



PASPCR

Newsletter

Volume 8 Number 4

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Introduction . . .

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

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

Note: The **IFPCS** webpage can be found at www.cbc.umn.edu/ifpcs.

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**PanAmerican Society for
Pigment Cell Research**

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

Officers

Richard A. King
President

Zalfa Abdel-Malek
President-Elect

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Secretary/Treasurer

Council Members

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Giselle Thibaudeau

IFPCS Representative

Sally Frost-Mason
past-President PASPCR

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

Publications Committee:

William S. Oetting, PhD

University of Minnesota
Department of Medicine - Genetics
MMC 485
420 Delaware St. S.E.
Minneapolis, MN 55455
Phone: (612) 624-1139
Email: bill@lenti.med.umn.edu

Vijayasradhi Setaluri, PhD

Wake Forest University School of Medicine
Department of Medicine
Winston-Salem, NC 27157
Phone: (336) 716-3273
Email: setaluri@bgsu.edu

Giselle Thibaudeau, PhD

Mississippi State University
Department of Biological Sciences
Harned Hall
Mississippi State, MS 39762
Phone: (662) 325-7572
Email: Giselle@ra.msstate.edu

Calendar of Events :

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

Feb 28, March 3, 2001 5th World Conference on Melanoma : Venice, Italy, February 28 - March 3
Contact: Dr Mario Santinami Secretary General
5th World Conference on Melanoma Casa di Cura S. Pio X Via F. Nava 31 I - 20159 Milano
Phone/Fax: 39-02-69516449
E-Mail : info@melanoma2001.org

April 27-29, 2001 International Workshop on Molecular Mechanisms of Tanning, Nice, France.
Contact: IWMMT Congress Office – Maryse Clappier – Hôpital l'Archet 2 - Service de dermatologie – BP 3079 – 06202 Nice cedex 3 – Tel 33 (0)4 92 03 61 19 – Fax 33 (0)4 92 03 65 32 - E.mail: maryse.clappier@unice.fr

Jun 25 - 28, 2001 Xth Annual Meeting of the PanAmerican Society for Pigment Cell Research, to be held in Minneapolis, MN
Contact: Dr. Richard A. King, Department of Medicine, Box 485 Mayo, 420 Delaware St. S.E., Minneapolis, MN 55455;
Phone: (612) 624-0144
Fax: (612) 624-6645
Email: king@mail.ahc.umn.edu.

2002 The XVIIIth International Pigment Cell Conference, to be held in The Hague, Holland.
Contact: Dr. Stan Pavel, President ESPCR, University Hospital Leiden, Dept of Dermatology, PO Box 9600, NL - 2300 RC LEIDEN
Phone: 31-(71) 526 1952
Fax: 31-(71) 524 8106;
E-mail: SPavel@algemeen.azl.nl

Sept 3-7, 2003 XIth Annual Meeting of the PanAmerican Society for Pigment Cell Research, to be held in Wood's Hole, MA.

Welcome to New Members

by James J Nordlund

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

Corporate Sponsors

by James J Nordlund

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

GOLD Corporate Patrons

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

Vince Hearing, Editor

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

Award for Publication Excellence - 2000

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

The PASPCR Annual Meeting in 2001 Has been set!

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



Theme in 2001:
New Approaches to the Pigment Cell

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

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

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

We hope to see you in Minneapolis in June 2001.

PanAmerican Society for Pigment Cell Research Annual Meeting

SYMPOSIUM PROGRAM

THURSDAY JUNE 14

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

Chairs: Giselle Thibaudeau and Nels Granholm

"Genetic Polymorphism at the Melanocortin 1 Receptor"

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

"The Importance of Being Red"

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

"Mapping Human Pigmentation and Skin Response Genes"

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

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

FRIDAY JUNE 15

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

Chairs: Jean Bologna and Murray Brilliant

"Using Gene Expression Patterns to Characterize Biological Diversity"

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

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

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

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

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

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

Chair: Miri Seiberg and Vijaysaradhi Setaluri

"The Molecular Machinery for Lysosome Biogenesis"

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

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

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

"A Genetic Approach to Vesicle Transport in the Mouse"

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

"Vesicular Transport Defects in Human Disease"

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

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

SATURDAY JUNE 16

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

Chair: Hee-Young Park and Meenhard Herlyn

"The Genetics of Melanoma Susceptibility"

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

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

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

"Microarray Characterization of Melanoma"

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

7:00P Reception and Banquet (hotel)

SUNDAY JUNE 17

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

Chair: Ruth Halaban and Vincent Hearing

"Evolution of Phenoloxidases"

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

"Structure, Function and Evolution of Hemocyanin and Tyrosinase"

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

"Functional Differences Between Vertebrate and Invertebrate Phenoloxidases"

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

And now for the rest of the story.

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

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

Preparation of Antibody against Tyrosinase from Hamster Melanoma

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

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

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

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

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

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

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

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

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

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

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

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

Announcement

International Workshop on Molecular Mechanisms of Tanning

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

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

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

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

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

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

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

International Federation of Pigment Cell Societies

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

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

A Letter from the IFPCS President to the PASPCR members

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

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

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

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

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

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

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

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

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

Shosuke Ito
President, IFPCS

Positions - Wanted and Available :

Principal Scientist- Clinical Research - Skin Science Research

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

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

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

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

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

Bibliography :

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

MELANINS, MELANOGENS & MELANOGENESIS

- Ancans J, Thody AJ: Activation of melanogenesis by vacuolar type H⁺-ATPase inhibitors in amelanotic, tyrosinase positive human and mouse melanoma cells. FEBS LETT 478:57-60 (2000).
- Barluzzi R, Brozzetti A, Mariucci G, Tantucci M, Neglia RG, Bistoni F, Blasi E: Establishment of protective immunity against cerebral cryptococcosis by means of an avirulent, non melanogenic *Cryptococcus neoformans* strain. J NEUROIMMUNOL 109:75-86 (2000).
- Casadevall A, Rosas AL, Nosanchuk JD: Melanin and virulence in *Cryptococcus neoformans*. CURR OPIN MICROBIOL 3:354-358 (2000).
- Castro S, Carrera I, Martinez-Drets G: Methods to evaluate nodulation competitiveness between *Sinorhizobium meliloti* strains using melanin production as a marker. J MICROBIOL METH 41:173-177 (2000).
- Dagnino-Subiabre A, Cassels BK, Baez S, Johansson AS, Mannervik B, Segura-Aguilar J: Glutathione transferase M2-2 catalyzes conjugation of dopamine and dopa o-quinones. BIOCHEM BIOPHYS RES COMMUN 274:32-36 (2000).
- Dolezalova, M, Fanali S: Enantiomeric separation of dihydroxyphenylalanine (DOPA), methyl-dihydroxyphenylalanine (MDOPA) and hydrazinomethyl-dihydroxyphenylalanine (CDOPA) by using capillary electrophoresis with sulfobutyl ether- β -cyclodextrin as a chiral selector. ELECTROPHORESIS 21:3264-3269 (2000).
- Hu BH, Messersmith PB: Protection of 3,4-dihydroxyphenylalanine (DOPA) for Fmoc solid-phase peptide synthesis. TETRAHEDRON LETT 41:5795-5798 (2000).
- ❖ Ito S, Wakamatsu K, Ozeki H: Chemical analysis of melanins and its application to the study of the regulation of melanogenesis. PIGM CELL RES 13:103-109 (2000).
- Koh SWM: VIP enhances the differentiation of retinal pigment epithelium in culture: from cAMP and pp60(c-src) to melanogenesis and development of fluid transport capacity. PROG RETIN EYE RES 19:669-688 (2000).
- Land EJ, Riley PA: Spontaneous redox reactions of dopaquinone and the balance between the eumelanin and pheomelanin pathways. PIGM CELL RES 13:273-277 (2000).
- Manini P, d'Ischia M, Prota G: A novel octahydropyridobenzothiazepine metabolite in human urine: Biomimetic formation from the melanogen 5-S-cysteinyl-dopa and formaldehyde via a peculiar sulfur-controlled double Pictet-Spengler condensation. J ORG CHEM 65:4269-4273 (2000).
- McGraw KJ, Hill GE: Differential effects of endoparasitism on the expression of carotenoid- and melanin-based ornamental coloration. PROC ROY SOC LONDON SER B 267:1525-1531 (2000).
- ❖ Mishima Y, Kondoh H: Dual control of melanogenesis and melanoma growth: Overview molecular to clinical level and the reverse. PIGM CELL RES 13:10-22 (2000).
- Novellino L, Napolitano A, Prota G: Isolation and characterization of mammalian eumelanins from hair and irides. BBA GEN SUBJECTS 1475:295-306 (2000).
- Pascon RC, Miller BL: Morphogenesis in *Aspergillus nidulans* requires Dopey (DopA), a member of a novel family of leucine zipper-like proteins conserved from yeast to humans. MOL MICROBIOL 36:1250-1264 (2000).
- Simpson TJ, Weerasooriya MKB: NMR studies of tautomerism in the fungal melanin biosynthesis intermediate 1,3,8-trihydroxynaphthalene. J CHEM SOC PERKIN TRANS 1 :2771-2775 (2000).
- Smith-Thomas LC, Richardson PSR, Rennie IG, Palmer I, Boulton M, Sheridan C, MacNeil S: Influence of pigment content, intracellular calcium and cyclic AMP on the ability of human retinal pigment epithelial cells to contract collagen gels. CURR EYE RES 21:518-529 (2000).
- Sugimoto M, Uchida N, Hatayama M: Apoptosis in skin pigment cells of the medaka, *Oryzias latipes* (Teleostei), during long-term chromatic adaptation: the role of sympathetic innervation. CELL TISSUE RES 301:205-216 (2000).
- True JR, Edwards KA, Yamamoto D, Carroll SB: Drosophila wing melanin patterns form by vein-dependent elaboration of enzymatic prepatterns. CURR BIOL 9:1382-1391 (1999).

MELANOCYTES & KERATINOCYTES

- ❖ Abdel-Malek Z, Scott MC, Suzuki I, Tada A, Im S, Lamoreux L, Ito S, Barsh G, Hearing VJ: The melanocortin-1 receptor is a key regulator of human cutaneous pigmentation. PIGM CELL RES 13:156-162 (2000).
- Ah-Hot P, Rivet J, Saliou C, Bailly C, Bruneval P: A clinicopathologic study of an atypical cellular blue nevus. ANN PATHOL 20:228-231 (2000).

- Alanko T, Saksela O: Transforming growth factor β 1 induces apoptosis in normal melanocytes but not in nevus cells grown in type I collagen gel. *J INVEST DERMATOL* 115:286-291 (2000).
- Arenberger P, Broz L, Vesely P, Havlickova, B, Matouskova E: Tissue-engineered skin in the treatment of vitiligo lesions. *FOLIA BIOL PRAGUE* 46:157-160 (2000).
- Bacino CA, Stockton DW, Sierra RA, Heilstedt HA, Lewandowski R, VandenVeyver IB: Terminal osseous dysplasia and pigmentary defects: Clinical characterization of a novel male lethal X-linked syndrome. *AMER J MED GENET* 94:102-112 (2000).
- Bauer P, Cristofolini P, Boi S, Burroni M, Dell'Eva G, Micciolo R, Cristofolini M: Digital epiluminescence microscopy: usefulness in the differential diagnosis of cutaneous pigmentary lesions. A statistical comparison between visual and computer inspection. *MELANOMA RES* 10:345-349 (2000).
- Bittencourt FV, Marghoob AA, Kopf AW, Koenig KL, Bart RS: Large congenital melanocytic nevi and the risk for development of malignant melanoma and neurocutaneous melanocytosis. *PEDIATRICS* 106:736-741 (2000).
- Boardman LA, Pittelkow MR, Couch FJ, Schaid DJ, McDonnell SK, Burgart LJ, Ahlquist DA, Carney JA, Schwartz DI, Thibodeau SN, Hartmann LC: Association of Peutz-Jeghers-like mucocutaneous pigmentation with breast and gynecologic carcinomas in women. *MEDICINE* 79:293-298 (2000).
- Braun RP, Krischer J, Saurat JH: The "wobble sign" in epiluminescence microscopy as a novel clue to the differential diagnosis of pigmented skin lesions. *ARCH DERMATOL* 136:940-942 (2000).
- Burton D, Vokey JE: α (1)- and α (2)-adrenoceptor mediation in melanosome aggregation in cryptic patterning of *Pleuronectes americanus*. *COMP BIOCHEM PHYSIOL PT A* 125:359-365 (2000).
- Cario-Andre, M, Pain C, Gall Y, Ginestar J, Nikaido O, Ta- b A: Studies on epidermis reconstructed with and without melanocytes: Melanocytes prevent sunburn cell formation but not appearance of DNA damaged cells in fair-skinned caucasians. *J INVEST DERMATOL* 115:193-199 (2000).
- Carli P, DeGiorgi V, Massi D, Giannotti B: The role of pattern analysis and the ABCD rule of dermoscopy in the detection of a histological atypia in melanocytic naevi. *BRIT J DERMATOL* 143:290-297 (2000).
- Catala M, Ziller C, Lapointe F, LeDouarin NM: The developmental potentials of the caudalmost part of the neural crest are restricted to melanocytes and glia. *MECH DEVELOP* 95:77-87 (2000).
- Commo S, Bernard BA: Melanocyte subpopulation turnover during the human hair cycle: An immunohistochemical study. *PIGM CELL RES* 13:253-259 (2000).
- deMajnik J, Weinman JJ, Djordjevic MA, Rolfe BG, Tanner GJ, Joseph RG, Larkin PJ: Anthocyanin regulatory gene expression in transgenic white clover can result in an altered pattern of pigmentation. *AUST J PLANT PHYSIOL* 27:659-667 (2000).
- Dohil MA, Baugh WP, Eichenfield LF: Vascular and pigmented birthmarks. *PEDIAT CLIN N AMER* 47:783+ (2000).
- Dupin E, Glavieux C, Vaigot P, LeDouarin NM: Endothelin 3 induces the reversion of melanocytes to glia through a neural crest-derived glial-melanocytic progenitor. *PROC NAT ACAD SCI USA* 97:7882-7887 (2000).
- Dwyer T, Protá G, Blizzard L, Ashbolt R, Vincensi MR: Melanin density and melanin type predict melanocytic naevi in 19-20 year olds of northern European ancestry. *MELANOMA RES* 10:387-394 (2000).
- Edwards MJ, Thomas RC: Protein phosphatase type 1-dependent dephosphorylation of the retinoblastoma tumor suppressor protein in ultraviolet-irradiated human skin and keratinocytes. *J INVEST DERMATOL* 115:88-94 (2000).
- ElAbdaimi K, Papavasiliou V, Goltzman D, Kremer R: Expression and regulation of parathyroid hormone-related peptide in normal and malignant melanocytes. *AMER J PHYSIOL CELL PHYSIOL* 279:C1230-C1238 (2000).
- Everitt JI, Mangum JB, Bermudez E, Wong BA, Asgharian B, Reverdy EE: Comparison of selected pulmonary responses of rats, mice, and syrian golden hamsters to inhaled pigmentary titanium dioxide. *INHAL TOXICOL* 12:275-282 (2000).
- Funasaka Y, Komoto M, Ichihashi M: Depigmenting effect of α -tocopheryl ferulate on normal human melanocytes. *PIGM CELL RES* 13:170-174 (2000).
- Gibert P, Moreteau B, David JR: Developmental constraints on an adaptive plasticity: reaction norms of pigmentation in adult segments of *Drosophila melanogaster*. *EVOL DEV* 2:249-260 (2000).
- Goldstein AM, Martinez M, Tucker MA, Demenais F: Gene-covariate interaction between dysplastic nevi and the CDKN2A gene in American melanoma-prone families. *CANCER EPIDEM BIOMARKER PREV* 9:889-894 (2000).
- Graeven U, Rodeck U, Karpinski S, Jost M, Andre N, Schmiegel W: Expression patterns of placenta growth factor in human melanocytic cell lines. *J INVEST DERMATOL* 115:118-123 (2000).
- Harland CC, Kale SG, Jackson P, Mortimer PS, Bamber JC: Differentiation of common benign pigmented skin lesions from melanoma by high-resolution ultrasound. *BRIT J DERMATOL* 143:281-289 (2000).
- Harrison SL, Mackie RM, MacLennan R: Development of melanocytic nevi in the first three years of life. *J NAT CANCER INST* 92:1436-1438 (2000).
- ❖ Hearing VJ: The melanosome: The perfect model for cellular responses to the environment. *PIGM CELL RES* 13:23-34 (2000).
 - ❖ Herlyn M, Berking C, Li G, Satyamoorthy K: Lessons from melanocyte development for understanding the biological events in naevus and melanoma formation. *MELANOMA RES* 10:303-312 (2000).
 - Horikawa T, Araki K, Fukai K, Ueda M, Ueda T, Ito S, Ichihashi M: Heterozygous HPS1 mutations in a case of Hermansky-Pudlak syndrome with giant melanosomes. *BRIT J DERMATOL* 143:635-640 (2000).
 - ❖ Hu DN, Woodward DF, McCormick SA: Influence of autonomic neurotransmitters on human uveal melanocytes in vitro. *EXP EYE RES* 71:217-224 (2000).
 - ❖ Hu DN: Regulation of growth and melanogenesis of uveal melanocytes. *PIGM CELL RES* 13:81-86 (2000).
 - Jamal S: Endothelin-1 down-regulates E-cadherin in melanocytic cells by apoptosis-independent activation of caspase-8. *J AMER ACAD DERMATOL* 43:703-704 (2000).
 - Jager D, Stockert E, Jager E, Gure AO, Scanlan MJ, Knuth A, Old LJ, Chen YT: Serological cloning of a melanocyte rab guanosine 5'-triphosphate-binding protein and a chromosome condensation protein from a melanoma complementary DNA library. *CANCER RES* 60:3584-3591 (2000).
 - ❖ Jimbow K, Park JS, Kato F, Hirosaki K, Toyofuku K, Hua C, Yamashita T: Assembly, target-signaling and intracellular transport of tyrosinase gene family proteins in the initial stage of melanosome biogenesis. *PIGM CELL RES* 13:222-229 (2000).

- Jordan SA, Jackson IJ: MGF (KIT ligand) is a chemokine factor for melanoblast migration into hair follicles. *DEVELOP BIOL* 225:424-436 (2000).
- Jouneau A, Yu YQ, Pasdar M, Larue L: Plasticity of cadherin-catenin expression in the melanocyte lineage. *PIGM CELL RES* 13:260-272 (2000).
- Kang HY, Kim NS, Lee CO, Lee JY, Kang WH: Expression and function of ryanodine receptors in human melanocytes. *J CELL PHYSIOL* 185:200-206 (2000).
- Kanitakis J, Claudy A: Mummified ossified melanocytic naevus. *EUROPEAN J DERMATOLOGY* 10:466-467 (2000).
- Kawa Y, Ito M, Ono H, Asano M, Takano N, Ooka S, Watabe H, Hosaka E, Baba T, Kubota Y, Mizoguchi M: Stem cell factor and/or endothelin-3 dependent immortal melanoblast and melanocyte populations derived from mouse neural crest cells. *PIGM CELL RES* 13:73-80 (2000).
- Kawakami Y, Suzuki Y, Shofuda T, Kaniwa Y, Inozume T, Dan K, Sakurai T, Fujita T: T cell immune responses against melanoma and melanocytes in cancer and autoimmunity. *PIGM CELL RES* 13:163-169 (2000).
- Kippenberger S, Loitsch S, Muller J, Guschel M, Ramirez-Bosca A, Kaufmann R, Bernd A: Melanocytes respond to mechanical stretch by activation of mitogen-activated protein kinases (MAPK). *PIGM CELL RES* 13:278-280 (2000).
- Kittler H, Pehamberger H, Wolff K, Binder M: Follow-up of melanocytic skin lesions with digital epiluminescence microscopy: Patterns of modifications observed in early melanoma, atypical nevi, and common nevi. *J AMER ACAD DERMATOL* 43:467-476 (2000).
- Koch PB, Behnecke B, Weigmann-Lenz M, Ffrench-Constant RH: Insect pigmentation: Activities of β -alanyl-dopamine synthase in wing color patterns of wild-type and melanic mutant swallowtail butterfly *Papilio glaucus*. *PIGM CELL RES* 13:54-58 (2000).
- Kook MS, Lee K: Increased eyelid pigmentation associated with use of latanoprost. *AMER J OPHTHALMOL* 129:804-806 (2000).
- Korabiowska M, Brinck U, Middel P, Brinkman U, Berger H, Radzun HJ, Ruschenburg I, Droese M: Proliferative activity in the progression of pigmented skin lesions, diagnostic and prognostic significance. *ANTICANCER RES* 20:1781-1785 (2000).
- Kroisel PM, Petek E, Wagner K: Skin pigmentary anomalies in a mosaic form of partial tetrasomy 3q. *J MED GENET* 37:723-725 (2000).
- Kunisada T, Yamazaki H, Hirobe T, Kamei S, Omoteno N, Tagaya H, Hemmi H, Koshimizu U, Nakamura T, Hayashia SI: Keratinocyte expression of transgenic hepatocyte growth factor affects melanocyte development, leading to dermal melanocytosis. *MECH DEVELOP* 94:67-78 (2000).
- ❖ LePoole IC, Boissy RE, Sarangarajan R, Chen J, Forristal JJ, Sheth P, Westerhof W, Babcock G, Das PK, Saelinger CB: PIG3V, an immortalized human vitiligo melanocyte cell line, expresses dilated endoplasmic reticulum. *IN VITRO CELL DEV BIOL ANIMAL* 36:309-319 (2000).
- Menzies SW, Westerhoff K, Rabinovitz H, Kopf AW, McCarthy WH, Katz B: Surface microscopy of pigmented basal cell carcinoma. *ARCH DERMATOL* 136:1012-1016 (2000).
- Miracco C, Pacenti L, Santopietro R, Laurini L, Biagioli M, Luzi P: Evaluation of telomerase activity in cutaneous melanocytic proliferations. *HUM PATHOL* 31:1018-1021 (2000).
- Miyanaga K, Seki M, Furusaki S: Analysis of pigmentation in individual cultured plant cells using an image processing system. *BIOTECHNOL LETT* 22:977-981 (2000).
- Mosley JD, Appel LJ, Ashour Z, Coresh J, Whelton PK, Ibrahim MM: Relationship between skin color and blood pressure in Egyptian adults - Results from the National Hypertension Project. *HYPERTENSION* 36:296-302 (2000).
- Okamura TM, Barr RJ, Cantos KA: Benign atypical junctional melanocytic hyperplasia associated with intradermal nevi: A common finding that may be confused with melanoma in situ. *MODERN PATHOL* 13:857-860 (2000).
- Orchard GE: Comparison of immunohistochemical labelling of melanocyte differentiation antibodies melan-A, tyrosinase and HMB 45 with NKIC3 and S100 protein in the evaluation of benign naevi and malignant melanoma. *HISTOCHEM J* 32:475-481 (2000).
- Oshima N, Goto M: Prolactin signaling in erythrophores and xanthophores of teleost fish. *PIGM CELL RES* 13:35-40 (2000).
- ❖ Parichy DM, Ransom DG, Paw B, Zon LI, Johnson SL: An orthologue of the kit-related gene *fms* is required for development of neural crest-derived xanthophores and a subpopulation of adult melanocytes in the zebrafish, *Danio rerio*. *DEVELOPMENT* 127:3031-3044 (2000).
- Pisarra P, Lupetti R, Palumbo A, Napolitano A, Prota G, Parmiani G, Anichini A, Sensi M: Human melanocytes and melanomas express novel mRNA isoforms of the tyrosinase-related protein-2/DOPAchrome tautomerase gene: Molecular and functional characterization. *J INVEST DERMATOL* 115:48-56 (2000).
- Prota G: Melanins, melanogenesis and melanocytes: Looking at their functional significance from the chemist's viewpoint. *PIGM CELL RES* 13:283-293 (2000).
- Rawls JF, Johnson SL: Zebrafish kit mutation reveals primary and secondary regulation of melanocyte development during fin stripe regeneration. *DEVELOPMENT* 127:3715-3724 (2000).
- Ruggieri M: Cutis tricolor: congenital hyper- and hypopigmented lesions in a background of normal skin with and without associated systemic features: further expansion of the phenotype. *EUR J PEDIAT* 159:745-749 (2000).
- Scully C, Porter S: ABC of oral health - Swellings and red, white, and pigmented lesions. *BRIT MED J* 321:225-228 (2000).
- ❖ Seiberg M, Paine C, Sharlow E, Andrade-Gordon P, Costanzo M, Eisinger M, Shapiro SS: Inhibition of melanosome transfer results in skin lightening. *J INVEST DERMATOL* 115:162-167 (2000).
- ❖ Sharlow ER, Paine CS, Babiarz L, Eisinger M, Shapiro S, Seiberg M: The protease-activated receptor-2 upregulates keratinocyte phagocytosis. *J CELL SCI* 113:3093-3101 (2000).
- Stratigos AJ, Dover JS, Arndt KA: Laser treatment of pigmented lesions-2000 - How far have we gone? *ARCH DERMATOL* 136:915-921 (2000).
- ❖ Suto J, Wakamatsu K, Yamanaka H, Ito S, Sekikawa K: Quantitative trait loci that modify the sootiness of yellow pigmentation in KK-A(y)/a mice. *MAMM GENOME* 11:639-644 (2000).
- Taieb A: Intrinsic and extrinsic pathomechanisms in vitiligo. *PIGM CELL RES* 13:41-47 (2000).

- Tobin DJ, Swanson NN, Pittelkow MR, Peters EM, Schallreuter KU: Melanocytes are not absent in lesional skin of long duration vitiligo. *J PATHOL* 191:407-416 (2000).
- Tomizawa K: Early malignant melanoma manifested as longitudinal melanonychia: subungual melanoma may arise from suprabasal melanocytes. *BRIT J DERMATOL* 143:431-434 (2000).
- Tsai TF, Paul BH, Jee SH, Maibach HI: Effects of glycolic acid on light-induced skin pigmentation in Asian and Caucasian subjects. *J AMER ACAD DERMATOL* 43:238-243 (2000).
- Vancoillie G, Lambert J, Mulder A, Koerten HK, Mommaas AM, VanOostveldt P, Naeyaert JM: Cytoplasmic dynein colocalizes with melanosomes in normal human melanocytes. *BRIT J DERMATOL* 143:298-306 (2000).
- ❖ vandenWijngaard R, Wankowicz-Kalinska A, LePoole C, Tigges B, Westerhof W, Das P: Local immune response in skin of generalized vitiligo patients - Destruction of melanocytes is associated with the prominent presence of CLA(+) T cells at the perilesional site. *LAB INVEST* 80:1299-1309 (2000).
 - ❖ VandenWijngaard RMJG, Aten J, Scheepmaker A, LePoole IC, Tigges AJ, Westerhof W, Das PK: Expression and modulation of apoptosis regulatory molecules in human melanocytes: significance in vitiligo. *BRIT J DERMATOL* 143:573-581 (2000).
- Walter A, vanRees BP, Heijnen BHM, vanLanschoot JJB, Offerhaus GJA: Atypical melanocytic proliferation associated with squamous cell carcinoma in situ of the esophagus. *VIRCHOWS ARCHIV* 437:203-207 (2000).
- Wang DZ, Yang W, Du JG, Devalaraja MN, Liang P, Matsumoto K, Tsubakimoto K, Endo T, Richmond A: MGSA/GRO-mediated melanocyte transformation involves induction of Ras expression. *ONCOGENE* 19:4647-4659 (2000).
- Weninger W, Rendl M, Mildner M, Mayer C, Ban J, Geusau A, Bayer G, Tanew A, Majdic O, Tschachler E: Keratinocytes express the CD146 (Muc18/S-Endo) antigen in tissue culture and during inflammatory skin diseases. *J INVEST DERMATOL* 115:219-224 (2000).
- Wu XF, Hammer JA: Making sense of melanosome dynamics in mouse melanocytes. *PIGM CELL RES* 13:241-247 (2000).
- Zhang WZ, Amir R, Stockton DW, VandenVeyver IB, Bacino CA, Zoghbi HY: Terminal osseous dysplasia with pigmentary defects maps to human chromosome Xq27.3-Xqter. *AMER J HUM GENET* 66:1461-1464 (2000).

MELANOMA & METASTASIS

- Anonymous. Vaccine effectively targets melanoma. *EUR J CANCER* 36:1467-1467 (2000).
- Albino AP, Juan G, Traganos F, Reinhart L, Connolly J, Rose DP, Darzynkiewicz Z: Cell cycle arrest and apoptosis of melanoma cells by docosahexaenoic acid: Association with decreased pRb phosphorylation. *CANCER RES* 60:4139-4145 (2000).
- Anthony DA, Bone I, Evans TRJ: Inflammatory demyelinating polyneuropathy: A complication of immunotherapy in malignant melanoma. *ANN ONCOL* 11:1197-1200 (2000).
- Aoyama T, Mastrangelo MJ, Berd D, Nathan FE, Shields CL, Shields JA, Rosato EL, Rosato FE, Sato T: Protracted survival after resection of metastatic uveal melanoma. *CANCER* 89:1561-1568 (2000).
- Ardekian L, Rosen DJ, Peled M, Rachmiel A, Machtei EE, eINaaj IA, Laufer D: Primary gingival malignant melanoma. Report of 3 cases. *J PERIODONTOL* 71:117-120 (2000).
- Ascierto PA, Daponte A, Parasole R, Perrone F, Carac
Intermediate dose recombinant interferon- α as second-line treatment for patients with recurrent cutaneous melanoma who were pretreated with low dose interferon. *CANCER* 89:1490-1494 (2000).
- Baars A, Claessen AME, vandenEertwegh AJM, Gall HE, Stam AGM, Meijer S, Giaccone G, Meijer CJLM, Scheper RJ, Wagstaff J, Vermorken JB, Pinedo HM: Skin tests predict survival after autologous tumor cell vaccination in metastatic melanoma: Experience in 81 patients. *ANN ONCOL* 11:965-970 (2000).
- Baisden BL, Askin FB, Lange JR, Westra WH: HMB-45 immunohistochemical staining of sentinel lymph nodes - A specific method for enhancing detection of micrometastases in patients with melanoma. *AMER J SURG PATHOL* 24:1140-1146 (2000).
- Barral AM, Kallstrom R, Sander B, Rosen A: Thioredoxin, thioredoxin reductase and tumour necrosis factor- α expression in melanoma cells: correlation to resistance against cytotoxic attack. *MELANOMA RES* 10:331-343 (2000).
- Bennett AT, Collins KA: Pathologic quiz case - Abdominal pain - Metastatic malignant melanoma. *ARCH PATHOL LAB MED* 124:1089-1090 (2000).
- Bertalot G, Biasi MO, Gramegna M, Askaa J, Dell'Orto P, Viale G: Immunoreactivity for latent membrane protein 1 of Epstein-Barr virus in nevi and melanomas is not related to the viral infection. *VIRCHOWS ARCHIV* 436:553-559 (2000).
- Bittner M, Meitzer P, Chen Y, Jiang Y, Seftor E, Hendrix M, Radmacher M, Simon R, Yakhini Z, Ben Dor A, Sampas N, Dougherty E, Wang E, Marincola F, Gooden C, Lueders J, Glatfelter A, Pollock P, Carpten J, Gillanders E, Leja D, Dietrich K, Beaudry C, Berens M, Alberts D, Sondak V, Hayward N, Trent J: Molecular classification of cutaneous malignant melanoma by gene expression profiling. *NATURE* 406:536-540 (2000).
- Blessing K, Grant JJH, Sanders DSA, Kennedy MM, Husain A, Coburn P: Small cell malignant melanoma: a variant of naevoid melanoma. Clinicopathological features and histological differential diagnosis. *J CLIN PATHOL* 53:591-595 (2000).
- Borg A, Sandberg T, Nilsson K, Johannsson O, Klinker M, Masback A, Westerdahl J, Olsson H, Ingvar C: High frequency of multiple melanomas and breast and pancreas carcinomas in CDKN2A mutation-positive melanoma families. *J NAT CANCER INST* 92:1260-1266 (2000).
- Brady MS, Oliveria SA, Christos PJ, Berwick M, Coit DG, Katz J, Halpern AC: Patterns of detection in patients with cutaneous melanoma - Implications for secondary prevention. *CANCER* 89:342-347 (2000).
- Brantey MA, Harbour JW: Inactivation of retinoblastoma protein in uveal melanoma by phosphorylation of sites in the COOH-terminal region. *CANCER RES* 60:4320-4323 (2000).
- Breuninger H: Local spread of melanomas - Reply. *AMER J SURG PATHOL* 24:1169-1170 (2000).
- Brinckerhoff LH, Thompson LW, Slingluff GL: Melanoma vaccines. *CURR OPIN ONCOL* 12:163-173 (2000).
- Briollais L, Chompret A, Guilloud-Bataille M, Bressac-dePaillerets B, Avril MF, Demenais F: Patterns of familial aggregation of three melanoma risk factors: great number of naevi, light phototype and high degree of sun exposure. *INT J EPIDEMIOL* 29:408-415 (2000).

- Brochez L, Naeyaert JM: Serological markers for melanoma. *BRIT J DERMATOL* 143:256-268 (2000).
- Bulliard JL, Cox B: Cutaneous malignant melanoma in New Zealand: trends by anatomical site, 1969-1993. *INT J EPIDEMIOL* 29:416-423 (2000).
- Bystryn JC: An alternate explanation for the increase in the incidence of melanoma being restricted to patients with thin lesions. *ARCH DERMATOL* 136:935-936 (2000).
- Caggiati A, Potenza C, Gabrielli F, Passarelli F, Tartaglione G: Sentinel node biopsy for malignant melanoma: Analysis of a four-year experience. *TUMORI* 86:332-335 (2000).
- Calonje E: Best practice No 162 - The histological reporting of melanoma. *J CLIN PATHOL* 53:587-590 (2000).
- Calorini L, Mannini A, Bianchini F, Mugnai G, Balzi M, Becciolini A, Ruggieri S: Biological properties associated with the enhanced lung-colonizing potential in a B16 murine melanoma line grown in a medium conditioned by syngeneic *Corynebacterium parvum*-elicited macrophages. *CLIN EXP METASTAS* 17:889-895 (1999).
- Caltagirone S, Rossi C, Poggi A, Ranelletti FO, Natali PG, Brunetti M, Aiello FB, Piantelli M: Flavonoids apigenin and quercetin inhibit melanoma growth and metastatic potential. *INT J CANCER* 87:595-600 (2000).
- Carli P, DeGiorgi V, Palli D, Giannotti V: Preoperative assessment of melanoma thickness by ABCD score of dermatoscopy. *J AMER ACAD DERMATOL* 43:459-466 (2000).
- Carr A, Mullet A, Mazorra Z, Vasquez AM, Alfonso M, Mesa C, Rengifo E, Perez R, Fernandez LE: A mouse IgG(1) monoclonal antibody specific for N-glycolyl GM3 ganglioside recognized breast and melanoma tumors. *HYBRIDOMA* 19:241-247 (2000).
- Casagrande F, Darbon JM: p21(CIP1) is dispensable for the G2 arrest caused by genistein in human melanoma cells. *EXP CELL RES* 258:101-108 (2000).
- Casara D, Rubello D, Rossi CR, Scagnet B, Mocellin S, Pilati P, Foletto M, Montesco MC, Tregnaghi A, Rubaltelli L, Lise M: Sentinel node biopsy in cutaneous melanoma patients: Technical and clinical aspects. *TUMORI* 86:339-340 (2000).
- Castel S, Pagan R, Garcia R, Casaroli-Marano RP, Reina M, Mitjans F, Piulats J, Vilaro S: Alpha v integrin antagonists induce the disassembly of focal contacts in melanoma cells. *EUR J CELL BIOL* 79:502-512 (2000).
- Ceccopieri B, Marcomin AR, Vitagliano F, Fragapane P: Primary anorectal malignant melanoma: Report of two cases. *TUMORI* 86:356-358 (2000).
- Cerundolo V: Use of major histocompatibility complex class I tetramers to monitor tumor-specific cytotoxic T lymphocyte response in melanoma patients. *CANCER CHEMOTHER PHARMACOL* 46:S83-S85 (2000).
- Chan AD, Essner R, Wanek LA, Morton DL: Judging the therapeutic value of lymph node dissections for melanoma. *J AMER COLL SURGEONS* 191:16-22 (2000).
- Chang JWC, Peng M, Vaquerano JE, Zhou YM, Clinton RA, Hyun WC, Giedlin MA, Leong SPL: Induction of Th1 response by dendritic cells pulsed with autologous melanoma apoptotic bodies. *ANTICANCER RES* 20:1329-1336 (2000).
- Charitopoulos KN, Lazaris AC, Aroni K, Kavantzias N, Nikolakopoulou E, Davaris P: Immunodetection of gastrin-releasing peptide in malignant melanoma cells. *MELANOMA RES* 10:395-400 (2000).
- Chartier T, Bigby M: Rational follow-up recommendations for patients with melanoma. *ARCH DERMATOL* 136:1145-1147 (2000).
- Ciotti P, Struewing JP, Mantelli M, Chompret A, Avril MF, Santi PL, Tucker MA, Bianchi-Scarr Goldstein AM: A single genetic origin for the G101W CDKN2A mutation in 20 melanoma-prone families. *AMER J HUM GENET* 67:311-319 (2000).
- ❖ Cochran AJ, Balda BR, Starz H, Bachter D, Krag DN, Cruse CW, Pijpers R, Morton DL: The Augsburg consensus - Techniques of lymphatic mapping, sentinel lymphadenectomy, and completion lymphadenectomy in cutaneous malignancies. *CANCER* 89:236-241 (2000).
- Cohn-Cedermark G, Mansson-Brahme E, Rutqvist LE, Larsson O, Johansson H, Ringborg U: Trends in mortality from malignant melanoma in Sweden, 1970-1996. *CANCER* 89:348-355 (2000).
- Cohn-Cedermark G, Rutqvist LE, Andersson R, Breivald M, Ingvar C, Johansson H, Jonsson PE, Krysaner L, Lindholm C, Ringborg U: Long term results of a randomized study by the Swedish Melanoma Study Group on 2-cm versus 5-cm resection margins for patients with cutaneous melanoma with a tumor thickness of 0.8-2.0 mm. *CANCER* 89:1495-1501 (2000).
- Curiel-Lewandrowski C, Demierre MF: Advances in specific immunotherapy of malignant melanoma. *J AMER ACAD DERMATOL* 43:167-185 (2000).
- Celebi JT, Shendrik I, Silvers DN, Peacocke M: Identification of PTEN mutations in metastatic melanoma specimens. *J MED GENET* 37:653-657 (2000).
- DellaMorte R, Squillacioti C, Garbi C, Derkinderen P, Belisario MA, Girault JA, DiNatale P, Nitsch L, Staiano N: Echistatin inhibits pp125(FAK) autophosphorylation, paxillin phosphorylation and pp125(FAK)-paxillin interaction in fibronectin-adherent melanoma cells. *EUR J BIOCHEM* 267:5047-5054 (2000).
- Demirci H, Finger PT, Cocker R, McCormick SA: Unusual presentation of diffuse melanoma of the iris. *BRIT J OPHTHALMOL* 84:1076-1078 (2000).
- Demirci H, Shields CL, Honavar SG, Shields JA, Bardenstein DS: Long-term follow-up of giant nodular posterior scleritis simulating choroidal melanoma. *ARCH OPHTHALMOL* 118:1290-1292 (2000).
- Demirci H, McCormick SA, Finger PT: Topical mitomycin chemotherapy for conjunctival malignant melanoma and primary acquired melanosis with atypia - Clinical experience with histopathologic observations. *ARCH OPHTHALMOL* 118:885-891 (2000).
- Dhar-Munshi S, Ameen M, Wilson RS: Simultaneous metastases of cutaneous malignant melanoma to conjunctiva and choroid. *BRIT J OPHTHALMOL* 84:930-931 (2000).
- Diaz-Cascajo C, Hoos A: Histopathologic features of malignant peripheral nerve sheath tumor are not restricted to metastatic malignant melanoma and can be found in primary malignant melanoma also. *AMER J SURG PATHOL* 24:1438-1439 (2000).
- Dickopp A, Esche H, Swart G, Seeber S, Kirch HC, Opalka B: Transformation-defective adenovirus 5 E1A mutants exhibit antioncogenic properties in human BLM melanoma cells. *CANCER GENE THERAPY* 7:1043-1050 (2000).
- Dionet C, Tchirkov A, Alard JP, Arnold J, Dhermain J, Rapp M, Bodez V, Tamain JC, Monbel I, Malet P, Kwiatkowski F, Donnarieix D, Veyre A, Verrelle P: Effects of low-dose neutrons applied at reduced dose rate on human melanoma cells. *RADIAT RES* 154:406-411 (2000).

- Dithmar S, Rusciano D, Lynn MJ, Lawson DH, Armstrong CA, Grossniklaus HE: Neoadjuvant interferon α -2b treatment in a murine model for metastatic ocular melanoma - A preliminary study. *ARCH OPHTHALMOL* 118:1085-1089 (2000).
- Djukanovic D, Hofmann U, Sucker A, Rittgen W, Schadendorf D: Comparison of S100 protein and MIA protein as serum marker for malignant melanoma. *ANTICANCER RES* 20:2203-2207 (2000).
- Dudley ME, Ngo LT, Westwood J, Wunderlich JR, Rosenberg SA: T-cell clones from melanoma patients immunized against an anchor-modified gp100 peptide display discordant effector phenotypes. *CANCER J* 6:69-77 (2000).
- Dummer R, Bergh J, Karlsson Y, Horovitz JA, Mulder NH, Huinin DT, Burg G, Hofbauer G, Osanto S: Biological activity and safety of adenoviral vector-expressed wild-type p53 after intratumoral injection in melanoma and breast cancer patients with p53-overexpressing tumors. *CANCER GENE THERAPY* 7:1069-1076 (2000).
- Edman RL, Klaus SN: Is routine screening for melanoma a benign practice? *JAMA J AM MED ASSN* 284:883-886 (2000).
- Ejadi S, Rosenblum J, Berd D, McCue P, Mastrangelo M: Diagnostic dilemmas in oncology - Case 1. Melanoma metastatic to the testis. *J CLIN ONCOL* 18:3187-3188 (2000).
- Eskelin S, Pyrhonen S, Summanen P, Hahka-Kemppinen M, Kivela T: Tumor doubling times in metastatic malignant melanoma of the uvea - Tumor progression before and after treatment. *OPHTHALMOLOGY* 107:1443-1449 (2000).
- Ferrari A, Peris K, Piccolo D, Chimenti S: Dermoscopic features of cutaneous local recurrent melanoma. *J AMER ACAD DERMATOL* 43:722-724 (2000).
- Finger PT, Lipka AC, Lipkowitz JL, Jofe M, McCormick SA: Failure of transpupillary thermotherapy (TTT) for choroidal melanoma: two cases with histopathological correlation. *BRIT J OPHTHALMOL* 84:1075-1076 (2000).
- Fintor L: Melanoma vaccine momentum spurs interest, investment. *J NAT CANCER INST* 92:1205-1207 (2000).
- Friebe M, Mahmood A, Spies H, Berger R, Johannsen B, Mohammed A, Eisenhut M, Bolzati C, Davison A, Jones AG: '3+1' mixed-ligand oxotechnetium(V) complexes with affinity for melanoma: Synthesis and evaluation in vitro and in vivo. *J MED CHEM* 43:2745-2752 (2000).
- Fritsch M, Rosenberg SA, Duray PH: Immunohistologic responses within dermal metastatic melanoma lesions of patients treated with a synthetic peptide vaccine. *J IMMUNOTHER* 23:557-569 (2000).
- Frumonto G, Franchello S, Palmisano GL, Nicotra MR, Giacomini P, Loke YW, Geraghty DE, Maio M, Manzo C, Natali PG, Ferrara GB: Melanomas and melanoma cell lines do not express HLA-G, and the expression cannot be induced by γ IFN treatment. *TISSUE ANTIGEN* 56:30-37 (2000).
- Fujii S, Huang S, Fong TC, Ando D, Burrows F, Jolly DJ, Nemunaitis J, Hoon DSB: Induction of melanoma-associated antigen systemic immunity upon intratumoral delivery of interferon- γ retroviral vector in melanoma patients. *CANCER GENE THERAPY* 7:1220-1230 (2000).
- Fujiwara Y, Hoon DSB: Microsatellite analysis of melanoma lesions using (CA)₁₃ oligonucleotides as an internal probe. *INT J ONCOL* 17:783-787 (2000).
- Fushimi H, Kotoh K, Watanabe D, Tanio Y, Ogawa T, Miyoshi S: Malignant melanoma in the thymus. *AMER J SURG PATHOL* 24:1305-1308 (2000).
- Garbe C, McLeod GRC, Buettner PG: Time trends of cutaneous melanoma in Queensland, Australia and Central Europe. *CANCER* 89:1269-1278 (2000).
- Gibbs P, Hutchins AM, Dorian KT, Vaughan HA, Davis ID, Silvapulle M, Cebon JS: MAGE-12 and MAGE-6 are frequently expressed in malignant melanoma. *MELANOMA RES* 10:259-264 (2000).
- Goldberg EK, Glendening JM, Karanjawala Z, Sridhar A, Walker GJ, Hayward NK, Rice AJ, Kurera D, Tebha Y, Fountain JW: Localization of multiple melanoma tumor-suppressor genes on chromosome 11 by use of homozygosity mapping-of-deletions analysis. *AMER J HUM GENET* 67:417-431 (2000).
- Graff BA, Bjornas I, Rofstad EK: Macromolecule uptake in human melanoma xenografts: relationships to blood supply, vascular density, microvessel permeability and extracellular volume fraction. *EUR J CANCER* 36:1433-1440 (2000).
- Gragoudas ES, Egan KM: Uveal melanoma: A rare malignancy. *OPHTHALMOLOGY* 107:1441-1442 (2000).
- Greenberg DB, Jonasch E, Gadd MA, Ryan BF, Everett JR, Sober AJ, Mihm MA, Tanabe KK, Ott M, Haluska FG: Adjuvant therapy of melanoma with interferon- α -2b is associated with mania and bipolar syndromes - Gabapentin may serve as a mood stabilizer. *CANCER* 89:356-362 (2000).
- Grossniklaus HE, Dithmar S, Albert DM: Animal models of uveal melanoma. *MELANOMA RES* 10:195-211 (2000).
- Guichard G, Zerbib A, LeGal FA, Hoebeke J, Connan F, Choppin J, Briand JP, Guillet JG: Melanoma peptide MART-1(27-35) analogues with enhanced binding capacity to the human class I histocompatibility molecule HLA-A2 by introduction of a β -amino acid residue: Implications for recognition by tumor-infiltrating lymphocytes. *J MED CHEM* 43:3803-3808 (2000).
- Hata K, Ishikawa K, Hori K, Konishi T: Differentiation-inducing activity of lupeol, a lupane-type triterpene from Chinese dandelion root (Hokouei-kon), on a mouse melanoma cell line. *BIOL PHARM BULL* 23:962-967 (2000).
- Heegaard S, Jensen OA, Prause JU: Immunohistochemical diagnosis of malignant melanoma of the conjunctiva and uvea: comparison of the novel antibody against melan-A with S100 protein and HMB-45. *MELANOMA RES* 10:350-354 (2000).
- Heninger E, Falus A, Darvas Z, Szalai C, Zsanko M, Pos Z, Hegyesi H: Both interferon (IFN) α and IFN γ inhibit histidine decarboxylase expression in the HT168 human melanoma cell line. *INFLAMM RESEARCH* 49:393-397 (2000).
- Henriet P, Zhong ZD, Brooks PC, Weinberg KI, DeClerck YA: Contact with fibrillar collagen inhibits melanoma cell proliferation by up-regulating p27(KIP1). *PROC NAT ACAD SCI USA* 97:10026-10031 (2000).
- Hettiaratchy S, Dheansa B, Powell B: Lymphatic mapping and sentinel lymph node biopsy in patients with melanoma of the lower extremity. *PLAST RECONSTR SURG* 106:734-735 (2000).
- ❖ Hill HZ, Hill GJ: UVA, pheomelanin and the carcinogenesis of melanoma. *PIGMENT CELL RES* 13:140-144 (2000).
- Huang SY, DeGuzman A, Bucana CD, Fidler IJ: Level of interleukin-8 expression by metastatic human melanoma cells directly correlates with constitutive NF-kappaB activity. *CYTOKINES CELL MOL THER* 6:9-17 (2000).
- Hughes TMD, A'Hern RP, Thomas JM: Prognosis and surgical management of patients with palpable inguinal lymph node metastases from melanoma. *BRIT J SURG* 87:892-901 (2000).
- Jansen L, Nieweg OE, Peterse L, Hoefnagel CA, Olmos AV, Kroon BBR: Reliability of sentinel lymph node biopsy for staging melanoma - Reply. *BRIT J SURG* 87:1251-1251 (2000).

- Jenne L, Arrighi JF, Jonuleit H, Saurat JH, Hauser C: Dendritic cells containing apoptotic melanoma cells prime human CD8(+) T cells for efficient tumor cell lysis. *CANCER RES* 60:4446-4452 (2000).
- Jonasch E, Kumar UN, Linette GP, Hodi FS, Soiffer RJ, Ryan BF, Sober AJ, Mihm MC, Tsao H, Langley RG, Cosimi BA, Gadd MA, Tanabe KK, Souba W, Haynes HA, Barnhill R, Osteen R, Haluska FG: Adjuvant high-dose interferon α -2b in patients with high-risk melanoma. *CANCER J* 6:139-145 (2000).
- Jury CS, McAllister EJ, Mackie RM: Rising levels of serum S100 protein precede other evidence of disease progression in patients with malignant melanoma. *BRIT J DERMATOL* 143:269-274 (2000).
- Kageshita T, Hamby CV, Hirai S, Kimura T, Ono T, Ferrone S: $\alpha(v)\beta(3)$ expression on blood vessels and melanoma cells in primary lesions; differential association with tumor progression and clinical prognosis. *CANCER IMMUNOL IMMUNOTHER* 49:314-318 (2000).
- Kammula US, Marincola FM, Rosenberg SA: Real-time quantitative polymerase chain reaction assessment of immune reactivity in melanoma patients after tumor peptide vaccination. *J NAT CANCER INST* 92:1336-1344 (2000).
- Kanazawa J, Ohta S, Shitara K, Fujita F, Fujita M, Hanai N, Akinaga S, Okabe M: Therapeutic potential of chimeric anti-(ganglioside GD3) antibody KM871: antitumor activity in xenograft model of melanoma and effector function analysis. *CANCER IMMUNOL IMMUNOTHER* 49:253-258 (2000).
- Kang IC, Kim DS, Jang Y, Chung KH: Suppressive mechanism of salmosin, a novel disintegrin in B16 melanoma cell metastasis. *BIOCHEM BIOPHYS RES COMMUN* 275:169-173 (2000).
- Karjalainen JM, Tammi RH, Tammi MI, Eskelinen MJ, Agren UM, Parkkinen JJ, Alhava EM, Kosma VM: Reduced level of CD44 and hyaluronan associated with unfavorable prognosis in clinical stage I cutaneous melanoma. *AMER J PATHOL* 157:957-965 (2000).
- Karnell R, Kagedal B, Lindholm C, Nilsson B, Arstrand K, Ringborg U: The value of cysteinyl-dopa in the follow-up of disseminated malignant melanoma. *MELANOMA RES* 10:363-369 (2000).
- Kimyai-Asadi A, Usman A: The use of interferon α as adjuvant therapy for advanced cutaneous melanoma: The need for more evidence. *J AMER ACAD DERMATOL* 43:708-711 (2000).
- Koller J, Rettenbacher L: The influence of diagnostic biopsies on the sentinel lymph node detection in cutaneous melanoma. *ARCH DERMATOL* 136:1176-1176 (2000).
- Korabiowska M, Brinck U, Brinkmann U, Berger H, Ruschenburg I, Droese M: Prognostic significance of newly defined ploidy related parameters in melanoma. *ANTICANCER RES* 20:1685-1690 (2000).
- Korabiowska M, Brinck U, Kotthaus I, Berger H, Droese M: Analysis of the DNA content in the progression of recurrent and metastatic melanomas. *ANTICANCER RES* 20:2791-2794 (2000).
- Kuchelmeister C, Schaumburg-Lever G, Garbe C: Acral cutaneous melanoma in caucasians: clinical features, histopathology and prognosis in 112 patients. *BRIT J DERMATOL* 143:275-280 (2000).
- Kurul S: Diffuse microscopic intransit metastases from malignant melanoma of the breast. *PLAST RECONSTR SURG* 106:513-514 (2000).
- Landra M, Acchiardi F, Pugno F, Forte G, Granetto C, Camuzzini GF: Sentinel node mapping for malignant melanoma. *TUMORI* 86:354+ (2000).
- Leo F, Cagini L, Rocmans P, Cappello M, VanGeel AN, Maggi G, Goldstraw P, Pastorino U: Lung metastases from melanoma: when is surgical treatment warranted? *BRIT J CANCER* 83:569-572 (2000).
- Letsch A, Keilholz U, Schadendorf D, Nagorsen D, Schmittel A, Thiel E, Scheibenbogen C: High frequencies of circulating melanoma-reactive CD8+T cells in patients with advanced melanoma. *INT J CANCER* 87:659-664 (2000).
- Li WJ, Gragoudas S, Egan KM: Metastatic melanoma death rates by anatomic site after proton beam irradiation for uveal melanoma. *ARCH OPHTHALMOL* 118:1066-1070 (2000).
- Li WJ, Judge H, Gragoudas ES, Seddon JM, Egan KM: Patterns of tumor initiation in choroidal melanoma. *CANCER RES* 60:3757-3760 (2000).
- Lipsker DM, Hedelin G: An alternate explanation for the increase in the incidence of melanoma being restricted to patients with thin lesions - In reply. *ARCH DERMATOL* 136:936-936 (2000).
- Lorentzen H: Dermatoscopic diagnosis of malignant melanoma - Response. *ACTA DERMATO VENEREOL* 80:223-223 (2000).
- MacNeil S, Eves P, Richardson B, Molife R, Lorigan P, Wagner M, Layton C, Morandini R, Ghanem G: Oestrogenic steroids and melanoma cell interaction with adjacent skin cells influence invasion of melanoma cells in vitro. *PIGM CELL RES* 13:68-72 (2000).
- Maellaro E, Dominici S, DelBello B, Valentini MA, Pieri L, Perego P, Supino R, Zunino F, Lorenzini E, Paolicchi A, Comporti M, Pompella A: Membrane γ -glutamyl transpeptidase activity of melanoma cells: effects on cellular H₂O₂ production, cell surface protein thiol oxidation and NF-kappaB activation status. *J CELL SCI* 113:2671-2678 (2000).
- Maffioli L, Belli F, Gallino G, Ditto A, Castellani MR, Testoni M, Sturm E, Bombardieri E, Cascinelli N: Sentinel node biopsy in patients with cutaneous melanoma of the head and neck. *TUMORI* 86:341-342 (2000).
- Majumder B: Reliability of sentinel lymph node biopsy for staging melanoma. *BRIT J SURG* 87:1250-1251 (2000).
- Marchetti D, Li J, Shen R: Astrocytes contribute to the brain-metastatic specificity of melanoma cells by producing heparanase. *CANCER RES* 60:4767-4770 (2000).
- Mazucca N, Bagnoni G, Solimeo C, Malvaldi F, Pratali R, Ceccarini M, Santini P, Morini V: Sentinel node biopsy in clinical stage I melanoma: Rationale for restaging and follow-up. *TUMORI* 86:351+ (2000).
- McCarthy WH: Evidence-based management of melanoma. *MED J AUSTRALIA* 173:286-287 (2000).
- McKenna DB, Doherty VR, McLaren KM, Hunter JAA: Malignant melanoma and lymphoproliferative malignancy: is there a shared aetiology? *BRIT J DERMATOL* 143:171-173 (2000).
- McNeil C: Micrometastases matter in new melanoma staging system. *J NAT CANCER INST* 92:1370-1371 (2000).
- Middleton MR, Lee SM, Arance A, Wood M, Thatcher N, Margison GP: O(6)-methylguanine formation, repair protein depletion and clinical outcome with a 4 hr schedule of temozolomide in the treatment of advanced melanoma: Results of phase II study. *INT J CANCER* 88:469-473 (2000).

- Minev BR, Chavez FL, Dudouet BM, Mitchell MS: Synthetic insertion signal sequences enhance MHC class I presentation of a peptide from the melanoma antigen MART-1. *EUR J IMMUNOL* 30:2115-2124 (2000).
- Ming ME: The histopathologic misdiagnosis of melanoma: Sources and consequences of "false positives" and "false negatives". *J AMER ACAD DERMATOL* 43:704-706 (2000).
- Miracco C, Pacenti L, Santopietro R, Biagioli M, Fimiani M, Perotti R, Rubegni P, Pirtoli L, Luzi P: Detection of telomerase activity and correlation with mitotic and apoptotic indices, Ki-67 and expression of cyclins D1 and A in cutaneous melanoma. *INT J CANCER* 88:411-416 (2000).
- Mitjans F, Meyer T, Fittschen C, Goodman S, Jonczyk A, Marshall JF, Reyes G, Piulats J: In vivo therapy of malignant melanoma by means of antagonists of αv integrins. *INT J CANCER* 87:716-723 (2000).
- Molinari A, Toccaceli L, Calcabrini A, Diociaiuti M, Cianfriglia M, Arancia G: Induction of P-glycoprotein expression on the plasma membrane of human melanoma cells. *ANTICANCER RES* 20:2691-2696 (2000).
- Mortarini R, Borri A, Tragni C, Bersani I, Vegetti C, Bajetta E, Pillotti S, Cerundolo V, Anichini A: Peripheral burst of tumor-specific cytotoxic T lymphocytes and infiltration of metastatic lesions by memory CD8(+) T cells in melanoma patients receiving interleukin 12. *CANCER RES* 60:3559-3568 (2000).
- Mouriaux F, Maurage CA, Labalette P, Sablonniere B, Malecaze F, Darbon JM: Cyclin-dependent kinase inhibitory protein express in human choroidal melanoma tumors. *INVEST OPHTHALMOL VISUAL SCI* 41:2837-2843 (2000).
- Mowlavi A, Malafa MP: Angiogenesis in primary tumor cells of metastatic and nonmetastatic malignant melanoma. *PLAST RECONSTR SURG* 106:514-514 (2000).
- Moller P, Moller H, Sun YS, Dorbic T, Henz BM, Wittig B, Schadendorf D: Increased non-major histocompatibility complex-restricted lytic activity in melanoma patients vaccinated with cytokine gene-transfected autologous tumor cells. *CANCER GENE THERAPY* 7:976-984 (2000).
- Nawrocki S, Murawa P, Malicki J, Kapcinska M, Gryska K, Izycki D, Kaczmarek A, Laciak M, Czapczyk A, Karczewska A, Rose-John S, Mackiewicz A: Genetically modified tumour vaccines (GMTV) in melanoma clinical trials. *IMMUNOL LETT* 74:81-86 (2000).
- Negrier S, Fervers B, Bailly C, Beckendorf V, Cupissol D, Dor Chevreau C, deCislain C, Delaunay MM, Depardieu C, Dubois JB, Escande MC, Fraisse J, Parache RM, Philip T, Ravaud A, Sancho-Garnier H, Spatz A, Autier P, Bonnetblanc JM, deRaucourt S, Dreno B, Gouttebel MC, Grange F, Guillot B, Khayat D, Lehmann M, Leroy D, Regal R, Revuz J, Saiag P, Schmutz JL, Truchetet F, Vuillemin P: Standards, options and guidelines for caring for patients with cutaneous melanomas. *PRESSE MEDICALE* 29:1317-1326 (2000).
- Negrier S: On the guidelines for management of patients with cutaneous melanomas. *PRESSE MEDICALE* 29:1295-1298 (2000).
- Nielsen MB, Marincola FM: Melanoma vaccines: the paradox of T cell activation without clinical response. *CANCER CHEMOTHER PHARMACOL* 46:S62-S66 (2000).
- Nielsen MB, Kirkin AF, Loftus D, Nissen MH, Rivoltini L, Zeuthen J, Geisler C, Odum N: Amino acid substitutions in the melanoma antigen recognized by T cell 1 peptide modulate cytokine responses in melanoma-specific T cells. *J IMMUNOTHER* 23:405-411 (2000).
- Nord B, Platz A, Smoczynski K, Kytola S, Robertson G, Calender A, Murat A, Weintraub D, Burgess J, Edwards M, Skogseid B, Owen D, Lassam N, Hogg D, Larsson C, Teh BT: Malignant melanoma in patients with multiple endocrine neoplasia type 1 and involvement of the MEN1 gene in sporadic melanoma. *INT J CANCER* 87:463-467 (2000).
- O'Leary JA, Berend KR, Johnson JL, Levin LS, Seigler HF: Subungual melanoma - A review of 93 cases with identification of prognostic variables. *CLIN ORTHOP RELATED RES* :206-212 (2000).
- Ocvirk J, Stabuc B, Rudolf Z, Galvani V, Curin-Serbec V: Serum values of tumour necrosis factor- α and of soluble tumour necrosis factor-R55 in melanoma patients. *MELANOMA RES* 10:253-258 (2000).
- Okada Y, Tsuda Y, Wanaka K, Tada M, Okamoto U, Okamoto S, Hijikata-Okunomiya A, Bokonyi G, Szende B, Keri G: Development of plasmin and plasma kallikrein selective inhibitors and their effect on M1 (Melanoma) and HT29 cell lines. *BIOORG MEDICINAL CHEM LETTER* 10:2217-2221 (2000).
- Paciucci PA, Ryder JS, Mandeli JP, Morris JC, Holland JF: Interleukin-2 plus chemotherapy for patients with metastatic melanoma. *MELANOMA RES* 10:291-295 (2000).
- Panelli MC, Wunderlich J, Jeffries J, Wang E, Mixon A, Rosenberg SA, Marincola FM: Phase 1 study in patients with metastatic melanoma of immunization with dendritic cells presenting epitopes derived from the melanoma-associated antigens MART-1 and gp100. *J IMMUNOTHER* 23:487-498 (2000).
- Pavlidis N, Aamdal S, Awada A, Calvert H, Fumoleau P, Sorio R, Punt C, Verweij J, vanOosterom A, Morant R, Wanders J, Hanauske AR: Carzelesin phase II study in advanced breast, ovarian, colorectal, gastric, head and neck cancer, non-Hodgkin's lymphoma and malignant melanoma: a study of the EORTC early clinical studies group (ECSG). *CANCER CHEMOTHER PHARMACOL* 46:167-171 (2000).
- Pelayo BA, Fu YM, Meadows GG: Inhibition of B16BL6 melanoma invasion by tyrosine and phenylalanine deprivation is associated with decreased secretion of plasminogen activators and increased plasminogen activator inhibitors. *CLIN EXP METASTAS* 17:841-848 (1999).
- Pellegrino D, Bellina CR, Manca G, Boni G, Grosso M, Volterrani D, Desideri I, Bianchi F, Bottoni A, Ciliberti V, Salimbeni G, Gandini D, Castagna M, Zucchi V, Romanini A, Bianchi R: Detection of melanoma cells in peripheral blood and sentinel lymph nodes by RT-PCR analysis: A comparative study with immunohistochemistry. *TUMORI* 86:336-338 (2000).
- Persons DL, Arber DA, Sosman JA, Borelli KA, Slovak ML: Amplification and overexpression of HER-2/neu are uncommon in advanced stage melanoma. *ANTICANCER RES* 20:1965-1968 (2000).
- Petrocelli T, Slingerland J: UVB induced cell cycle checkpoints in an early stage human melanoma line, WM35. *ONCOGENE* 19:4480-4490 (2000).
- Pizzocaro C, Rossini PL, Magri GC, Manca G, Caglioni C, Manganoni MA, Giubbini R: Sentinel node biopsy in melanoma: The experience of Brescia Civic Hospital. *TUMORI* 86:349-350 (2000).
- Platz A, Ringborg U, Hansson J: Hereditary cutaneous melanoma. *SEMIN CANCER BIOL* 10:319-326 (2000).

- Poetsch M, Dittberner T, Woenckhaus C, Kleist B: Use of interphase cytogenetics in demonstrating specific chromosomal aberrations in solid tumors - new insights in the pathogenesis of malignant melanoma and head and neck squamous cell carcinoma. *HISTOL HISTOPATHOL* 15:1225-1231 (2000).
- Porter GA, Rose MI, Berman RS, Sumner WE, Lee JE, Mansfield PF, Gershenwald JE: How many lymph nodes are enough during sentinel lymphadenectomy for primary melanoma? *SURGERY* 128:306-311 (2000).
- Pozo L, Diaz-Cano SJ: Tumor screening and biology in malignant melanomas. *ARCH DERMATOL* 136:934-935 (2000).
- Prevost-Blondel A, Neuenhahn M, Rawiel M, Pircher H: Differential requirement of perforin and IFN- γ in CD8 T cell-mediated immune responses against B16.F10 melanoma cells expressing a viral antigen. *EUR J IMMUNOL* 30:2507-2515 (2000).
- Puig S, Castro J, Ventura PJ, Ruiz A, Ascaso C, Melvehy J, Estivill X, Mascaro JM, Lecha M, Castel T: Large deletions of chromosome 9p in cutaneous malignant melanoma identify patients with a high risk of developing metastases. *MELANOMA RES* 10:231-236 (2000).
- Rizvi SMA, Sarkar S, Goozee G, Allen BJ: Radioimmunoconjugates for targeted α therapy of malignant melanoma. *MELANOMA RES* 10:281-289 (2000).
- Robinson ES, Hubbard GB, Dooley TP: Metastatic melanoma in an adult opossum (*Monodelphis domestica*) after short-term intermittent UVB exposure. *ARCH DERMATOL RES* 292:469-471 (2000).
- Roetzheim RG, Pal N, VanDurme DJ, Wathington D, Ferrante JM, Gonzalez EC, Krischer JP: Increasing supplies of dermatologists and family physicians are associated with earlier stage of melanoma detection. *J AMER ACAD DERMATOL* 43:211-218 (2000).
- Rosario RT, DiMaio DT, Lapham RL, Sweeney M, Smalling R, Barasch E: Metastatic ocular melanoma to the left ventricle inducing near-syncope attacks in an 84-year-old woman. *CHEST* 118:551-553 (2000).
- Russo E: Tracking melanoma metastasis. *SCIENTIST* 14:23-23 (2000).
- Saida T: Malignant melanoma on the sole: How to detect the early lesions efficiently. *PIGM CELL RES* 13:135-139 (2000).
- Satherley K, deSouza L, Neale MH, Alexander RA, Myatt N, Foss AJE, Hungerford JL, Hickson ID, Cree IA: Relationship between expression of topoisomerase II isoforms and chemosensitivity in choroidal melanoma. *J PATHOL* 192:174-181 (2000).
- Satoh S, Hashimoto-Tamaoki T, Furuyama J, Mihara K, Namba M, Kitano Y: High frequency of tetraploidy detected in malignant melanoma of Japanese patients by fluorescence in situ hybridization. *INT J ONCOL* 17:707-715 (2000).
- Satyamoorthy K, Chehab NH, Waterman MJF, Lien MC, El Deiry WS, Herlyn M, Halazonetis TD: Aberrant regulation and function of wild-type p53 in radioresistant melanoma cells. *CELL GROWTH DIFFER* 11:467-474 (2000).
- Schadendorf D, Paschen A, Sun YS: Autologous, allogeneic tumor cells or genetically engineered cells as cancer vaccine against melanoma. *IMMUNOL LETT* 74:67-74 (2000).
- Schmid-Wendtner MH, Brunner B, Konz B, Kaudewitz P, Wendtner CM, Peter RU, Plewig G, Volkenandt M: Fractionated radiotherapy of lentigo maligna and lentigo maligna melanoma in 64 patients. *J AMER ACAD DERMATOL* 43:477-482 (2000).
- Schmid-Wendtner MH, Baumert J, Schmidt M, Konz B, Hzel D, Plewig G, Volkenandt M: Late metastases of cutaneous melanoma: An analysis of 31 patients. *J AMER ACAD DERMATOL* 43:605-609 (2000).
- Schrader AJ, Probst-Kepper M, Grosse J, Kunter U, Schenk F, Franzke A, Atzpodien J, Buer J: Molecular and prognostic classification of advanced melanoma: a multi-marker microcontamination assay of peripheral blood stem cells. *MELANOMA RES* 10:355-362 (2000).
- Schuchter LM: Melanoma and other skin neoplasms. *CURR OPIN ONCOL* 12:157-158 (2000).
- Schuchter LM, Green R, Fraker D: Primary and metastatic diseases in malignant melanoma of the gastrointestinal tract. *CURR OPIN ONCOL* 12:181-185 (2000).
- Schulz H: Epiluminescence microscopy features of cutaneous malignant melanoma metastases. *MELANOMA RES* 10:273-280 (2000).
- Sersa G, Stabuc B, Cemazar M, Miklavcic D, Rudolf Z: Electrochemotherapy with cisplatin: the systemic antitumour effectiveness of cisplatin can be potentiated locally by the application of electric pulses in the treatment of malignant melanoma skin metastases. *MELANOMA RES* 10:381-385 (2000).
- Shields CL, Shields JA, Cater J, Gunduz K, Miyamoto C, Micaly B, Brady LW: Plaque radiotherapy for uveal melanoma - Long-term visual outcome in 1106 consecutive patients. *ARCH OPHTHALMOL* 118:1219-1228 (2000).
- Shields JA, Shields CL, Eagle RC, Santos C, Singh AD: Malignant melanoma arising from a large uveal melanocytoma in a patient with oculodermal melanocytosis. *ARCH OPHTHALMOL* 118:990-993 (2000).
- Singh AD, Shields CL, Shields JA, Sato T: Uveal melanoma in young patients. *ARCH OPHTHALMOL* 118:918-923 (2000).
- Sinha P, Kohl S, Fischer J, Hutter G, Kern M, Kottgen E, Dietel M, Lage H, Schnolzer M, Schadendorf D: Identification of novel proteins associated with the development of chemoresistance in malignant melanoma using two-dimensional electrophoresis. *ELECTROPHORESIS* 21:3048-3057 (2000).
- Smith CC, Yu YX, Kulka M, Aurelian L: A novel human gene similar to the protein kinase (PK) coding domain of the large subunit of herpes simplex virus type 2 ribonucleotide reductase (ICP10) codes for a serine-threonine PK and is expressed in melanoma cells. *J BIOL CHEM* 275:25690-25699 (2000).
- Smith Y, Weinberg A, Klauss S, Soffer D, Ingher A: Improving screening for melanoma by measuring similarity to pre-classified images. *MELANOMA RES* 10:265-272 (2000).
- Smolle J: Diagnostic assessment of cutaneous melanoma and common nevi using tissue counter analysis. *ANAL QUANT CYTOL HISTOL* 22:299-306 (2000).
- Soubrane C, Mouawad R, Antoine EC, Verola O, Gil-Delgado M, Khayat D: A comparative study of Fas and Fas-ligand expression during melanoma progression. *BRIT J DERMATOL* 143:307-312 (2000).
- Stas M, vandenOord JJ, Garmyn M, Degreef H, deWever I, DeWolf-Peters C: Minimal deviation and/or naevoid melanoma: is recognition worthwhile? A clinicopathological study of nine cases. *MELANOMA RES* 10:371-380 (2000).
- Steinmann A, Funk JO, Schuler G, vondenDriesch P: Topical imiquimod treatment of a cutaneous melanoma metastasis. *J AMER ACAD DERMATOL* 43:555-556 (2000).

- Stephens JK, Everson GT, Elliott CL, Kam I, Wachs M, Haney J, Bartlett ST, Franklin WA: Fatal transfer of malignant melanoma from multiorgan donor to four allograft recipients. *TRANSPLANTATION* 70:232-236 (2000).
- Stewart JH, Rosenberg SA: Long-term survival of anti-tumor lymphocytes generated by vaccination of patients with melanoma with a peptide vaccine. *J IMMUNOTHER* 23:401-404 (2000).
- Straten PT, Kirkin AF, Siim E, Dahlstrom K, Drzewiecki KT, Seremet T, Zeuthen J, Becker JC, Guldberg P: Tumor infiltrating lymphocytes in melanoma comprise high numbers of T-cell clonotypes that are lost during in vitro culture. *CLIN IMMUNOL* 96:94-99 (2000).
- Strickland FM, Muller HK, Stephens LC, Bucana CD, Donawho CK, Sun Y, Pelley RP: Induction of primary cutaneous melanomas in C3H mice by combined treatment with ultraviolet radiation, ethanol and aloe emodin. *PHOTOCHEM PHOTOBIOLOG* 72:407-414 (2000).
- Strome SE, Martin B, Flies D, Tamada K, Chapoval AI, Sargent DJ, Shu SY, Chen LP: Enhanced therapeutic potential of adoptive immunotherapy by in vitro CD28/4-1BB costimulation of tumor-reactive T cells against a poorly immunogenic, major histocompatibility complex class I-negative A9P melanoma. *J IMMUNOTHER* 23:430-437 (2000).
- Sullivan RM, Stone M, Marshall JF, Uberall F, Rotenberg SA: Photo-induced inactivation of protein kinase C α by dequalinium inhibits motility of murine melanoma cells. *MOL PHARMACOL* 58:729-737 (2000).
- Tallberg TH, Uusitalo R, Sarna S, Seregard S, Werschnik C: Improvement of the recurrence-free interval using biological adjuvant therapy in uveal melanoma. *ANTICANCER RES* 20:1969-1975 (2000).
- Tanaka T, Kohno H, Murakami M, Kagami S, El Bayoumy K: Suppressing effects of dietary supplementation of the organoselenium 1,4-phenylenebis(methylene)selenocyanate and the Citrus antioxidant auroaptene on lung metastasis of melanoma cells in mice. *CANCER RES* 60:3713-3716 (2000).
- Theron T, Binder A, Verheye-Dua F, Bohm L: The role of G2-block abrogation, DNA double-strand break repair and apoptosis in the radiosensitization of melanoma and squamous cell carcinoma cell lines by pentoxifylline. *INT J RADIAT BIOL* 76:1197-1208 (2000).
- Troyanova P, Valerianova Z, Danon S: Clinical stages of cutaneous malignant melanoma in Bulgaria. *NEOPLASMA* 47:257-260 (2000).
- Tsao H, Zhang X, Kwitkiwski K, Finkelstein DM, Sober AJ, Haluska FG: Low prevalence of germline CDKN2A and CDK4 mutations in patients with early-onset melanoma. *ARCH DERMATOL* 136:1118-1122 (2000).
- Tyler DS, Onaitis M, Kherani A, Hata A, Nicholson E, Keogan M, Fisher S, Coleman E, Seigler HF: Positron emission tomography scanning in malignant melanoma - Clinical utility in patients with Stage III disease. *CANCER* 89:1019-1025 (2000).
- Vaggelli L, Castagnoli A, Borgognoni L, Urso C, Matteini M, Cesco P: Radioisotopic lymphatic mapping of the sentinel node in melanoma: Importance of immunohistochemistry. *TUMORI* 86:346-348 (2000).
- Valmori D, Dutoit V, Lienard D, Rimoldi D, Pittet MJ, Champagne P, Ellefsen K, Sahin U, Speiser D, Lejeune F, Cerottini JC, Romero P: Naturally occurring human lymphocyte antigen-A2 restricted CD8+T-cell response to the cancer testis antigen NY-ESO-1 in melanoma patients. *CANCER RES* 60:4499-4506 (2000).
- Vandeweyer E, Sales F, Deraemaeker R: Cutaneous malignant melanoma in children. *EUR J PEDIAT* 159:582-584 (2000).
- Vasen HFA, Gruis NA, Frants RR, vanderVelden PA, Hille ETM, Bergman W: Risk of developing pancreatic cancer in families with familial atypical multiple mole melanoma associated with a specific 19 deletion of p16 (p16-Leiden). *INT J CANCER* 87:809-811 (2000).
- Vaughan MM, Moore J, Riches PG, Johnston SRD, A'Hern RP, Hill ME, Eisen T, Ayliffe MJ, Thomas JM, Gore ME: GM-CSF with biochemotherapy (cisplatin, DTIC, tamoxifen, IL-2 and interferon- α): A phase I trial in melanoma. *ANN ONCOL* 11:1183-1189 (2000).
- Vihinen P, Nikkola J, Vlaykova T, Hahka-Kemppinen M, Talve L, Heino J, Pyrhonen S: Prognostic value of β 1 integrin expression in metastatic melanoma. *MELANOMA RES* 10:243-251 (2000).
- Villa G, Agnese G, Bianchi P, Buffoni F, Costa R, Carli F, Peressini A, Solari N, Cafiero F, Mariani G: Mapping the sentinel lymph node in malignant melanoma by blue dye, lymphoscintigraphy and intraoperative γ probe. *TUMORI* 86:343-345 (2000).
- Virgo KS, Chan D, Handler BS, Johnson DY, Goshima K, Johnson FE: Current practice of patient follow-up after potentially curative resection of cutaneous melanoma. *PLAST RECONSTR SURG* 106:590-597 (2000).
- Vuoristo MS, Kellokumpu-Lehtinen P, Laine S, Parvinen LM, Hahka-Kemppinen M, Korpela M, Kumpulainen E: The value of serum S-100 β and interleukins as tumour markers in advanced melanoma. *MELANOMA RES* 10:237-241 (2000).
- Wagner JD, Gordon MS, Chuang TY, Coleman JJ, Hayes JT, Jung SH, Love C: Predicting sentinel and residual lymph node basin disease after sentinel lymph node biopsy for melanoma. *CANCER* 89:453-462 (2000).
- Wagner JD: Lymphatic mapping and sentinel lymph node basin after sentinel lymph node biopsy for melanoma. *PLAST RECONSTR SURG* 106:515-516 (2000).
- Wagner SN, Rebmann V, Willers CP, Grosse-Wilde H, Goos M: Expression analysis of classic and non-classic HLA molecules before interferon α -2b treatment of melanoma. *LANCET* 356:220-221 (2000).
- Waldmann V: Dermatoscopic diagnosis of malignant melanoma. *ACTA DERMATO VENEREOL* 80:223-223 (2000).
- Weichenthal M, Godorr M, Altenhoff J, Neuber K, Breitbart EW: Effects of whole-body UVB irradiation on cytokine production by peripheral blood mononuclear cells from stage I melanoma patients. *ARCH DERMATOL RES* 292:348-353 (2000).
- Weinstock MA: Early detection of melanoma. *JAMA J AM MED ASSN* 284:886-889 (2000).
- Weyers W: Local spread of melanomas. *AMER J SURG PATHOL* 24:1168-1169 (2000).
- Witkowski JM, Kozłowska K, Zarzeczna M: Expression and activity of P-glycoprotein in transplantable hamster melanomas. *ARCH DERMATOL RES* 292:354-361 (2000).
- Yakobson E, Shemesh P, Azizi E, Winkler E, Lassam N, Hogg D, Brookes S, Peters G, Lotem M, Zlotogorski A, Landau M, Safro M, Shafir R, Friedman E, Peretz H: Two p16 (CDKN2A) germline mutations in 30 Israeli melanoma families. *EUR J HUMAN GENET* 8:590-596 (2000).

Zhou R, Bansal N, Leeper DB, Glickson JD: Intracellular acidification of human melanoma xenografts by the respiratory inhibitor m-iodobenzylguanidine plus hyperglycemia: A P-31 magnetic resonance spectroscopy study. *CANCER RES* 60:3532-3536 (2000).

MSH, POMC, GROWTH FACTORS & RECEPTORS

- Adan RAH, Gispen WH: Melanocortins and the brain: from effects via receptors to drug targets. *EUR J PHARMACOL* 405:13-24 (2000).
- Anastassiou G, Schilling H, Djakovic S, Bornfeld N: Expression of VLA-2, VLA-3, and $\alpha(v)$ integrin receptors in uveal melanoma: association with microvascular architecture of the tumour and prognostic value. *BRIT J OPHTHALMOL* 84:899-902 (2000).
- Arsov Z, Zorec R: α -Melanocyte stimulating hormone sensitizes the responsiveness of carbon-fibres within seconds. *PFLUGERS ARCH EUR J PHYSIOL* 440:R155-R156 (2000).
- ❖ Barsh G, Gunn T, He L, Schlossman S, Duke-Cohan J: Biochemical and genetic studies of pigment-type switching. *PIGM CELL RES* 13:48-53 (2000).
- Boyano MD, Garcia-Vasquez MD, Lopez-Michelena T, Gardeazabal J, Bilbao J, Canavate ML, deGaldeano AG, Izu R, Diaz-Ramon L, Raton JA, Diaz-Perez JL: Soluble interleukin-2 receptor, intercellular adhesion molecule-1 and interleukin-10 serum levels in patients with melanoma. *BRIT J CANCER* 83:847-852 (2000).
- Catania A, Airaghi L, Colombo G, Lipton JM: α -melanocyte-stimulating hormone in normal human physiology and disease states. *TRENDS ENDOCRINOL METAB* 11:304-308 (2000).
- Cummings DE, Schwartz MW: Melanocortins and body weight: a tale of two receptors. *NAT GENET* 26:8-9 (2000).
- Fan T, Dinulescu DM, Butler AA, Zhou J, Marks DL, Cone RD: The central melanocortin system can directly regulate serum insulin levels. *ENDOCRINOLOGY* 141:3072-3079 (2000).
- Fekete C, Legradi G, Mihaly E, Tatro JB, Rand WM, Lechan RM: α -melanocyte stimulating hormone prevents fasting-induced suppression of corticotropin-releasing hormone gene expression in the rat hypothalamic paraventricular nucleus. *NEUROSCI LETT* 289:152-156 (2000).
- Galvani V, Hartman KP, Ruprecht RR, Novakovic S, Stabuc B, Ocvirk J, Menart V, Porekar VG, Stale A, Rozman P, Serbec VC: Soluble tumor necrosis factor receptor I (sTNFRI) as a prognostic factor in melanoma patients in Slovene population. *PFLUGERS ARCH EUR J PHYSIOL* 440:R61-R63 (2000).
- Golob M, Buettner R, Bosserhoff AK: CHARACTERIZATION OF A TRANSCRIPTION FACTOR BINDING SITE, SPECIFICALLY ACTIVATING MIA TRANSCRIPTION IN MELANOMA. *J INVEST DERMATOL* 115:42-47 (2000).
- Harris J, Bird DJ: Supernatants from leucocytes treated with melanin-concentrating hormone (MCH) and α -melanocyte stimulating hormone (α -MSH) have a stimulatory effect on rainbow trout (*Oncorhynchus mykiss*) phagocytes in vitro. *VET IMMUNOL IMMUNOPATHOL* 76:117-124 (2000).
- Hedley SJ, Murray A, Sisley K, Ghanem G, Morandini R, Gawkrödger DJ, MacNeil S: α -Melanocyte stimulating hormone can reduce T-cell interaction with melanoma cells in vitro. *MELANOMA RES* 10:323-330 (2000).
- Ichinose M, Nagle GT, Asai M, Sawada M: Melanocortin-1 and melanocortin-5 receptors are expressed in cultured mouse peritoneal macrophages. *BIOMED RES* 21:169-172 (2000).
- Iwashita K, Kobori M, Yamaki K, Tsushida T: Flavonoids inhibit cell growth and induce apoptosis in B16 melanoma 4A5 cells. *BIOSCI BIOTECHNOL BIOCHEM* 64:1813-1820 (2000).
- Kanter-Lewensohn L, Girnita L, Girnita A, Dricu A, Olsson G, Leech L, Nilsson G, Hilding A, Wejde J, Brismar K, Larsson O: Tamoxifen-induced cell death in malignant melanoma cells: possible involvement of the insulin-like growth factor-1 (IGF-1) pathway. *MOL CELL ENDOCRINOL* 165:131-137 (2000).
- Karlsson AM, Lerner MR, Unett D, Lundström I, Svensson SPS: Melatonin-induced organelle movement in melanophores is coupled to tyrosine phosphorylation of a high molecular weight protein. *CELL SIGNAL* 12:469-474 (2000).
- Katsuki A, Sumida Y, Murashima S, Furuta M, Araki-Sasaki R, Tsuchihashi K, Hori Y, Yano Y, Adachi Y: Elevated plasma levels of α -melanocyte stimulating hormone (α -MSH) are correlated with insulin resistance in obese men. *INT J OBESITY* 24:1260-1264 (2000).
- Korner J, Wardlaw SL, Liu SM, Conwell IM, Leibel RL, Chua SC: Effects of leptin receptor mutation on *Agrp* gene expression in fed and fasted lean and obese (LA/N-fa(f)) rats. *ENDOCRINOLOGY* 141:2465-2471 (2000).
- Kubo H, Matsumoto K, Funahashi M, Takagi H, Kitajima Y, Taniguchi S, Saida T: Sequential chemioimmunotherapy with cisplatin, interferon- β and interleukin-2 inhibits the growth of B16-F1 melanoma in syngeneic mice. *MELANOMA RES* 10:223-229 (2000).
- Li JY, Finniss S, Yang YK, Zeng Q, Qu SY, Barsh G, Dickinson C, Gantz I: Agouti-related protein-like immunoreactivity: Characterization of release from hypothalamic tissue and presence in serum. *ENDOCRINOLOGY* 141:1942-1950 (2000).
- Lipton JM, Catania A, Ichiyama T: Marshaling the anti-inflammatory influence of the neuroimmunomodulator α -MSH. *NEWS PHYSIOL SCI* 15:192-195 (2000).
- Louisset E, McKernan R, Sieghart W, Vaudry H: Subunit composition and pharmacological characterization of γ -aminobutyric acid type A receptors in frog pituitary melanotrophs. *ENDOCRINOLOGY* 141:1083-1092 (2000).
- Madireddi MT, Dent P, Fisher PB: AP-1 and C/EBP transcription factors contribute to *mda-7* gene promoter activity during human melanoma differentiation. *J CELL PHYSIOL* 185:36-46 (2000).
- Noonan FP, Otsuka T, Bang S, Anver MR, Merlino G: Accelerated ultraviolet radiation-induced carcinogenesis in hepatocyte growth factor/scatter factor transgenic mice. *CANCER RES* 60:3738-3743 (2000).
- Repp AC, Mayhew ES, Apte S, Niederkorn JY: Human uveal melanoma cells produce macrophage migration-inhibitory factor to prevent lysis by NK cells. *J IMMUNOL* 165:710-715 (2000).
- ❖ Roberts JE, Hu DN, Martinez L, Chignell CF: Photophysical studies on melatonin and its receptor agonists. *J PINEAL RES* 29:94-99 (2000).

- Rofstad EK, Halsor EF: Vascular endothelial growth factor, interleukin 8, platelet-derived endothelial cell growth factor, and basic fibroblast growth factor promote angiogenesis and metastasis in human melanoma xenografts. *CANCER RES* 60:4932-4938 (2000).
- Rotllant J, Balm PHM, Ruane NM, Perez-Sanchez J, Wendelaar-Bonga SE, Tort L: Pituitary proopiomelanocortin-derived peptides and hypothalamus-pituitary-interrenal axis activity in gilthead sea bream (*Sparus aurata*) during prolonged crowding stress: Differential regulation of adrenocorticotropin hormone and α -melanocyte-stimulating hormone release by corticotropin-releasing hormone and thyrotropin-releasing hormone. *GEN COMP ENDOCRINOL* 119:152-163 (2000).
- Rousseau B, Dubayle D, Sennlaub F, Jeanny JC, Costet P, Bikfalvi A, Javerzat S: Neural and angiogenic defects in eyes of transgenic mice expressing a dominant-negative FGF receptor in the pigmented cells. *EXP EYE RES* 71:395-404 (2000).
- Saito Y, Nothacker HP, Civelli O: Melanin-concentrating hormone receptor: An orphan receptor fits the key. *TRENDS ENDOCRINOL METAB* 11:299-303 (2000).
- Sanchez MS, Celis ME, Schioth HB: Evidence that α -MSH induced grooming is not primarily mediated by any of the cloned melanocortin receptors. *NEUROPEPTIDES* 34:77-82 (2000).
- ❖ Satyamoorthy K, Oka M, Herlyn M: An antisense strategy for inhibition of human melanoma growth targets the growth factor pleiotrophin. *PIGM CELL RES* 13:87-93 (2000).
- Sheidow TG, Hooper PL, Crukley C, Young J, Heathcote JG: Expression of vascular endothelial growth factor in uveal melanoma and its correlation with metastasis. *BRIT J OPHTHALMOL* 84:750-756 (2000).
- Shiesh SC, Chen CY, Lin XZ, Liu ZA, Tsao HC: Melatonin prevents pigment gallstone formation induced by bile duct ligation in guinea pigs. *HEPATOLOGY* 32:455-460 (2000).
- Shiose S, Sakamoto T, Yoshikawa H, Hata Y, Kawano Y, Ishibashi T, Inomata H, Takayama K, Ueno H: Gene transfer of a soluble receptor of VEGF inhibits the growth of experimental eyelid malignant melanoma. *INVEST OPHTHALMOL VISUAL SCI* 41:2395-2403 (2000).
- Singh RK, Varney ML: IL-8 expression in malignant melanoma: implications in growth and metastasis. *HISTOL HISTOPATHOL* 15:843-849 (2000).
- ❖ Slominski A, Wortsman J, Luger T, Paus R, Solomon S: Corticotropin releasing hormone and proopiomelanocortin involvement in the cutaneous response to stress. *PHYSIOL REV* 80:979-1020 (2000).
- Smalley K, Eisen T: The involvement of p38 mitogen-activated protein kinase in the α -melanocyte stimulating hormone (α -MSH)-induced melanogenic and anti-proliferative effects in B16 murine melanoma cells. *FEBS LETT* 476:198-202 (2000).
- Tajima A, Miyamoto Y, Kadowaki H, Hayashi M: Mouse integrin α v promoter is regulated by transcriptional factors Ets and Sp1 in melanoma cells. *BBA GENE STRUCT EXPRESS* 1492:377-384 (2000).
- Tsatmali M, Ancans J, Yukitake J, Thody AJ: Skill POMC peptides: Their actions at the human MC-1 receptor and roles in the tanning response. *PIGM CELL RES* 13:125-129 (2000).
- Vergoni AV, Bertolini A: Role of melanocortins in the central control of feeding. *EUR J PHARMACOL* 405:25-32 (2000).
- Zawilska JB, Rosiak J, Nowak JZ: Near-ultraviolet radiation suppresses melatonin synthesis in the chicken retina - A role of dopamine. *LIFE SCI* 67:2233-2246 (2000).
- Zuasti A, Martinez-Liarte JH, Solano F, Ferrer C: Melanization stimulating factors in the integument of the Mugil cephalus and *Dicertranchus labrax*. *HISTOL HISTOPATHOL* 15:1145-1150 (2000).

DEVELOPMENTAL BIOLOGY

- Abe Y, Sakurai T, Yamada T, Nakamura T, Yanagisawa M, Goto K: Functional analysis of five endothelin-B receptor mutations found in human Hirschsprung disease patients. *BIOCHEM BIOPHYS RES COMMUN* 275:524-531 (2000).
- Bondurand N, Pingault V, Goerich DE, Lemort N, Sock E, LeCaignec C, Wegner M, Goossens M: Interaction among SOX10, PAX3 and MITF, three genes altered in Waardenburg syndrome. *HUM MOL GENET* 9:1907-1917 (2000).
- Carreira S, Liu BG, Goding CR: The gene encoding the T-box factor Tbx2 is a target for the microphthalmia-associated transcription factor in melanocytes. *J BIOL CHEM* 275:21920-21927 (2000).
- Cheng YC, Cheung M, Abu-Elmagd MM, Orme A, Scotting PJ: Chick Sox10, a transcription factor expressed in both early neural crest cells and central nervous system. *DEVELOP BRAIN RES* 121:233-241 (2000).
- Conway SJ, Bundy J, Chen JW, Dickman E, Rogers R, Will BM: Decreased neural crest stem cell expansion is responsible for the conotruncal heart defects within the Splotch (*Sp(2H)*)/Pax3 mouse mutant. *CARDIOVASC RES* 47:314-328 (2000).
- ❖ Dunn KJ, Williams BO, Li Y, Pavan WJ: Neural crest-directed gene transfer demonstrates Wnt1 role in melanocyte expansion and differentiation during mouse development. *PROC NAT ACAD SCI USA* 97:10050-10055 (2000).
- Epstein JA: Pax3 and vertebrate development. *DEVELOPMENTAL BIOLOGY PROTOCOLS, VOL III*. 459-470 (2000).
- Goding CR: Mitf from neural crest to melanoma: signal transduction and transcription in the melanocyte lineage. *GENE DEVELOP* 14:1712-1728 (2000).
- Heinrich MC, Griffith DJ, Druker BJ, Wait CL, Ott KA, Zigler AJ: Inhibition of c-kit receptor tyrosine kinase activity by STI 571, a selective tyrosine kinase inhibitor. *BLOOD* 96:925-932 (2000).
- Kawakami K, Amsterdam A, Shimoda N, Becker T, Mugg J, Shima A, Hopkins N: Proviral insertions in the zebrafish hgoromo gene, encoding an F-box/WD40-repeat protein, cause stripe pattern anomalies. *CURR BIOL* 10:463-466 (2000).
- Kelsh RN, Schmid B, Eisen JS: Genetic analysis of melanophore development in zebrafish embryos. *DEVELOP BIOL* 225:277-293 (2000).
- Li J, Chen F, Epstein JA: Neural crest expression of Cre recombinase directed by the proximal Pax3 promoter in transgenic mice. *GENESIS* 26:162-164 (2000).
- Lovicu FJ, Kollé G, Yamada T, Little MH, McAvoy JW: Expression of Crim1 during murine ocular development. *MECH DEVELOP* 94:261-265 (2000).
- ❖ Mason KA, Mason SKF: Evolution and development of pigment cells: At the crossroads of the discipline. *PIGM CELL RES* 13:150-155 (2000).

- Mayanil CSK, George D, Mania-Farnell B, Bremer CL, McLone DG, Bremer EG: Overexpression of murine Pax3 increases NCAM polysialylation in a human medulloblastoma cell line. *J BIOL CHEM* 275:23259-23266 (2000).
- Munnes M, Fanaei S, Schmitz B, Muiznieks I, Holschneider AM, Doerfler W: Familial form of Hirschsprung disease: Nucleotide sequence studies reveal point mutations in the RET proto-oncogene in two of six families but not in other candidate genes. *AMER J MED GENET* 94:19-27 (2000).
- Peirano RI, Wegner M: The glial transcription factor Sox10 binds to DNA both as monomer and dimer with different functional consequences. *NUCL ACID RES* 28:3047-3055 (2000).
- Pingault V, Guiochon-Mantel A, Bondurand N, Faure C, Lacroix C, Lyonnet S, Goossens M, Landrieu P: Peripheral neuropathy with hypomyelination, chronic intestinal pseudo-obstruction and deafness: A developmental "neural crest syndrome" related to a SOX10 mutation. *ANN NEUROL* 48:671-676 (2000).
- ❖ Potterf SB, Furumura M, Dunn KJ, Arnheiter H, Pavan WJ: Transcription factor hierarchy in Waardenburg syndrome: regulation of MITF expression by SOX10 and PAX3. *HUM GENET* 107:1-6 (2000).
- Salti GI, Manouagian T, Farolan M, Shilkaitis A, Majumdar D, DasGupta TK: Microphthalmia transcription factor: A new prognostic marker in intermediate-thickness cutaneous malignant melanoma. *CANCER RES* 60:5012-5016 (2000).
- Tachibana M: MITF: A stream flowing for pigment cells. *PIGM CELL RES* 13:230-240 (2000).
- Touraine RL, Atti
Holschneider AM, Munnes M, Doerfler W, Goossens M, Munnich A, Vekemans M, Lyonnet S: Neurological phenotype in Waardenburg syndrome type 4 correlates with novel SOX10 truncating mutations and expression in developing brain. *AMER J HUM GENET* 66:1496-1503 (2000).

DIFFERENTIATION

- Aigner B, Besenfelder U, Moller M, Brem G: Tyrosinase gene variants in different rabbit strains. *MAMM GENOME* 11:700-702 (2000).
- Amae S, Yasumoto K, Takeda K, Udono T, Takahashi K, Shibahara S: Identification of a composite enhancer of the human tyrosinase-related protein 2/DOPachrome tautomerase gene. *BBA GENE STRUCT EXPRESS* 1492:505-508 (2000).
- Bicknell AB, Lomthaisong K, Gladwell RT, Lowry PJ: Agouti related protein in the rat adrenal cortex: Implications for novel autocrine mechanisms modulating the actions of pro-opiomelanocortin peptides. *J NEUROENDOCRINOL* 12:977-982 (2000).
- Branford WA: Hutchinson and Nettleship, nettlership and albinism. *BRIT J DERMATOL* 143:16-22 (2000).
- Burzio LA, Burzio VA, Pardo J, Burzio LO: In vitro polymerization of mussel polyphenolic proteins catalyzed by mushroom tyrosinase. *COMP BIOCHEM PHYSIOL PT B* 126:383-389 (2000).
- Camacho-Hubner A, Beermann F: Cellular and molecular features of mammalian pigmentation - tyrosinase and TRPs. *PATHOL BIOL* 48:577-583 (2000).
- Claycombe KJ, Wang YX, Jones BH, Kim S, Wilkison WO, Zemel MB, Chun J, Moustaid-Moussa N: Transcriptional regulation of the adipocyte fatty acid synthase gene by agouti: interaction with insulin. *PHYSIOL GENOMICS* 3:157-162 (2000).
- DeCamp DL, Thompson TM, deSauvage FJ, Lerner MR: Smoothed activates G α (i)-mediated signaling in frog melanophores. *J BIOL CHEM* 275:26322-26327 (2000).
- Decker H, Tuzcek F: Tyrosinase/catecholoxidase activity of hemocyanins: structural basis and molecular mechanism. *TRENDS BIOCHEM SCI* 25:392-397 (2000).
- Fenoll LG, Rodriguez-Lopez JN, Garcia-Sevilla F, Tudela J, Garcia-Ruiz PA, Varon R, Garcia-Canovas F: Oxidation by mushroom tyrosinase of monophenols generating slightly unstable o-quinones. *EUR J BIOCHEM* 267:5865-5878 (2000).
- Fetsch PA, Riker AI, Marincola FM, Abati A: Tyrosinase immunoreactivity in fine-needle aspiration samples of metastatic malignant melanoma - Fixation methods yield variable results. *CANCER CYTOPATHOL* 90:252-257 (2000).
- Fisher DE: Microphthalmia: A signal responsive transcriptional regulator in development. *PIGM CELL RES* 13:145-149 (2000).
- Futaki S, Takagishi Y, Hayashi Y, Ohmori S, Kanou Y, Inouye M, Oda S, Seo H, Iwaikawa Y, Murata Y: Identification of a novel myosin-Va mutation in an ataxic mutant rat, dilute-opisthotonus. *MAMM GENOME* 11:649-655 (2000).
- Galbreath PF, Plemmons BP: Mottled coloration in a rainbow trout is associated with mosaicism for albinism. *J HERED* 91:405-407 (2000).
- Hettmann T, Barton K, Leiden TM: Microphthalmia due to p53-mediated apoptosis of anterior lens epithelial cells in mice lacking the CREB-2 transcription factor. *DEVELOP BIOL* 222:110-123 (2000).
- Higashi Y, Asanuma M, Miyazaki I, Ogawa N: Inhibition of tyrosinase reduces cell viability in catecholaminergic neuronal cells. *J NEUROCHEM* 75:1771-1774 (2000).
- Hiratsuka J, Kondoh H, Tsuboi T, Yoshino K, Imajo Y, Mishima Y: Selective uptake of para-boronophenylalanine increases in amelanotic melanoma cells transfected by the tyrosinase gene. *MELANOMA RES* 10:297-302 (2000).
- ❖ Hornyak TJ, Hayes DJ, Ziff EB: Cell-density-dependent regulation of expression and glycosylation of dopachrome tautomerase/tyrosinase-related protein-2. *J INVEST DERMATOL* 115:106-112 (2000).
- Ikehata K, Nicell JA: Color and toxicity removal following tyrosinase-catalyzed oxidation of phenols. *BIOTECHNOL PROGR* 16:533-540 (2000).
- ❖ Jimbow K, Hua C, Gomez PF, Hirosaki K, Shinoda K, Salopek TG, Matsusaka H, Jin HY, Yamashita T: Intracellular vesicular trafficking of tyrosinase gene family protein in Eu- and pheomelanosome biogenesis. *PIGM CELL RES* 13:110-117 (2000).
- Johansson M, Arstrand K, Hansson A, Lindholm C, Kagedal B: Quantitative analysis of tyrosinase and tyrosinase-related protein-2 mRNA from melanoma cells in blood by real-time polymerase chain reaction. *MELANOMA RES* 10:213-222 (2000).
- Johansson M, Pisa EK, T? m? en V, ? rstrand K, K? edal B: Quantitative analysis of tyrosinase transcripts in blood. *CLIN CHEM* 46:921-927 (2000).
- Khanom F, Kayahara H, Tadasa K: Tyrosinase inhibitory activity of Bangladeshi indigenous medicinal plants. *BIOSCI BIOTECHNOL BIOCHEM* 64:1967-1969 (2000).

- Kubo I, Kinst-Hori I, Chaudhuri SK, Kubo Y, Sanchez Y, Ogura T: Flavonols from *Heterotheca inuloides*: Tyrosinase inhibitory activity and structural criteria. *BIOORGAN MED CHEM* 8:1749-1755 (2000).
- Liu ZJ, Liu BH, Kong JL, Deng JQ: Probing trace phenols based on mediator-free alumina sol-gel derived tyrosinase biosensor. *ANAL CHEM* 72:4707-4712 (2000).
- Nakai R, Sen K, Kurosawa S, Shibai H: Cloning and sequencing analysis of TRP1 gene of *Flammulina velutipes*. *FEMS MICROBIOL LETT* 190:51-56 (2000).
- Nakamura M, Nakajima T, Ohba Y, Yamauchi S, Lee BR, Ichishima E: Identification of copper ligands in *Aspergillus oryzae* tyrosinase by site-directed mutagenesis. *BIOCHEM J* 350:537-545 (2000).
- ❖ Nguyen MTT, Arnheiter H: Signaling and transcriptional regulation in early mammalian eye development: a link between FGF and MITF. *DEVELOPMENT* 127:3581-3591 (2000).
- Percin EF, Ploder LA, Yu JJ, Arici K, Horsford DJ, Rutherford A, Bapat B, Cox DW, Duncan AMV, Kalnins VI, Kocak-Altintas A, Sowden JC, Traboulsi E, Sarfarazi M, McInnes RR: Human microphthalmia associated with mutations in the retinal homeobox gene CHX10. *NAT GENET* 25:397-401 (2000).
- Reese EL, Haimo LT: Dynein, dynactin, and kinesin II's interaction with microtubules is regulated during bidirectional organelle transport. *J CELL BIOL* 151:155-165 (2000).
- Rodriguez-Lopez JN, Fenoll LG, Garcia-Ruiz PA, Varon R, Tudela J, Thorneley RNF, Garcia-Canovas F: Stopped-flow and steady-state study of the diphenolase activity of mushroom tyrosinase. *BIOCHEMISTRY USA* 39:10497-10506 (2000).
- Sanal O, Yel L, Kucukali T, Gilbert-Barnes E, Tardieu M, Tezcan I, Ersoy F, Metin A, deSaintBasile G: An allelic variant of Griscelli disease: presentation with severe hypotonia, mental-motor retardation, and hypopigmentation consistent with Elejalde syndrome (neuroectodermal melanolyosomal disorder). *J NEUROL* 247:570-572 (2000).
- Sasaki M, Horikoshi T, Uchiwa H, Miyachi Y: Up-regulation of tyrosinase gene by nitric oxide in human melanocytes. *PIGM CELL RES* 13:248-252 (2000).
- Schallreuter KU, Wood JM: Downregulation of tyrosinase activity in human melanocyte cell cultures by yohimbine. *J INVEST DERMATOL* 115:130-131 (2000).
- Shibahara S, Yasumoto KI, Amae S, Uono T, Watanabe KI, Saito H, Takeda K: Regulation of pigment cell-specific gene expression by MITF. *PIGM CELL RES* 13:98-102 (2000).
- Solano F, Martinez-Esparza M, Jimenez-Cervantes C, Hill SP, Lozano JA, Garcia-Borron JC: New insights on the structure of the mouse silver locus and on the function of the silver protein. *PIGM CELL RES* 13:118-124 (2000).
- Sugumaran M, Nellaiappan K, Valivittan K: A new mechanism for the control of phenoloxidase activity: Inhibition and complex formation with quinone isomerase. *ARCH BIOCHEM BIOPHYS* 379:252-260 (2000).
- Swank RT, Novak EK, McGarry MP, Zhang YK, Li W, Zhang Q, Feng LJ: Abnormal vesicular trafficking in mouse models of Hermansky-Pudlak syndrome. *PIGM CELL RES* 13:59-67 (2000).
- Tomita Y, Miyamura Y, Kono M, Nakamura R, Matsunaga J: Molecular bases of congenital hypopigmentary disorders in humans and oculocutaneous albinism 1 in Japan. *PIGM CELL RES* 13:130-134 (2000).
- Vihetelc TS, Hyde DR: Light-induced rod and cone cell death and regeneration the adult albino zebrafish (*Danio rerio*) retina. *J NEUROBIOL* 44:289-307 (2000).
- ❖ Virador VM, Santis C, Furumura M, Kalbacher H, Hearing VJ: Bioactive motifs of agouti signal protein. *EXP CELL RES* 259:54-63 (2000).
- Wilson SM, Yip R, Swing DA, O'Sullivan TN, Zhang Y, Novak EK, Swank RT, Russell LB, Copeland NG, Jenkins NA: A mutation in *Rab27a* causes the vesicle transport defects observed in ashen mice. *PROC NAT ACAD SCI USA* 97:7933-7938 (2000).
- Wolfel C, Drexler I, VanPel A, Thres T, Leister N, Herr W, Sutter G, Huber C, Wolfel T: Transporter (TAP)- and proteasome-independent presentation of a melanoma-associated tyrosinase epitope. *INT J CANCER* 88:432-438 (2000).
- Yamaki K, Kondo I, Nakamura H, Miyano M, Konno S, Sakuragi S: Ocular and extraocular inflammation induced by immunization of tyrosinase related protein 1 and 2 in Lewis rats. *EXP EYE RES* 71:361-369 (2000).
- Zhang JZ, Wang BQ, Xu B, Cheng GJ, Dong SJ: Amperometric quantification of polar organic solvents based on a tyrosinase biosensor. *ANAL CHEM* 72:3455-3460 (2000).

MISCELLANEOUS

- Bataille V, Bykov VJ, Sasiemi P, Harulow S, Cuzick J, Hemminki K: Photoadaptation to ultraviolet (UV) radiation in vivo: photoproducts in epidermal cells following UVB therapy for psoriasis. *BRIT J DERMATOL* 143:477-483 (2000).
- Eller MS, Gilchrist BA: Tanning as part of the eukaryotic SOS response. *PIGM CELL RES* 13:94-97 (2000).
- Koch PB, Behnecke B, Ffrench-Constant RH: The molecular basis of melanism and mimicry in a swallowtail butterfly. *CURR BIOL* 10:591-594 (2000).