicism for a putative BDLS gene mutation? AM J MED GENET PART A 118A:358-361 (2003).

MELANOMA & METASTASIS

Aguiar RO, Kwee JK, dePaula EF, Gomes ML, Bernardo M: The effect of murine B16F10 melanoma on the biodistribution of Tc-99m-MDP in male C57BL / 6J mice. CELL MOL BIOL 48:747-750 (2002).

Anastassiou G, Rebmann V, Wagner S, Bornfeld N, Grosse-Wilde H: Expression of classic and nonclassic HLA class I antigens in uveal melanoma. INVEST OPHTHALMOL VISUAL SCI 44:2016-2019 (2003).

Andersson R, Hofer PA, Riklund-•hlstr"m K, Henriksson R: Effects of interferon-, verpamil and dacarbazine in the treatment of advanced malignat melanoma. MELANOMA RES 13:87-91 (2003).

Arbesman H: UVA, melanoma, and antibacterial soaps. J AMER ACAD DERMATOL 48:464-465 (2003).

Argentati K, Re F, Serresi S, Tucci MG, Bartozzi B, Bernardini G, Provinciali M: Reduced number and impaired function of circulating T cells in patients with cutaneous primary melanoma. J INVEST DERMATOL 120:829-834 (2003).

Argenziano G, Rossiello L, Staibano S, Ruocco E, Cicale L: Melanoma simulating seborrheic keratosls: A major dermoscopy pitfall. ARCH DERMATOL 139:389-391 (2003).

Ariyan S: Regional isolated perfusion of extremities for melanoma: Now a 26-year experience with drugs other than L-phenylalanine mustard. PLAST RECONSTR SURG 111:1257-1261 (2003).

Azzola MF, Shaw HM, Thompson JF, Soong SJ, Scolyer RA, Watson GF, Colman MH, Zhang YT: Tumor mitotic rate is a more powerful prognostic indicator than ulceration in patients with primary cutaneous melanoma - An analysis of 3661 patients from a single center. CANCER 97:1488-1498 (2003).

B nfalvi T, Gilde K, Gergye M, Boldizs r M, Kremmer T, Ott¢ S: Use of serum 5-S-CD and S-100B protein levels to monitor the clinical course of malignant melanoma. EUR J CANCER 39:164-169 (2003).

Ballo MT, Bonnen MD, Garden AS, Myers JN, Gershenwald JE, Zagars GK, Schechter NR, Morrison WH, Ross MI, Ang KK: Adjuvant irradiation for cervical lymph node metastases from melanoma. CANCER 97:1789-1796 (2003).

Ballo MT, Ang KK: Radiation therapy for malignant melanoma. SURG CLIN N AMER 83:323-+ (2003).

Bedrosian I, Gershenwald JE: Surgical clinical trials in melanoma. SURG CLIN N AMER 83:385-+ (2003).

Benferhat S, Lessourd A, L,vy P, Feydy P, Has H, Carton S: Primary malignant melanoma of the esophagus. GASTROEN CLIN BIOL 27:113-115 (2003).

Berd D: Contribution of dead cells to the immunogenicity of an autologous, hapten-modified melanoma vaccine. VACCINE 21:795-797 (2003).

Bernsen MR, H†kansson L, Gustafsson B, Krysander L, Rettrup B, Ruiter D, H†kansson A: On the biological relevance of MHC class II and B7 expression by tumour cells in melanoma metastases. BRIT J CANCER 88:424-431 (2003).

Bettinotti MP, Panelli MC, Ruppe E, Mocellin S, Phan GQ, White DE, Marincola FM: Clinical and immunological evaluation of patients with metastatic melanoma undergoing immunization with the HLA-Cw*0702-associated epitope MAGE-A12:170-178. INT J CANCER 105:210-216 (2003).

Biroccio A, Gabellini C, Amodei S, Benassi B, DelBufalo D, Elli R, Antonelli A, D'Incalci M, Zupi G: Telomere dysfunction increases cisplatin and ecteinascidin-743 sensitivity of melanoma cells. MOL PHARMACOL 63:632-638 (2003).

Bleicher RJ, Essner R, Foshag LJ, Wanek LA, Morton DL: Role of sentinel lymphadenectomy in thin invasive cutaneous melanomas. J CLIN ONCOL 21:1326-1331 (2003).

Bosserhoff AK, Moser M, Sch"lmerich J, Buettner R, Hellerbrand C: Specific expression and regulation of the new melanoma inhibitory activity-related gene MIA2 in hepatocytes. J BIOL CHEM 278:15225-15231 (2003).

Brown CK, Kirkwood JM: Medical management of melanoma. SURG CLIN N AMER 83:283-+ (2003).

Browning DJ, Perkins SL, Lark KK: Iris cyst secondary to latanoprost mimicking iris melanoma. AMER J OPHTHALMOL 135:419-421 (2003).

Browning DJ, Antoszyk AN: Retinal tear and detachment after transpupillary thermotherapy for choroidal melanoma. AMER J OPHTHALMOL 135:729-730 (2003).

Bullard KM, Tuttle TM, Rothenberger DA, Madoff RD, Baxter NN, Finne CO, Spencer MP: Surgical therapy for anorectal melanoma. J AMER COLL SURGEONS 196:206-211 (2003).

Burd R, Lavorgna SN, Daskalakis C, Wachsberger PR, Wahl ML, Biaglow JE, Stevens CW, Leeper DB: Tumor oxygenation and acidification are increased in melanoma xenografts after exposure to hyperglycemia and meta-iodo-benzylguanidine. RADIAT RES 159:328-335 (2003).

Carlring J, Shaif-Muthana M, Sisley K, Rennie IG, Murray AK: Apoptotic cell death in conjunction with CD80 costimulation confers uveal melanoma cells with the ability to induce immune responses. IMMUNOLOGY

109:41-48 (2003).
Carrabba MG, Castelli C, Maeurer MJ, Squarcina P, Cova A, Pilla L, Renkvist N, Parmiani G, Rivoltini L: Suboptimal activation of CD8(+) T cells by melanoma-derived altered peptide ligands: Role of melan-A / MART-1 optimized analogues. CANCER RES 63:1560-1567 (2003).
Cascinelli N, Santinami M, Maurichi A, Patuzzo R, Pennacchioli E: World Health Organization experience in the treatment of melanoma. SURG CLIN N AMER 83:405-+ (2003).
Chamberlain AJ, Fritschi L, Giles GG, Dowling JP, Kelly JW: Nodular melanoma is not a distinct entity - In reply. ARCH DERMATOL 139:387-388 (2003).
Char DH: Ocular melanoma. SURG CLIN N AMER 83:253-+ (2003).
Clarijs R, Ruiter DJ, deWaal RMW: Pathophysiological implications of stroma pattern formation in uveal melanoma. J CELL PHYSIOL 194:267-271 (2003).
Clarijs R, Schalkwijk L, Ruiter DJ, deWaal RMW: EMAP-II expression is associated with macrophage accumulation in primary uveal melanoma. INVEST OPHTHALMOL VISUAL SCI 44:1801-1806 (2003).
Cocconi G, Passalacqua R, Foladore S, Carlini P, Acito L, Maiello E, Marchi M, Gebbia V, DiSarra S, Beretta M, Bacchi M: Treatment of metastatic malignant melanoma with dacarbazine plus tamoxifen, or vindesine plus tamoxifen: a prospective randomized study. MELANOMA RES 13:73-79 (2003).
Coss RA, Storck CW, Daskalakis C, Berd D, Wahl ML: Intracellular acidification abrogates the heat shock response and compromises survival of human melanoma cells. MOL CANCER THER 2:383-388 (2003).
Crocetti E, Carli P: Changes from mid-1980s to late 1990s among clinical and demographic correlates of melanoma thickness. EUROPEAN J DERMATOLOGY 13:72-75 (2003).
Cruz J, Reis JS, Lopes JM: Primary cutaneous malignant melanoma with lipoblast-like cells. ARCH PATHOL LAB MED 127:370-371 (2003).
Daryanani D, Plukker JT, DeHullu JA, Kuiper H, Nap RE, Hoekstra HJ: Pregnancy and early-stage melanoma. CANCER 97:2248-2253 (2003).
Davids V, Kidson SH, Hanekom GS: Accurate molecular detection of melanoma nodal metastases: an assessment of multimarker assay specificity, sensitivity, and detection rate. J CLIN PATHOL MOL PATHOL 56:43-51 (2003).
Dawson M, Doble P, Beavis A, Li LXL, Soper R, Scolyer RA, Uren RF, Thompson JF: Antimony by ICP-MS as a marker for sentinel lymph nodes in melanoma patients. ANALYST 128:217-219 (2003).
deGast GC, Batchelor D, Kersten MJ, Vyth-Dreese FA, Sein J, vandeKasteele WF, Nooijen WJ, Nieweg OE, deWaal MA, Boogerd W: Temozolomide followed by combined immunotherapy with GM-CSF, low-dose IL2 and IFN in patients with metastatic melanoma. BRIT J CANCER 88:175-180 (2003).
Delmas C, Aragou N, Poussard S, Cottin P, Darbon JM, Manenti S: MAP kinase-dependent degradation of p27(Kip1) by calpains in choroidal melanoma cells - Requirement of p27(Kip1) nuclear export. J BIOL CHEM 278:12443-12451 (2003).
DePaola F, Ridolfi R, Riccobon A, Flamini E, Barzanti F, Granato AM, Mordenti GL, Medri L, Vitali P, Amadori D: Restored T-cell activation mechanisms in human tumour-infiltrating lymphocytes from melanomas and colorectal carcinomas after exposure to interleukin-2. BRIT J CANCER 88:320-326 (2003).
DePotter P, Jamart J: Adjuvant indocyanine green in transpupillary thermotherapy for choroidal melanoma. OPHTHALMOLOGY 110:406-413 (2003).
Desmond RA, Soong SJ: Epidemiology of malignant melanoma. SURG CLIN N AMER 83:1-+ (2003).
DeWitt JM, Chappo J, Sherman S: Endoscopic ultrasound-guided fine-needle aspiration of melanoma metastatic to the pancreas: Report of two cases and review. ENDOSCOPY 35:219-222 (2003).
Durrani AJ, Moir GC, Diaz-Cano SJ, Cerio R: Malignant melanoma in an 8-year-old Caribbean girl: diagnostic criteria and utility of sentinel lymph node biopsy. BRIT J DERMATOL 148:569-572 (2003).
Dutcher JP: The prognostic role of detection of circulating melanoma cells in the blood. J CLIN ONCOL 21:757-759 (2003).
Eggermont AMM, vanGeel AN, deWilt JHW, tenHagen TLM: The role of isolated limb perfusion for melanoma confined to the extremities. SURG CLIN N AMER 83:371-+ (2003).
Emionite L, Galmozzi F, Raffo P, Vergani L, Toma S: Retinoids and malignant melanoma: A pathway of proliferation inhibition on SK MEL28 cell line. ANTICANCER RES 23:13-19 (2003).
Essner R: Surgical treatment of malignant melanoma. SURG CLIN N AMER 83:109-+ (2003).
Feng NP, Jin HN, Wang M, Du CG, Wright JA, Young AH: Antitumor activity of Virulizin, a novel biological response modifier (BRM) in a panel of human pancreatic cancer and melanoma xenografts. CANCER CHEMOTHER PHARMACOL 51:247-255 (2003).

Garbe C, Paul A, Kohler-Sp„th H, Ellwanger U, Stroebel W, Schwarz M, Schlagenhauff B, Meier F, Schittek B, Blaheta HJ, Blum A, Rassner G: Prospective evaluation of a follow-up schedule in cutaneous melanoma patients: Recommendations for an effective follow-up strategy. J CLIN ONCOL 21:520-529 (2003).

Garbe C, Leiter U, Ellwanger U, Blaheta HJ, Meier F, Rassner G, Schittek B: Diagnostic value and prognostic significance of protein S-100, melanoma-inhibitory activity, and tyrosinase / MART-1 reverse transcription-polymerase chain reaction in the follow-up of high-risk melanoma patients. CANCER 97:1737-1745 (2003).

Glazyrin AL, Kan-Mitchell J, Mitchell MS: Analysis of in vitro immunization: generation of cytotoxic T-lymphocytes against allogeneic melanoma cells with tumor lysate-loaded or tumor RNA-transfected antigen-presenting cells. CANCER IMMUNOL IMMUNOTHER 52:171-178 (2003).

Gogas H: Reply: Value of tyrosinase RT-PCR in melanoma prognosis. BRIT J CANCER 88:982 (2003).

Goydos JS, Patel KN, Shih WJ, Lu SE, Yudd AP, Kempt JS, Bancila E, Germino FJ: Patterns of recurrence in patients with melanoma and histologically negative but RT-PCR-positive sentinel lymph nodes - Invited commentary - Reply. J AMER COLL SURGEONS 196:205 (2003).

Goydos JS, Patel KN, Shih WJ, Lu SE, Yudd AP, Kempf JS, Bancila E, Germino FJ: Patterns of recurrence in patients with melanoma and histologically negative but RT-PCR-positive sentinel lymph nodes. J AMER COLL SURGEONS 196:196-204 (2003).

Graff BA, Kvinnsland Y, Skretting A, Rofstad EK: Intratumour heterogeneity in the uptake of macromolecular therapeutic agents in human melanoma xenografts. BRIT J CANCER 88:291-297 (2003).

Guadagni S, Santinami M, Patuzzo R, Pilati PL, Miotto D, Deraco M, Rossi CR, Fiorentini G, DiFilippo F, Valenti M, Amicucci G: Hypoxic pelvic and limb perfusion with melphalan and mitomycin C for recurrent limb melanoma: a pilot study. MELANOMA RES 13:51-58 (2003).

Guitart J, Lowe L, Piepkorn M, Prieto VG, Rabkin MS, Shea CR, White W, Barnhill RML: Metastasizing thin melanoma or multiple primary melanomas? In reply. ARCH DERMATOL 139:388-389 (2003).

Hadden PW, Damato BE: Consecutive choroidal melanoma in the same eye of a patient. AMER J OPHTHALMOL 135:728-729 (2003).

Hamberg AP, Korse CM, Bonfrer JMG, deGast GC: Serum S100B is suitable for prediction and monitoring of response to chemoimmunotherapy in metastatic malignant melanoma. MELANOMA RES 13:45-49 (2003).

Hammar N, Eliasch H, Linnersj" A, Dammstr"m BG, Johansson M, Lindgren T: Pilots & melanoma - Response. AVIAT SPACE ENVIRON MED 74:188 (2003).

Hanada T, Toshinai K, Kajimura N, Nara-ashizawa N, Tsukada T, Hayashi Y, Osuye K, Kangawa K, Matsukura S, Nakazato M: Anti-cachectic effect of ghrelin in nude mice bearing human melanoma cells. BIOCHEM BIOPHYS RES COMMUN 301:275-279 (2003).

Hearle N, Damato BE, Humphreys J, Wixey J, Green H, Stone J, Easton DF, Houlston RS: Contribution of germline mutations in BRCA2, P16(INK4A), P14(ARF) and P15 to uveal melanoma. INVEST OPHTHALMOL VISUAL SCI 44:458-462 (2003).

Heenan P, Taran JM: Metastasizing thin melanoma or multiple primary melanomas? ARCH DERMATOL 139:388 (2003).

Heenan PJ: Nodular melanoma is not a distinct entity. ARCH DERMATOL 139:387 (2003).

Heimann DM, Rosenberg SA: Continuous intravenous administration of live genetically modified Salmonella typhimurium in patients with metastatic melanoma. J IMMUNOTHER 26:179-180 (2003).

Hemminki K, Zhang H, Czene K: Incidence trends and familial risks in invasive and in situ cutaneous melanoma by sun-exposed body sites. INT J CANCER 104:764-771 (2003).

Hemminki K, Zhang H, Czene K: Association of first ocular melanoma with subsequent cutaneous melanoma: Results from the Swedish Family-Cancer Database. INT J CANCER 104:257-258 (2003).

Hodi FS, Mihm MC, Soiffer RJ, Haluska FG, Butler M, Seiden MV, Davis T, Henry-Spires R, MacRae S, Willman A, Padera R, Jaklitsch MT, Shankar S, Chen TC, Korman A, Allison JP, Dranoff G: Biologic activity of cytotoxic T lymphocyte-associated antigen 4 antibody blockade in previously vaccinated metastatic melanoma and ovarian carcinoma patients. PROC NAT ACAD SCI USA 100:4712-4717 (2003).

Hornbuckle J, Culjak G, Jarvis E, Gebski V, Coates A, Mann G, Kefford R: Patterns of metastases in familial and non-familial melanoma. MELANOMA RES 13:105-109 (2003).

Hug DH, Hunter JK, Dunkerson DD: Pilots & melanoma. AVIAT SPACE ENVIRON MED 74:187 (2003).

Hussein MR, Haemel AK, Wood GS: Apoptosis and melanoma: molecular mechanisms. J PATHOL 199:275-288 (2003).

Ito A, Tanaka K, Kondo K, Shinkai M, Honda H, Matsumoto K, Saida T, Kobayashi T: Tumor regression by combined immunotherapy and hyperthermia using magnetic nanoparticles in an experimental subcutaneous

murine melanoma. CANCER SCI 94:308-313 (2003).
Javia LR, Rosenberg SA: CD4(+)CD25(+) suppressor lymphocytes in the circulation of patients immunized against melanoma antigens. J IMMUNOTHER 26:85-93 (2003).
Johnson DS, Yamane S, Morita S, Yonehara C, Wong JH: Malignant melanoma in non-Caucasians: experience from Hawaii. SURG CLIN N AMER 83:275-+ (2003).
Jorkov AS, Donskov F, Steiniche T, Ternesten-Bratel A, Naredi P, Hellstrand K, Hokland M: Immune response in blood and tumour tissue in patients with metastatic malignant melanoma treated with IL-2, IFN and histamine dihydrochloride. ANTICANCER RES 23:537-542 (2003).
Kadison AS, Morton DL: Immunotherapy of malignant melanoma. SURG CLIN N AMER 83:343-+ (2003).
Kahle B, Hoffend J, Wacker J, Hartschuh W: Preoperative ultrasonographic identification of the sentinel lymph node in patients with malignant melanoma. CANCER 97:1947-1954 (2003).
Kannan K, Sharpless NE, Xu J, O'Hagan RC, Bosenberg M, Chin L: Components of the Rb pathway are critical targets of UV mutagenesis in a murine melanoma model. PROC NAT ACAD SCI USA 100:1221-1225 (2003).
Kefford RF, Mann GJ: Is there a role for genetic testing in patients with melanoma? CURR OPIN ONCOL 15:157-161 (2003).
Khayat D, Rixe O, Martin G, Soubrane C, Banzet M, Bazex JA, Lauret P, V,rola O, Auclerc R, Harper P, Banzet P: Surgical margins in cutaneous melanoma (2 cm versus 5 cm for lesions measuring less than 2.1-mm thick) - Long-term results of a large European multicentric phase III study. CANCER 97:1941-1946 (2003).
Khorana AA, Rosenblatt J, Sahasrabudhe DM, Evans T, Ladrigan M, Marquis D, Rosell K, Whiteside T, Phillippe S, Acres B, Slos P, Squiban P, Ross M, Kendra K: A phase I trial of immunotherapy with intratumoral adenovirus-interferon-gamma (TG1041) in patients with malignant melanoma. CANCER GENE THERAPY 10:251-259 (2003).
Klimek VM, Williams L, Chapman PB: Serum levels of melanoma-inhibiting activity do not predict relapse in melanoma patients. CYTOKINES CELL MOL THER 7:71-74 (2002).
Kloos L, Smitt PS, Ang CW, Kruit W, Stoter G: Paraneoplastic ophthalmoplegia and subacute motor axonal neuropathy associated with anti-GQ1b antibodies in a patient with malignant melanoma. J NEUROL NEUROSURG PSYCHIAT 74:507-509 (2003).
Kloos L, Ang CW, Kruit W, Stoter G, Sillevis P: Paraneoplastic ophthalmoplegia and subacute motor axonal neuropathy associated with anti-GQ1b antibodies in a patient with malignant melanoma (vol 74, pg 507, 2003). J NEUROL NEUROSURG PSYCHIAT 74:694 (2003).
Kneier AW: Coping with melanoma - ten strategies that promote psychological adjustment. SURG CLIN N AMER 83:417-+ (2003).
Konstantopoulos K: Value of tyrosinase RNA detection by an RT-PCR method in melanoma prognosis. BRIT J CANCER 88:981 (2003).
Kogure K, Manabe S, Hama S, Tokumura A, Fukuzawa K: Potentiation of anti-cancer effect by intravenous administration of vesiculated -tocopheryl hemisuccinate on mouse melanoma in vivo. CANCER LETT 192:19-24 (2003).
Krause MHJ, Xiong J, Gragoudas ES, Young LHY: Treatment of experimental choroidal melanoma with an Nd:yttrium-lanthanum-fluoride laser at 1047 nm. ARCH OPHTHALMOL 121:357-363 (2003).
Kremer S, Grand S, Berger F, Hoffmann D, Pasquier B, R,my C, Benabid AL, LeBas JF: Dynamic contrast-enhanced MRI: differentiating melanoma and renal carcinoma metastases from high-grade astrocytomas and other metastases. NEURORADIOLOGY 45:44-49 (2003).
Kretschmer L, Altenvoerde G, Meller J, Zutt M, Funke M, Neumann C, Becker W: Dynamic lymphoscintigraphy and image fusion of SPECT and pelvic CT-scans allow mapping of aberrant pelvic sentinel lymph nodes in malignant melanoma. EUR J CANCER 39:175-183 (2003).
Kricker A, Vajdic C, Armstrong B: Ocular melanoma and cutaneous melanoma. INT J CANCER 104:259 (2003).
Lang J, Boxer M, MacKie R: Absence of exon 15 BRAF germline mutations in familial melanoma. HUM MUTAT 21:327-330 (2003).
Lauer-Fields JL, Malkar NB, Richet G, Drauz K, Fields GB: Melanoma cell CD44 interaction with the 1(IV)1263-1277 region from basement membrane collagen is modulated by ligand glycosylation. J BIOL CHEM 278:14321-14330 (2003).
Leman JA, MacKie RM: Late (>10 years) recurrence of melanoma: the Scottish experience. BRIT J DERMATOL 148:372-373 (2003).
Leong SPL: Malignant melanoma, Part II - Preface. SURG CLIN N AMER 83:XIII-XIXV (2003).
Leong SPL: Selective sentinel lymphadenectomy for malignant melanoma. SURG CLIN N AMER 83:157-+ (2003).

Leong SPL: Future perspectives on malignant melanoma. SURG CLIN N AMER 83:453-+ (2003).

Leong SPL: Preface - Malignant Melanoma, Part I. SURG CLIN N AMER 83:XI-XIII (2003).

Li Y, Madigan MC, Lai K, Conway RM, Billson FA, Crouch R, Allen BJ: Human uveal melanoma expresses NG2 immunoreactivity. BRIT J OPHTHALMOL 87:629-632 (2003).

Liu V, Mihm MC: Pathology of malignant melanoma. SURG CLIN N AMER 83:31-+ (2003).

Lotem M, Yehuda-Gafni O, Butnaryu E, Drize O, Peretz T, Abeliovich D: Cytogenetic analysis of melanoma cell lines: subclone selection in long-term melanoma cell cultures. CANCER GENET CYTOGENET 142:87-91 (2003).

Lozupone F, Rivoltini L, Luciani F, Venditti M, Lugini L, Cova A, Squarcina P, Parmiani G, Belardelli F, Fais S: Adoptive transfer of an anti-MART-1(27-35)-specific CD8(+) T cell clone leads to immunoselection of human melanoma antigen-loss variants in SCID mice. EUR J IMMUNOL 33:556-566 (2003).

Luu Y, Li G: The p53-stabilizing compound, CP-31398, does not enhance chemosensitivity in human melanoma cells. ANTICANCER RES 23:99-105 (2003).

MacKie RM, Bray CA, Leman JA: Effect of public education aimed at early diagnosis of malignant melanoma: cohort comparison study. BRIT MED J 326:367 (2003).

Marchetti D, Murry B, Galjour J, Wilke-Greiter A: Human melanoma TrkC: Its association with a purine-analog-sensitive kinase activity. J CELL BIOCHEM 88:865-872 (2003).

McKenna D, Stockton D, Brewster DH, Doherty VR: Evidence for an association between cutaneous malignant melanoma and lymphoid malignancy: a population-based retrospective cohort study in Scotland. BRIT J CANCER 88:74-78 (2003).

McMasters KM: Sentinel lymph node biopsy: Beyond melanoma and breast carcinoma. CANCER 97:2134-2136 (2003).

Meidenbauer N, Marienhagen J, Laumer M, Vogl S, Heymann J, Andreesen R, Mackensen A: Survival and tumor localization of adoptively transferred Melan-A-specific T cells in melanoma patients. J IMMUNOL 170:2161-2169 (2003).

Merlino G, Noonan FP: Modeling gene-environment interactions in malignant melanoma. TRENDS MOL MED 9:102-108 (2003).

Michel J, Sauerwein W, Wittig A, Balossier G, Zierold K: Subcellular localization of boron in cultured melanoma cells by electron energy-loss spectroscopy of freeze-dried cryosections. J MICROSC OXFORD 210:25-34 (2003).

Mijnhout GS, Hoekstra OS, vanLingen A, vanDiest PJ, AdŠr HJ, Lammertsma AA, Pijpers R, Meijer S, Teule GJJ: How morphometric analysis of metastatic load predicts the (un)usefulness of PET scanning: the case of lymph node staging in melanoma. J CLIN PATHOL 56:283-286 (2003).

Mornex F, Thomas L, Mohr P, Hauschild A, Delaunay MM, Lesimple T, Tilgen W, Bui BN, Guillot B, Ulrich J, Bourdin S, Mousseau M, Cupissol D, Bonneterre ME, deGislain C, Bensadoun RJ, Clavel M: A prospective randomized multicentre phase III trial of fotemustine plus whole brain irradiation versus fotemustine alone in cerebral metastases of maliqnant melanoma. MELANOMA RES 13:97-103 (2003).

Morvan D, Demidem A, Papon J, Madelmont JC: Quantitative HRMAS proton total correlation spectroscopy applied to cultured melanoma cells treated by chloroethyl nitrosourea: Demonstration of phospholipid metabolism alterations. MAGN RESON MED 49:241-248 (2003).

Moyano JV, Maqueda A, Albar JP, Garcia-Pardo A: A synthetic peptide from the heparin-binding domain III (repeats III4-5) of fibronectin promotes stress-fibre and focal-adhesion formation in melanoma cells. BIOCHEM J 371:565-571 (2003).

Neuber K, Reinhold U, Deutschmann A, Pf"hler C, Mohr P, Pichlmeier U, Baumgart J, Hauschild A: Second-line chemotherapy of metastatic malignant melanoma with intravenous treosulfan: a phase II multicentre trial. MELANOMA RES 13:81-85 (2003).

Ng PC, Barzilai DA, Ismail SA, Averitte RL, Gilliam AC: Evaluating invasive cutaneous melanoma: Is the initial biopsy representative of the final depth? J AMER ACAD DERMATOL 48:420-424 (2003).

Nguyen NP, Levinson B, Dutta S, Karlsson U, Alfieri A, Childress C, Sallah S: Concurrent interferon- and radiation for head and neck melanoma. MELANOMA RES 13:67-71 (2003).

Niles RM, McFarland M, Weimer MB, Redkar A, Fu YM, Meadows GG: Resveratrol is a potent inducer of apoptosis in human melanoma cells. CANCER LETT 190:157-163 (2003).

Nowecki ZI, Rutkowski P, Nasierowska-Guttmejer A, Ruka W: Sentinel lymph node biopsy in melanoma patients with clinically negative regional lymph nodes - one institution's experience. MELANOMA RES 13:35-43 (2003).

Nyormoi O, Bar-Eli M: Transcriptional regulation of metastasis-related genes in human melanoma. CLIN EXP

METASTAS 20:251-263 (2003).
Okada Y, Okada N, Mizuguchi H, Hayakawa T, Mayumi T, Mizuno N: An investigation of adverse effects caused by the injection of high-dose TNF-expressing adenovirus vector into established murine melanoma. GENE THERAPY 10:700-705 (2003).
Olaso E, Salado C, Egilegor E, Gutierrez V, Santisteban A, Sancho-Bru P, Friedman SL, Vidal-Vanaclocha F: Proangiogenic role of tumor-activated hepatic stellate cells in experimental melanoma metastasis. HEPATOLOGY 37:674-685 (2003).
Oratz R, Hauschild A, Schadendorf D, Castro D, Br"cker EB, Orenberg EK: Intratumoral cisplatin / adrenaline injectable gel for the treatment of patients with cutaneous and soft tissue metastases of malignant melanoma. MELANOMA RES 13:59-66 (2003).
Ordan O, Rotem R, Jaspers I, Flescher E: Stress-responsive JNK mitogen-activated protein kinase mediates aspirin-induced suppression of B16 melanoma cellular proliferation. BRIT J PHARMACOL 138:1156-1162 (2003).
Ortega AL, Carretero J, Obrador E, Gambini J, Asensi M, Rodilla V, Estrela JM: Tumor cytotoxicity by endothelial cells - Impairment of the mitochondrial system for glutathione uptake in mouse B16 melanoma cells that survive after in vitro interaction with the hepatic sinusoidal endothelium. J BIOL CHEM 278:13888-13897 (2003).
Osborne JE, Chave TA, Hutchinson PE: Comparison of diagnostic accuracy for cutaneous malignant melanoma between general dermatology, plastic surgery and pigmented lesion clinics. BRIT J DERMATOL 148:252-258 (2003).
P,guet-Navarro J, Sportouch M, Popa I, Berthier O, Schmitt D, Portoukalian J: Gangliosides from human melanoma tumors impair dendritic cell differentiation from monocytes and induce their apoptosis. J IMMUNOL 170:3488-3494 (2003).
Palmieri G, Ascierto PA, Perrone F, Satriano SMR, Ottaiano A, Daponte A, Napolitano M, Carac• C, Mozzillo N, Melucci MT, Cossu A, Tanda F, Gallo C, Satriano RA, Castello G: Prognostic value of circulating melanoma cells detected by reverse transcriptase-polymerase chain reaction. J CLIN ONCOL 21:767-773 (2003).
Pellacani G, Seidenari S: Preoperative melanoma thickness determination by 20-MHz sonography and digital videomicroscopy in combination. ARCH DERMATOL 139:293-298 (2003).
Pennati M, Binda M, Colella G, Folini M, Citti L, Villa R, Daidone MG, Zaffaroni N: Radiosensitization of human melanoma cells by ribozyme-mediated inhibition of survivin expression. J INVEST DERMATOL 120:648-654 (2003).
Penso J, Beitner R: Lithium detaches hexokinase from mitochondria and inhibits proliferation of B16 melanoma cells. MOL GENET METAB 78:74-78 (2003).
Peter I, Graf C, Dummer R, Schaffner W, Greber UF, Hemmi S: A novel attenuated replication-competent adenovirus for melanoma therapy. GENE THERAPY 10:530-539 (2003).
Pieri L, Dominici S, DelBello B, Maellaro E, Comporti M, Paolicchi A, Pompella A: Redox modulation of protein kinase / phosphatase balance in melanoma cells: the role of endogenous and -glutamyltransferase-dependent H2O2 production. BBA GEN SUBJECTS 1621:76-83 (2003).
Poetsch M, Dittberner T, Woenckhaus C: Microsatellite analysis at 1p36.3 in malignant melanoma of the skin: fine mapping in search of a possible tumour suppressor gene region. MELANOMA RES 13:29-33 (2003).
Poser I, Golob M, Buettner R, Bosserhoff AK: Upregulation of HMG1 leads to melanoma inhibitory activity expression in malignant melanoma cells and contributes to their malignancy phenotype. MOL CELL BIOL 23:2991-2998 (2003).
Qu GZ, Kaur JS, Seward JB: Metastatic melanoma presenting as cardiac mass and hemobilia. AMER J MED SCI 325:157-159 (2003).
Raikov ZD, Atanasov AT, Raikova ET: Nitroxyl radicals and malignant pigment melanoma. MED HYPOTHESES 60:387-388 (2003).
Rajini B, Graham C, Wistow G, Sharma Y: Stability, homodimerization, and calcium-binding properties of a single, variant -crystallin domain of the protein absent in melanoma 1 (AIM1). BIOCHEMISTRY USA 42:4552-4559 (2003).
Reintgen D: Patterns of recurrence in patients with melanoma and histologically negative but RT-PCR-positive sentinel lymph nodes - Invited commentary. J AMER COLL SURGEONS 196:204-205 (2003).
Ribatti D, Ennas MG, Vacca A, Ferreli F, Nico B, Orru S, Sirigu P: Tumor vascularity and tryptase-positive mast cells correlate with a poor prognosis in melanoma. EUR J CLIN INVEST 33:420-425 (2003).
Ridolfi L, Ridolfi R, Riccobon A, DePaola F, Petrini M, Stefanelli M, Flamini E, Ravaioli A, Verdecchia GM, Trevisan G, Amadori D: Adjuvant immunotherapy with tumor infiltrating lymphocytes and interleukin-2 in

patients with resected stage III and IV melanoma. J IMMUNOTHER 26:156-162 (2003).

Rosado B, Menzics S, Harbauer A, Pehamberger H, Wolff K, Binder M, Kittler H: Accuracy of computer diagnosis of melanoma - A quantitative meta-analysis. ARCH DERMATOL 139:361-367 (2003).

Rosenkranz AA, Lunin VG, Sergienko OV, Gilyazova DG, Voronina OL, Jans DE, Kofner AA, Shumiantseva MA, Mironov AF, Sobolev AS: Targeted intracellular site-specific drug delivery: Photosensitizer targeting to melanoma cell nuclei. RUSS J GENET 39:198-206 (2003).

Salio M, Cella M, Vermi W, Facchetti F, Palmowski MJ, Smith CL, Shepherd D, Colonna M, Cerundolo V: Plasmacytoid dendritic cells prime IFN—secreting melanoma-specific CD8 lymphocytes and are found in primary melanoma lesions. EUR J IMMUNOL 33:1052-1062 (2003).

Schachter J, Brenner B, Fenig E, Gutman R, Sulkes A, Gutman H: Patterns of failure in patients with malignant melanoma treated with high-dose interferon-2b in the adjuvant setting. MELANOMA RES 13:93-96 (2003).

Scheibenbogen C, Schadendorf D, Bechrakis NE, Nagorsen D, Hofmann U, Servetopoulou F, Letsch A, Philipp A, Foerster MH, Schmittel A, Thiel E, Keilholz U: Effects of granulocyte-macrophage colony-stimulating factor and foreign helper protein as immunologic adjuvants on the T-cell response to vaccination with tyrosinase peptides. INT J CANCER 104:188-194 (2003).

Schmittel A, Proebstle T, Engenhart-Cabillic R, Scheibenbogen C, Geueke AM, Thiel E, Keilholz U: Brain metastases following interleukin-2 plus interferon-alpha-2a therapy: a follow-up study in 94 stage IV melanoma patients. EUR J CANCER 39:476-480 (2003).

Schmollinger JC, Vonderheide RH, Hoar KM, Maecker B, Schultze JL, Hodi FS, Soiffer RJ, Jung K, Kuroda MJ, Letvin NL, Greenfield EA, Mihm M, Kutok JL, Dranoff G: Melanoma inhibitor of apoptosis protein (ML-IAP) is a target for immune-mediated tumor destruction. PROC NAT ACAD SCI USA 100:3398-3403 (2003).

Scholes AGM, Damato BE, Nunn J, Hiscott P, Grierson I, Field JK: Monosomy 3 in uveal melanoma: Correlation with clinical and histologic predictors of survival. INVEST OPHTHALMOL VISUAL SCI 44:1008-1011 (2003).

Schuler-Thurner B, Schultz ES, Berger TG, Weinlich G, Ebner S, Woerl P, Bender A, Feuerstein B, Fritsch PO, Romani N, Schuler G: Rapid induction of tumor-specific type 1 T helper cells in metastatic melanoma patients by vaccination with mature, cryopreserved, peptide-loaded monocyte-derived dendritic cells (vol 195, pg 1279, 2002). J EXP MED 197:395 (2003).

Schwartz JL, Mozurkewich EL, Johnson TM: Current management of patients with melanoma who are pregnant, want to get pregnant, or do not want to get pregnant. CANCER 97:2130-2133 (2003).

Selzer E, Thallinger C, Hoeller C, Oberkleiner P, Wacheck V, Pehamberger H, Jansen B: Betulinic acid-induced Mcl-1 expression in human melanoma mode of action and functional significance. MOL MED 8:877-884 (2002).

Shibagaki N, Udey MC: Dendritic cells transduced with TAT protein transduction domain-containing tyrosinase-related protein 2 vaccinate against murine melanoma. EUR J IMMUNOL 33:850-860 (2003).

Shields CL: Adjuvant indocyanine green in transpupillary thermotherapy for choroidal melanoma - Discussion. OPHTHALMOLOGY 110:413-414 (2003).

Shields CL, Naseripour M, Shields JA, Freire J, Cater J: Custom-designed plaque radiotherapy for nonresectable iris melanoma in 38 patients: Tumor control and ocular complications. AMER J OPHTHALMOL 135:648-656 (2003).

Singh AD, Eagle RC, Shields CL: Enucleation following transpupillary thermotherapy of choroidal melanoma: Clinicopathologic correlations. ARCH OPHTHALMOL 121:397-400 (2003).

Slutsky SG, Kamaraju AK, Levy AM, Chebath J, Revel M: Activation of myelin genes during transdifferentiation from melanoma to glial cell phenotype. J BIOL CHEM 278:8960-8968 (2003).

Smalley KSM: A pivotal role for ERK in the oncogenic behaviour of malignant melanoma? INT J CANCER 104:527-532 (2003).

Smalley KSM, Eisen TG: Farnesyl transferase inhibitor SCH66336 is cytostatic, pro-apoptotic and enhances chemosensitivity to cisplatin in melanoma cells. INT J CANCER 105:165-175 (2003).

Smith JW, Walker EB, Fox BA, Haley D, Wisner KP, Doran T, Fisher B, Justice L, Wood W, Vetto J, Maecker H, Dols A, Meijer S, Hu HM, Romero P, Alvord WG, Urba WJ: Adjuvant immunization of HLA-A2-positive melanoma patients with a modified gp100 peptide induces peptide-specific CD8(+) T-cell responses. J CLIN ONCOL 21:1562-1573 (2003).

Smithers M, O'Connell K, MacFadyen S, Chambers M, Greenwood K, Boyce A, Abdul-Jabbar L, Barker K, Grimmett K, Walpole E, Thomas R: Clinical response after intradermal immature dendritic cell vaccination in metastatic melanoma is associated with immune response to particulate antigen. CANCER IMMUNOL IMMUNOTHER 52:41-52 (2003).

Somasundaram R, Swoboda R, Caputo L, Lee A, Jackson N, Marincola FM, Guerry D, Herlyn D: A CD4(+), HLA-DR7-restricted T-helper lymphocyte clone recognizes an antigen shared by human malignant melanoma and glioma. INT J CANCER 104:362-368 (2003).

Soon SL, Solomon AR, Papadopoulos D, Murray DR, McAlpine B, Washington CV: Acral lentiginous melanoma mimicking benign disease: The Emory experience. J AMER ACAD DERMATOL 48:183-188 (2003).

Spugnardi M, Tommasi S, Dammann R, Pfeifer GP, Hoon DSB: Epigenetic inactivation of RAS Association Domain Family Protein 1 (RASSF1A) in malignant cutaneous melanoma. CANCER RES 63:1639-1643 (2003).

Staquicini FI, Moreira CR, Nascimento FD, Tersariol ILS, Nader HB, Dietrich CP, Lopes JD: Enzyme and integrin expression by high and low metastatic melanoma cell lines. MELANOMA RES 13:11-18 (2003).

Swetter SM: Dermatological perspectives of malignant melanoma. SURG CLIN N AMER 83:77-+ (2003).

Szende B, Horv th A, B"k"nyi G, K,ri G: Effect of a novel somatostatin analogue combined with cytotoxic drugs on human tumour xenografts and metastasis of B16 melanoma. BRIT J CANCER 88:132-136 (2003).

Thompson JF, Shaw HM, Stretch JR, McCarthy WH, Milton GW: The Sydney Melanoma Unit - a multidisciplinary melanoma treatment center. SURG CLIN N AMER 83:431-+ (2003).

Thompson LDR, Wieneke JA, Miettinen M: Sinonasal tract and nasopharyngeal melanomas - A clinicopathologic study of 115 cases with a proposed staging system. AMER J SURG PATHOL 27:594-611 (2003).

Tien HY, McMasters KM, Edwards MJ, Chao C: Sentinel lymph node metastasis in anal melanoma - A case report. INT J GASTROINTEST CANCER 32:53-56 (2002).

Tobacman JK, Whitaker D, Zimmerman B: Inverse relationship between density of cutaneous hair and pigmented lesion count in patients with malignant melanoma. MELANOMA RES 13:23-27 (2003).

Tomatis S, Bono A, Bartoli C, Carrara M, Lualdi M, Tragni G, Marchesini R: Automated melanoma detection: Multispectral imaging and neural network approach for classification. MED PHYS 30:212-221 (2003).

Tomicic J, Wanebo HJ: Mucosal melanomas. SURG CLIN N AMER 83:237-+ (2003).

Tsai NM, Chen BM, Wei SL, Wu CW, Roffler SR: Anti-tumor immunoglobulin M increases lung metastasis in an experimental model of malignant melanoma. CLIN EXP METASTAS 20:103-109 (2003).

Tynes T, Kl'boe L, Haldorsen T: Residential and occupational exposure to 50 Hz magnetic fields and malignant melanoma: a population based study. OCCUP ENVIRON MEDICINE 60:343-347 (2003).

Uren RF, Howman-Giles R, Thompson JF: Patterns of lymphatic drainage from the skin in patients with melanoma. J NUCL MED 44:570-582 (2003).

Vajdic CM, Kricker A, Giblin M, McKenzie J, Aitken J, Giles GG, Armstrong BK: Incidence of ocular melanoma in Australia from 1990 to 1998. INT J CANCER 105:117-122 (2003).

vanAalst JA, McCurry T, Wagner J: Reconstructive considerations in the surgical management of melanoma. SURG CLIN N AMER 83:187-+ (2003).

Velazquez OC, Herlyn M: The vascular phenotype of melanoma metastasis. CLIN EXP METASTAS 20:229-235 (2003).

Vidal-Sicart S, Pons F, Puig S, Ortega M, Vilalta A, Mart¡n F, Rull R, Palou JM, Castel T: Identification of the sentinel lymph node in patients with malignant melanoma: what are the reasons for mistakes? EUR J NUCL MED MOL IMAGING 30:362-366 (2003).

vonWillebrand M, Zacksenhaus E, Cheng E, Glazer P, Halaban R: The tyrphostin AG1024 accelerates the degradation of phosphorylated forms of retinoblastoma protein (pRb) and restores pRb tumor suppressive function in melanoma cells. CANCER RES 63:1420-1429 (2003).

Vuylsteke RJCL, vanLeeuwen PAM, Muller MGS, Gietema HA, Kragt DR, Meijer S: Clinical outcome of stage I / II melanoma patients after selective sentinel lymph node dissection: Long-term follow-up results. J CLIN ONCOL 21:1057-1065 (2003).

Wagner JD: PET detection of melanoma metastases in lymph nodes. J NUCL MED 44:486 (2003).

Wei QY, Lee JE, Gershenwald JE, Ross MI, Mansfield PF, Strom SS, Wang LE, Guo ZZ, Qiao YW, Amos CI, Spitz MR, Duvic M: Repair of UV light-induced DNA damage and risk of cutaneous malignant melanoma. J NAT CANCER INST 95:308-315 (2003).

Winum JY, BouissiŠre JL, Passagne I, Evrard A, Montero W, Cuq P, Montero JL: Synthesis and biological evaluation of Fotemustine analogues on human melanoma cell lines. EUR J MED CHEM 38:319-324 (2003).

Wojtukiewicz MZ, Kozlowski L, Ostrowska K, Dmitruk A, Zacharski LR: Low molecular weight heparin treatment for malignant melanoma: a pilot clinical trial. THROMB HAEMOST 89:405-407 (2003).

Wolf IH, Smolle J, Binder B, Cerroni L, Richtig E, Kerl H: Topical imiquimod in the treatment of metastatic melanoma to skin. ARCH DERMATOL 139:273-276 (2003).

Yamamoto S, Yamano T, Tanaka M, Hoon DSB, Takao S, Morishita R, Aikou T, Kaneda Y: A novel combination of suicide gene therapy and histone deacetylase inhibitor for treatment of malignant melanoma. CANCER GENE THERAPY 10:179-186 (2003).

Yang TY, McNally BA, Ferrone S, Liu Y, Zheng P: A single-nucleotide deletion leads to rapid degradation of TAP-1 mRNA in a melanoma cell line. J BIOL CHEM 278:15291-15296 (2003).

Zacharias DPM, Lima MMR, Souza AL, Santos IDDO, Enokiara M, Michalany N, Curi R: Human cutaneous melanoma expresses a significant phosphate-dependent glutaminase activity: A comparison with the surrounding skin of the same patient. CELL BIOCHEM FUNCT 21:81-84 (2003).

Zaldivar RA, Aaberg TM, Sternberg P, Waldron R, Grossniklaus HE: Clinicopathologic findings in choroidal melanomas after failed transpupillary thermotherapy. AMER J OPHTHALMOL 135:657-663 (2003).

Zhang H, Satyamoorthy K, Herlyn M, Rosdahl I: All-trans retinoic acid (atRA) differentially induces apoptosis in matched primary and metastatic melanoma cells - a speculation on damage effect of atRA via mitochondrial dysfunction and cell cycle redistribution. CARCINOGENESIS 24:185-191 (2003).

MSH, POMC, GROWTH FACTORS & RECEPTORS

Aguirre-Ghiso JA, Estrada Y, Liu D, Ossowski L: ERKMAPK activity as a determinant of tumor growth and dormancy; Regulation by p38(SAPK). CANCER RES 63:1684-1695 (2003).

Ardjomand N, Ardjomand N, Schaffler G, Radner H, El Shabrawi Y: Expression of somatostatin receptors in uveal melanomas. INVEST OPHTHALMOL VISUAL SCI 44:980-987 (2003).

Argyropoulos G, Rankinen T, Bai F, Rice T, Province MA, Leon AS, Skinner JS, Wilmore JH, Rao DC, Bouchard C: The agouti-related protein and body fatness in humans. INT J OBESITY 27:276-280 (2003).

Baroni A, Paoletti I, Silvestri I, Buommino E, Carriero MV: Early vitronectin receptor downregulation in a melanoma cell line during all-trans retinoic acid-induced apoptosis. BRIT J DERMATOL 148:424-433 (2003).

BellemŠre G, Morain P, Vaudry H, J,gou S: Effect of S 17092, a novel prolyl endopeptidase inhibitor, on substance P and -melanocyte-stimulating hormone breakdown in the rat brain. J NEUROCHEM 84:919-929 (2003).

Benoit SC, Sheldon RJ, Air EL, Messerschmidt P, Wilmer KA, Hodge KMB, Jones MB, Eckstein DMM, McOsker CC, Woods SC, Seeley RJ: Assessment of the aversive consequences of acute and chronic administration of the melanocortin agonist, MTII. INT J OBESITY 27:550-556 (2003).

Betti R, Vergani R, Tolomio E, Santambrogio R, Crosti C: Factors of delay in the diagnosis of melanoma. EUROPEAN J DERMATOLOGY 13:183-188 (2003).

Cao J, Panetta R, Yue SY, Steyaert A, Young-Bellido M, Ahmad S: A naive Bayes model to predict coupling between seven transmembrane domain receptors and G-proteins. BIOINFORMATICS 19:234-240 (2003).

Chaillou E, Baumont R, Fellmann D, Tramu G, Tillet Y: Sensitivity of galanin- and melanin-concentrating hormone-containing neurones to nutritional status: An immunohistochemical study in the ovariectomized ewe. J NEUROENDOCRINOL 15:459-467 (2003).

Cheung AWH, Danho W, Swistok J, Qi LD, Kurylko G, Rowan K, Yeon M, Franco L, Chu XJ, Chen L, Yagaloff K: Structure-activity relationship of cyclic peptide penta-c[Asp-His(6)-DPhe(7)-Arg(8)-Trp(9)-Lys]-NH2 at the human melanocortin-1 and-4 receptors: His(6) substitution. BIOORG MEDICINAL CHEM LETTER 13:1307-1311 (2003).

Chiang EY, Henson M, Stroynowski I: Correction of defects responsible for impaired Qa-2 class Ib MHC expression on melanoma cells protects mice from tumor growth. J IMMUNOL 170:4515-4523 (2003).

Danho W, Swistok J, Cheung AWH, Kurylko G, Franco L, Chu XJ, Chen L, Yagaloff K: Structure-activity relationship of linear peptide Bu-His(6)-DPhe(7)-Arg(8)-Trp(9)-Gly(10)-NH2 at the human melanocortin-1 and-4 receptors: DPhe(7) and Trp(9) substitution. BIOORG MEDICINAL CHEM LETTER 13:649-652 (2003).

deSouza AV, Visconti MA, Castrucci AMD: Melatonin biological activity and binding sites in human melanoma cells. J PINEAL RES 34:242-248 (2003).

Diefenbach K, Mrozikiewicz PM, Brien B, Landt O, Roots I: Rapid genotyping of melanocortin-1 receptor with use of fluorescence-labeled oligonucleotides. CLIN CHEM 49:507-509 (2003).

Engstr"m M, Karlsson R, J"nsson JI: Inactivation of the forkhead transcription factor FoxO3 is essential for PKB-mediated survival of hematopoietic progenitor cells by kit ligand. EXP HEMATOL 31:316-323 (2003).

Fukuda M, Miyazaki H, Shimada N, Ishikawa N, Ishii A, Takagi Y, Ishijima Y, Kurama H, Kimura N: Nucleoside diphosphate kinase / NM23 as a key regulatory factor of tumor metastasis and cell motility. BIOL MEMBRANY 20:59-65 (2003).

Gantz I, Fong TM: The melanocortin system. AMER J PHYSIOL ENDOCRINOL MET 284:E468-E474 (2003).

Getting SJ, Christian HC, Lam CW, Gavins FNE, Flower RJ, Schi"th HB, Perretti M: Redundancy of a functional melanocortin 1 receptor in the anti-inflammatory actions of melanocortin peptides: Studies in the recessive yellow (e/e) mouse suggest an important role for melanocortin 3 receptor. J IMMUNOL 170:3323-3330 (2003).

Han G, Quillan JM, Carlson K, Sad,e W, Hruby VJ: Design of novel chimeric melanotropin-deltorphin analogues. discovery of the first potent human melanocortin 1 receptor antagonist. J MED CHEM 46:810-819 (2003).

Hansen IA, To TT, Wortmann S, Burmester T, Winkler C, Meyer SR, Neuner C, Fassnacht M, Allolio B: The pro-opiomelanocortin gene of the zebrafish (Danio rerio). BIOCHEM BIOPHYS RES COMMUN 303:1121-1128 (2003).

Herpin TF, Yu GX, Carlson KE, Morton GC, Wu XM, Kang LY, Tuerdi H, Khanna A, Tokarski JS, Lawrence RM, Macor JE: Discovery of tyrosine-based potent and selective melanocortin-1 receptor small-molecule agonists with anti-inflammatory properties. J MED CHEM 46:1123-1126 (2003).

Holder JR, Xiang ZM, Bauzo RM, Haskell-Luevano C: Structure-activity relationships of the melanocortin tetrapeptide Ac-His-DPhe-Arg-Trp-NH2 at the mouse melanocortin receptors - Part 3: modifications at the Arg position. PEPTIDES 24:73-82 (2003).

Holder JR, Marques FF, Xiang ZM, Bauzo RM, Haskell-Luevano C: Characterization of aliphatic, cyclic, and aromatic N-terminally "capped" His-D-Phe-Arg-Trp-NH2 tetrapeptides at the melanocortin receptors. EUR J PHARMACOL 462:41-52 (2003).

Kobie JJ, Wu RS, Kurt RA, Lou SM, Adelman MK, Whitesell LJ, Ramanathapuram LV, Arteaga CL, Akporiaye ET: Transforming growth factor inhibits the antigen-presenting functions and antitumor activity of dendritic cell vaccines. CANCER RES 63:1860-1864 (2003).

Ling MK, Lagerstr"m MC, Fredriksson R, Okimoto R, Mundy NI, Takeuchi S, Schi"th HB: Association of feather colour with constitutively active melanocortin 1 receptors in chicken. EUR J BIOCHEM 270:1441-1449 (2003).

Logan DW, Bryson-Richardson RJ, Pag n KE, Taylor MS, Currie PD, Jackson IJ: The structure and evolution of the melanocortin and MCH receptors in fish and mammals. GENOMICS 81:184-191 (2003).

Marks DL, Butler AA, Turner R, Brookhart G, Cone RD: Differential role of melanocortin receptor subtypes in cachexia. ENDOCRINOLOGY 144:1513-1523 (2003).

Mogil JS, Wilson SG, Chesler EJ, Rankin AL, Nemmani KVS, Lariviere WR, Groce MK, Wallace MR, Kaplan L, Staud R, Ness TJ, Glover TL, Stankova M, Mayorov A, Hruby VJ, Grisel JE, Fillingim RB: The melanocortin-1 receptor gene mediates female-specific mechanisms of analgesia in mice and humans. PROC NAT ACAD SCI USA 100:4867-4872 (2003).

Mummert ME, Mummert DI, Ellinger L, Takashima A: Functional roles of hyaluronan in B16-F10 melanoma growth and experimental metastasis in mice. MOL CANCER THER 2:295-300 (2003).

Ohara M, Kawashima Y, Kitajima S, Mitsuoka C, Watanabe H: Blue light inhibits the growth of skin tumors in the v-Ha-ras transgenic mouse. CANCER SCI 94:205-209 (2003).

Oliveira RS, Ferreira LM, Biasi LJ, Enokihara MMSS, Paiva GR, Wagner J: Vertical growth phase and positive sentinel node in thin melanoma. BRAZ J MED BIOL RES 36:347-350 (2003).

Ribatti D, Vacca A, Ria R, Marzullo A, Nico B, Filotico R, Roncali L, Dammacco F: Neovascularisation, expression of fibroblast growth factor-2, and mast cells with tryptase activity increase simultaneously with pathological progression in human malignant melanoma. EUR J CANCER 39:666-674 (2003).

Satyamoorthy K, Li G, Gerrero MR, Brose MS, Volpe P, Weber BL, vanBelle P, Elder DE, Herlyn M: Constitutive mitogen-activated protein kinase activation in melanoma is mediated by both BRAF mutations and autocrine growth factor stimulation. CANCER RES 63:756-759 (2003).

Schi"th HB, Raudsepp T, Ringholm A, Fredriksson R, Takeuchi S, Larhammar D, Chowdhary BP: Remarkable synteny conservation of melanocortin receptors in chicken, human, and other vertebrates. GENOMICS 81:504-509 (2003).

Schlumberger SE, Saito Y, Giller T, Hintermann E, Tanner H, J„ggin V, Zumsteg U, Civelli O, Eberle AN: Different structural requirements for melanin-concentrating hormone (MCH) interacting with rat MCH-R-1 (SLC-1) and mouse B16 cell MCH-R. J RECEPT SIGNAL TRANSDUCT RES 23:69-81 (2003).

Shen ST, Lu LM, Chen JR, Chien JT, Yu JYL: Molecular cloning of proopiomelanocortin (POMC) cDNA from mud turtle, Pelodiscus sinensis. GEN COMP ENDOCRINOL 131:192-201 (2003).

Su ZZ, Lebedeva IV, Sarkar D, Gopalkrishnan RV, Sauane M, Sigmon C, Yacoub A, Valerie K, Dent P, Fisher PB: Melanoma differentiation associated gene-7, mda-7/IL-24, selectively induces growth suppression, apoptosis and radiosensitization in malignant gliomas in a p53-independent manner. ONCOGENE 22:1164-1180 (2003).

Zettersten E, Shaikh L, Ramirez R, Kashani-Sabet M: Prognostic factors in primary cutaneous melanoma. SURG CLIN N AMER 83:61-+ (2003).

DEVELOPMENTAL BIOLOGY

Blake J, Ziman MR: Aberrant PAX3 and PAX7 expression. A link to the metastatic potential of embryonal rhabdomyosarcoma and cutaneous malignant melanoma? HISTOL HISTOPATHOL 18:529-539 (2003).

Brenig B, Pfeiffer I, Jaggy A, Kathmann I, Balzari M, Gaillard C, Dolf G: Analysis of the 5' region of the canine PAX3 gene and exclusion as a candidate for Dalmatian deafness. ANIM GENET 34:47-50 (2003).

Kim J, Lo L, Dormand E, Anderson DJ: SOX10 maintains multipotency and inhibits neuronal differentiation of neural crest stem cells. NEURON 38:17-31 (2003).

Koch PB, Merk R, Reinhardt R, Weber P: Localization of ecdysone receptor protein during colour pattern formation in wings of the butterfly Precis coenia (Lepidoptera: Nymphalidae) and co-expression with Distal-less protein. DEV GENES EVOL 212:571-584 (2003).

Lang D, Epstein JA: Sox10 and Pax3 physically interact to mediate activation of a conserved c-RET enhancer. HUM MOL GENET 12:937-945 (2003).

Luo R, Gao J, Wehrle-Haller B, Henion PD: Molecular identification of distinct neurogenic and melanogenic neural crest sublineages. DEVELOPMENT 130:321-330 (2003).

McCallion AS, Stames E, Conlon RA, Chakravarti A: Phenotype variation in two-locus mouse models of Hirschsprung disease: Tissue-specific interaction between Ret and Ednrb. PROC NAT ACAD SCI USA 100:1826-1831 (2003).

Nelson J, Bagnato A, Battistini B, Nisen P: The endothelin axis: Emerging role in cancer. NAT REV CANCER 3:110-116 (2003).

Parichy DM, Tumer JM: Zebrafish puma mutant decouples pigment pattern and somatic metamorphosis. DEVELOP BIOL 256:242-257 (2003).

Parichy DM, Turner JM: Temporal and cellular requirements for Fms signaling during zebrafish adult pigment pattern development. DEVELOPMENT 130:817-833 (2003).

Pritchard C, Grosveld G, Hollenbach AD: Alternative splicing of Pax3 produces a transcriptionally inactive protein. GENE 305:61-69 (2003).

Rossi P, Dolci S, Sette C, Geremia R: Molecular mechanisms utilized by alternative c-kit gene products in the control of spermatogonial proliferation and sperm-mediated egg activation. ANDROLOGIA 35:71-78 (2003).

Schmutz SM, Berryere TG, Ellinwood NM, Kerns JA, Barsh GS: MCIR studies in dogs with melanistic mask or brindle patterns. J HERED 94:69-73 (2003).

Tarttelin EE, Bellingham J, Bibb LC, Foster RG, Hankins MW, Gregory-Evans K, Gregory-Evans CY, Wells DJ, Lucas RJ: Expression of opsin genes early in ocular development of humans and mice. EXP EYE RES 76:393-396 (2003).

Zhang XY, Krishnamoorthy RR, Prasanna G, Narayan S, Clark A, Yorio T: Dexamethasone regulates endothelin-1 and endothelin receptors in human non-pigmented ciliary epithelial (HNPE) cells. EXP EYE RES 76:261-272 (2003).

DIFFERENTIATION

Aksu G, K•t•k‡•ler N, Genel F, Vergin C, Omowaire B: Griscelli syndrome without hemophagocytosis in an eleven-year-old girl: Expanding the phenotypic spectrum of Rab27A mutations in humans. AM J MED GENET PART A 116A:329-333 (2003).

Bahadoran P, Busca R, Chiaverini C, Westbroek W, Lambert J, Bille K, Valony G, Fukuda M, Naeyaert JM, Ortonne JP, Ballotti R: Characterization of the molecular defects in Rab27a, caused by RAB27A missense mutations found in patients with Griscelli syndrome. J BIOL CHEM 278:11386-11392 (2003).

Basrur V, Yang F, Kushimoto T, Higashimoto Y, Yasumoto K, Valencia J, Muller J, Vieira WD, Watabe H, Shabanowitz J, Hearing VJ, Hunt DF, Appella E: Proteomic analysis of early melanosomes: Identification of novel melanosomal proteins. J PROTEOME RES 2:69-79 (2003).

Biet E, Alberti C, Faccella P, Sun JS, Dutreix M, Larue L: Tyrosinase gene correction using fluorescent oligonucleotides. PIGM CELL RES 16:133-138 (2003).

Boyce BF: Bad bones, grey hair, one mutation. NATURE MED 9:395-396 (2003).

Camp E, Badhwar P, Mann GJ, Lardelli M: Expression analysis of a Tyrosinase promoter sequence in zebrafish. PIGM CELL RES 16:117-126 (2003).

Chalhoub N, Benachenhou N, Rajapurohitam V, Pata M, Ferron M, Frattini A, Villa A, Vacher J: Grey-lethal

mutation induces severe malignant autosomal recessive osteopetrosis in mouse and human. NATURE MED 9:399-406 (2003).

Deacon SW, Serpinskaya AS, Vaughan PS, Fanarraga ML, Vernos I, Vaughan KT, Gelfand VI: Dynactin is required for bidirectional organelle transport. J CELL BIOL 160:297-301 (2003).

Dell KR: Dynactin polices two-way organelle traffic. J CELL BIOL 160:291-293 (2003).

Fukuda M: Distinct Rab binding specificity of Rim1, Rim2, rabphilin, and Noc2 - Identification of a critical determinant of Rab3A / Rab27A recognition by Rim2. J BIOL CHEM 278:15373-15380 (2003).

Fukuda M: Slp4-a / granuphilin-a inhibits dense-core vesicle exocytosis through interaction with the GDP-bound form of Rab27A in PC12 cells. J BIOL CHEM 278:15390-15396 (2003).

Green ES, Stubbs JL, Levine EM: Genetic rescue of cell number in a mouse model of microphthalmia: interactions between Chx10 and G1-phase cell cycle regulators. DEVELOPMENT 130:539-552 (2003).

Gupta PC, Peralta D, Parker M, Crowe C, Clark B, Traboulsi EI: Bilateral microphthalmia with cyst, facial clefts, and limb anomalies: A new syndrome with features of Waardenburg syndrome, cerebro-oculo-nasal syndrome, and craniotelencephalic dysplasia. AM J MED GENET PART A 117A:72-75 (2003).

Hall AM, Krishnamoorthy L, Orlow SJ: Accumulation of tyrosinase in the endolysosomal compartment is induced by U18666A. PIGM CELL RES 16:149-158 (2003).

Jaenicke E, Decker H: Tyrosinases from crustaceans form hexamers. BIOCHEM J 371:515-523 (2003).

Kerns JA, Olivier M, Lust G, Barsh GS: Exclusion of melanocortin-1 receptor (Mc1r) and Agouti as candidates for dominant black in dogs. J HERED 94:75-79 (2003).

Khan KM, Maharvi GM, Abbaskhan A, Hayat S, Khan MTH, Makhmoor T, Choudhary MI, Shaheen F, Att uR: Three tyrosinase inhibitors and antioxidant compounds from Salsola foetida. HELV CHIM ACTA 86:457-464 (2003).

Libby RT, Smith RS, Savinova OV, Zabaleta A, Martin JE, Gonzalez FJ, John SWM: Modification of ocular defects in mouse developmental glaucoma models by tyrosinase. SCIENCE 299:1578-1581 (2003).

Masamoto Y, Ando H, Murata Y, Shimoishi Y, Tada M, Takahata K: Mushroom tyrosinase inhibitory activity of esculetin isolated from seeds of Euphorbia lathyris L. BIOSCI BIOTECHNOL BIOCHEM 67:631-634 (2003).

Menasch, G, Feldmann J, Houdusse A, Desaymard C, Fischer A, Goud B, deSaintBasile G: Biochemical and functional characterization of Rab27a mutations occurring in Griscelli syndrome patients. BLOOD 101:2736-2742 (2003).

Morii E, Oboki K, Jippo T, Kitamura Y: Additive effect of mouse genetic background and mutation of MITF gene on decrease of skin mast cells. BLOOD 101:1344-1350 (2003).

Nerya O, Vaya J, Musa R, Izrael S, Ben Arie R, Tamir S: Glabrene and isoliquiritigenin as tyrosinase inhibitors from licorice roots. J AGR FOOD CHEM 51:1201-1207 (2003).

Ohguchi K, Tanaka T, Iliya I, Ito T, Iinuma M, Matsumoto K, Akao Y, Nozawa Y: Gnetol as a potent tyrosinase inhibitor from genus Gnetum. BIOSCI BIOTECHNOL BIOCHEM 67:663-665 (2003).

Paranjpe PS, Karve MS, Padhye SB: Characterization of tyrosinase and accompanying laccase from Amorphophallus campanulatus. INDIAN J BIOCHEM BIOPHYS 40:40-45 (2003).

Sanjust E, Cecchini G, Sollai F, Curreli N, Rescigno A: 3-hydroxykynurenine as a substrate / activator for mushroom tyrosinase. ARCH BIOCHEM BIOPHYS 412:272-278 (2003).

Schimmenti LA, delaCruz J, Lewis RA, Karkera JD, Manligas GS, Roessler E, Muenke M: Novel mutation in sonic hedgehog in non-syndromic colobomatous microphthalmia. AM J MED GENET PART A 116A:215-221 (2003).

Senior SZ, Mans LL, VanGuilder HD, Kelly KA, Hendrich MP, Elgren TE: Catecholase activity associated with copper-S100B. BIOCHEMISTRY USA 42:4392-4397 (2003).

Shimizu K, Yasutake S, Kondo R: New stilbene with tyrosinase inhibitory activity from Chlorophora excelsa. CHEM PHARM BULL TOKYO 51:318-319 (2003).

Shipovskov S, Ferapontova E, Ruzgas T, Levashov A: Stabilisation of tyrosinase by reversed micelles for bioelectrocatalysis in dry organic media. BBA GEN SUBJECTS 1620:119-124 (2003).

Steingr¡msson E, Arnheiter H, Hallsson JH, Lamoreux ML, Copeland NG, Jenkins NA: Interallelic complementation at the mouse Mitf locus. GENETICS 163:267-276 (2003).

Suzuki T, Miyamura Y, Matsunaga J, Shimizu H, Kawachi Y, Ohyama N, Ishikawa O, Ishikawa T, Terao H, Tomita Y: Six novel P gene mutations and oculocutaneous albinism type 2 frequency in Japanese albino patients. J INVEST DERMATOL 120:781-783 (2003).

Suzuki T, Oiso N, Gautam R, Novak EK, Panthier JJ, Suprabha PG, Vida T, Swank RT, Spritz RA: The mouse organellar biogenesis mutant buff results from a mutation in Vps33a, a homologue of yeast vps33 and Drosophila carnation. PROC NAT ACAD SCI USA 100:1146-1150 (2003).

Thompson DA, Chai BX, Rood HLE, Siani MA, Douglas NR, Grantz I, Millhauser GL: Peptoid mimics of Agouti Related Protein. BIOORG MEDICINAL CHEM LETTER 13:1409-1413 (2003).

Westbroek W, Lambert J, Bahadoran P, Busca R, Herteleer MC, Smit N, Mommaas M, Ballotti R, Naeyaert JM: Interactions of human myosin Va isoforms, endogenously expressed in human melanocytes, are tightly regulated by the tail domain. J INVEST DERMATOL 120:465-475 (2003).

Yokochi N, Morita T, Yagi T: Inhibition of diphenolase activity of tyrosinase by vitamin B-6 compounds. J AGR FOOD CHEM 51:2733-2736 (2003).

Yu LL: Inhibitory effects of (S)- and (R)-6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acids on tyrosinase activity. J AGR FOOD CHEM 51:2344-2347 (2003).

Zarivi O, Bonfigli A, Cesare P, Amicarelli F, Pacioni G, Miranda M: Truffle thio-flavours reversibly inhibit truffle tyrosinase. FEMS MICROBIOL LETT 220:81-88 (2003).

Zhang Q, Zhao BH, Li W, Oiso N, Novak EK, Rusiniak ME, Gautam R, Chintala S, O'Brien EP, Zhang Y, Roe BA, Elliott RW, Eicher EM, Liang P, Kratz C, Legius E, Spritz RA, O'Sullivan TN, Copeland NG, Jenkins NA, Swank RT: Ru2 and Ru encode mouse orthologs of the genes mutated in human Hermansky-Pudlak syndrome types 5 and 6. NAT GENET 33:145-153 (2003).

MISCELLANEOUS

Dellavalle RP, Parker ER, Cersonsky N, Hester EJ, Hemme B, Burkhardt DL, Chen AK, Schilling LM: Youth access laws - In the dark at the tanning parlor? ARCH DERMATOL 139:443-448 (2003).

Demierre MF: Time for the national legislation of indoor tanning to protect minors. ARCH DERMATOL 139:520-524 (2003).

Forbes PD, Beer JZ, Black HS, Cesarini JP, Cole CA, Davies RE, Davitt JM, DeGruijl F, Epstein J, Fourtanier A, Green A, Koval T, Ley RD, Mascotto R, Morison W, Osterberg R, Sliney D, Urbach F, vanderLeun JC, Young AR: Standardized protocols for photocarcinogenesis safety testing. FRONT BIOSCI 8:D848-D854 (2003).

Hawk JLM: Cutaneous photoprotection. ARCH DERMATOL 139:527-530 (2003).

Herrera GA, Turbat-Herrera EA: Current role of electron microscopy in the diagnosis of pigmented tumors. SEMIN DIAGN PATHOL 20:60-71 (2003).

Jamora MJ, Wainwright BD, Meehan SA, Bystryn JC: Improved identification of potentially dangerous pigmented skin lesions by computerized image analysis. ARCH DERMATOL 139:195-198 (2003).

Mitchell R, Rochtchina E, Lee A, Wang JJ, Mitchell P: Iris color and intraocular pressure: The Blue Mountains Eye Study. AMER J OPHTHALMOL 135:384-386 (2003).