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PASPCR *Newsletter*

Volume 8 Number 1 **March, 2000**

Introduction . . .

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

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** is 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 has a new URL address at http://www.cbc.umn.edu/ifpcs.

IN THIS ISSUE . . . . .

PanAmerican Society for Pigment Cell Research

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Calendar of Events :

Jun 25 - 28, 2000 IXth Annual Meeting of the PanAmerican Society for Pigment Cell Research, to be held in College Station, TX
Contact: Dr. Lynn Lamoreux, Department of Veterinary Pathobiology, The Texas Veterinary Medical Center, Texas A & M University, College Station, TX 77843-4467;
Phone: (409) 845-6084
Fax: (409) 845-9972
Email: llamoreux@vetmed.tamu.edu.

Sept 28 - Oct 1, 2000 9th Annual Meeting of the European Society for Pigment Cell Research, to be held in Ulm, Germany
Contact: Prof. R.U. Peter, University of Ulm (BWK) Dept of Dermatology Oberer Eselsberg 40 D - 89081 ULM
Tel: 49-731 502-3770
Fax: 49-731 502-3772
E-mail: ralf.peter@medizin.uni-ulm.de

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

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

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

Gisela F. Erf, Ph.D., Yoshida Masaki, Sujit S. Nair, M.Sc., Elizabeth A. Pereira, M.S., M. Cathy Scott, M.S., and Xiaoli Wang, M.S.

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

Corporate Sponsors

by James J Nordlund

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	*SILVER Corporate Patrons*
Procter and Gamble Co	Avon Products, Inc
Shiseido Co, Ltd	Galderma Laboratories, Inc
	Stiefel Laboratories
	Combe, Inc.

Farewell to Professor Fritz Anders

by Zalfa Abdel-Malek

With the death of Professor Fritz Anders on December 22, 1999, the International Federation of Pigment Cell Research lost a distinguished scholar and colleague, an active participant, and a dear friend. In the name of the Pan American Society of Pigment Cell Research, I want to express to his wife and scientific associate, and our dear colleague and friend Dr. Annerose Anders, our sadness and deep sympathy for Fritz's death.

Professor Fritz Anders was a first class scientist, who is recognized for his pioneering studies on oncogenes and tumor suppressor genes. His work on fish melanoma led to the identification of specific oncogenes and tumor suppressor genes that control the expression of malignant tumors. His contributions to cancer biology and pigment cell biology are enormous. His activities in the European Pigment Cell Society and in the Federation are tremendous. He and his wife Annerose were an exemplary team, who served as mentors for many notable scientists.

On the anniversary of Fritz's 80th birthday, The Fritz-Anders-Birthday Symposium was held in Giessen on December 2, 1999. Unfortunately, Fritz's poor health prevented him from participating in person in this honorary event, but he watched a videotape of the presentations from his hospital bed. Among the participants in the symposium were Robert Gallo, Soldano Ferroni, and Patrick Riley. Fritz will be greatly missed, particularly at our various pigment cell research meetings, but his creativity and achievements will remain a legacy and inspiration for us.

Zalfa Abdel-Malek
President-elect of PASPCR

In Memoriam - Fritz Anders (1919 - 1999)

by Patrick Riley

The following letter was written by Patrick Riley and initially posted on the European Society for Pigment Cell Research (ESPCR) web site. With Dr. Riley's permission, here is his tribute to Dr. Fritz Anders.

Fritz Anders, Emeritus Professor of Genetics at the University of Giessen died on the 21st of December 1999 a month after his 80th birthday which had been marked by a special Symposium to celebrate his important contributions to Cancer Genetics. He will be remembered not only for the wealth of new ideas which were spawned from his work on the Xiphophorus Model of melanoma but also for his energetic lectures and successful pedagogy. His enthusiasm and friendly disposition inspired several generations of geneticists.

Fritz Wilhelm Anders was born in Berlin on the 22nd of November 1919. He grew up in Prussia on the banks of the river Elbe. In 1938, instead of entering University as he had planned, he was conscripted into the Wehrmacht. He was captured on the Eastern front in 1943 and became a prisoner of war in Russia. On his release in 1948 he became a student of Education in Potsdam moving in 1951 to the University of Mainz where he worked on a doctoral thesis on "Polygenic Sex Determination in Sub-mammalian Systems" which earned him the degree of Dr. rer. nat. in 1954. Here he met and married (in 1954) Annerose Anders who became his partner, not only in a long and happy marriage, but also in his scientific career.

Survivors of Fritz Anders' enolic "Seminars" will be aware of his profound knowledge of viniculture which stemmed from his period of the Grape Breeding Institute at Geilweilerhof from 1954-1958. He qualified as Privatdozent and became Professor of Genetics at the University of Saarbrüchen in 1958. In 1964 he moved to Giessen where he was appointed the first Director of the new Institute of Genetics at the Justus Liebig University, a post that he held with great distinction until his official retirement in 1988. Thereafter, he remained at the University of Giessen as a Research Fellow in Comparative Oncology and continued to be fully involved in academic work until his death.

Fritz Anders' contribution to genetics was profound. He became interested in the genetics of tumorigenesis and the contribution of the Gordon-Kosswig fish melanoma model to the present concepts of the actions of genes in neoplasia have been very substantial. Anders originally worked on tumour induction in grapes and attended the 10th International Congress of Genetics in Montreal in 1958 where he met Myron Gordon. Gordon was showing his work of melanoma-bearing fish in which he could continuously produce and propagate the tumours by crossings of spotted platyfish and swordtails. Fritz Anders obtained some fish provided by Gordon and with Annerose Anders continued Gordon's crossing experiments. By 1962 it had become clear that the formation and inheritance of the melanotic spots of the platyfish and the melanomas of the hybrids followed the segregation of the same Mendelian gene present at a distinct locus of a platyfish-derived chromosome but which was missing in the genome of the swordtail. This gene was called a "tumour gene" and is essentially the equivalent of the general category of oncogene by modern definition. Further analysis showed that another Mendelian gene located on a different chromosome of the platyfish acted as a counterweight to the tumour gene by keeping the spots under control in purebred animals but permitting them to grow into tumours when lost by segregation in the hybrids. Anders and his team called this gene a "regulatory gene" but it is essentially homologous to a tumour suppressor gene by modern definition. In the fish model, heterozygosity for the regulatory gene resulted in benign tumours whereas homozygous absence was reflected by malignant behaviour of the melanoma. Further work demonstrated that the regulatory gene was implicated in the action of carcinogens and this was set out in a review entitled: "Tumour formation in platyfish-swordtail hybrids as a problem of gene regulation" which appeared in Experientia 23: 1-10 (1967). Further work showing the existence of stable hybrid genotypes developing heritable tumours of other systems suggested that the system might be a general mechanism for tumour formation based on impairment of oncogene-specific suppressor gene activity. In 1969 an evolutionary tree of 20 oncogenes from sponges, sea anemones, cuttlefish, limulus sharks, Xiphophorus, frogs, snakes, chickens, mice and pigs up to humans seemed to confirm this view. Further work led to a partial elucidation of the molecular mechanisms involved in oncogene activity culminating in the identification of the x-erb B oncogene and several papers dealing with transduction mechanisms thought to be involved in tumour growth. The most recent studies from Anders' laboratory have been related to the attempt to trace and identify non-Mendelian elements which appear to modify the balance between suppressor genes and oncogenes. These elements appear to exist in multiple copies in the telomeric chromosome regions. This third class of onco-determinants were named "paragenetic suppressors of suppressor genes" and may be significant in providing a lead to the molecular understanding of world-wide increases in the incidence of many cancers.

Fritz Anders was highly active in professional societies. He was one of the re-founders of the German Genetic Society after World War II and was its Secretary and President and continued to be an active member. He was also a member of the Genetics Society of America, the American Association for Cancer Research, the International Academy for Tumour Marker Oncology, the German Cancer Society, the German Society of

Biochemistry and Molecular Biology, the German Zoological Society, the Naturforscher Leopoldina and the ESPCR, of which he was an Honorary Member. Fritz Anders was a superlative speaker and was invited to give many named public lectures. His expertise was in great demand as a reviewer of grants and he served on the Editorial Boards of many Journals, including Pigment Cell Research, Melanoma Research, The International Journal of Oncology, Critical Reviews in Oncogenesis and many others. His contribution to science was widely recognized and Fritz Anders was the recipient of many honours including the Myron Gordon Award (together with Annerose Anders), the Emil Salzer Prize (with Annerose Anders), the Gottron-Just-Wissenschaft Prize, the German Cancer Prize (with Annerose Anders), the Mildred Scheel Memorial Lecture and the Prince Hitashi Prize for Comparative Oncology.

Fritz Anders was a highly respected scientist with a well-earned international reputation for originality and intellectual rigour and he leaves a legacy of work which will continue to have an impact on the genetics of malignancy. Above all, Fritz Anders was a gentleman and a true and loyal friend. His mischievous humour and sense of fun, which was never far from the surface, will be sorely missed by his many admirers in the scientific community at large and not least by his many friends in the ESPCR.

Patrick Riley, 11.1.2000

Notice on Professor Yoshiaki Hori

by Shosuke Ito

Dear IFPCS Council members:

It is very sad to inform you that Prof. Yoshiaki Hori, former professor of Kyushu University and ex-Vice President of the IFPCS, passed away on March 5. He had been ill for some time. It is a great loss to the pigment cell community.

The official funeral will be held on March 26 in Fukuoka, to which Dr. Jiro Matsumoto and myself will certainly attend. If you need any more information, please let me know.

Sincerely, ***Sho***

Results of the PASPCR Council Elections 2000

by Richard A. King

The election for three council positions was held in January, 2000. The following individuals were elected for a three-year term, for the period 2000-2002

Mary K Cullen
Randall Morrison
Vijayasaradhi Setaluri

We congratulate these individuals as new members of the PASPCR council and look forward to their contributions to the Society.

19th International Pigment Cell Conference

The PASPCR and IFPCS invite members of the PASPCR to submit proposals for hosting the 19th IPCC. In 2005 the IPCC will be held in the Americas (North, Central or South). Those interested in hosting and chairing this meeting should prepare their invitation to present to the Council of the PASPCR meeting at College Station, Texas during the June 25-28, 2000.

The interested parties should present the advantages of hosting the meeting in their city and university; general plans and topics or themes; proposed levels of funding and sources of funding; plans for organizing the scientific meeting; conference facilities; hotels and recreation or other topics that will help the Council of the PASPCR select the best site for this meeting.

Vince Hearing at NIH and Jim Nordlund at Cincinnati both have indicated their interests in hosting the meeting. Others interested should contact Dick King at the University of Minnesota to indicate their interest.

Subscribe to *Pigment Cell Research* by Jim Nordlund

Feeling Guilty!

Pigment Cell Research is the sponsored journal for our society and for the IFPCS. The Japanese are required to subscribe as part of their membership in the JSPCR. Vince Hearing is the new editor and has lots of great ideas to make the Journal better than ever.

Only 33 members of the PASPCR have subscribed so far. That is disappointing and shameful. All regular members (non students) should feel guilty if they have not subscribed. The journal will get better only if we support it. Please renew or start your subscriptions immediately while you still can get all the issues from this year.

Notice: Please renew your membership to PASPCR as soon as possible. Those who do not renew must pay a larger registration fee at the annual meeting in College Station, cannot apply for travel assistance.

Please get your membership dues in soon along with you PCR subscription.

Thanks,

Jim

Pigment Cell Research - into the next Millennium by Vince Hearing, *Editor*

Hopefully by now many of you will already have seen the new format of our journal ***Pigment Cell Research***. The journal has had an interior and exterior face-lift that goes beyond the cosmetic changes immediately visible and embraces dramatic changes in editorial policy. I would invite each of you to visit our Web Site (www.pigment.org), which I hope will develop into a focal point for everyone in the field. Click on the 'Register' button and sign up for 'The PCR Primer' (cf below) or volunteer to help us review manuscripts. There is a

'Search' page where you can search all the archived issues of ***Pigment Cell Research*** for articles published on your favorite topic(s). We have a 'Hot Links' page that lists various scientific DataBases of interest to pigment researchers, an 'Archives' page that lists all papers published to date in the journal (and their abstracts). Even better, the 'Current Issue' page shows the contents and abstracts of the issue that just came out, and the 'In Press' page lists papers that have been recently accepted and are in press. The publisher (Munksgaard) will soon have ***Pigment Cell Research*** online (details forthcoming), but at this time there are no plans to publish articles from past years electronically and our Web page will be the only source for that information (unless you've been subscribing all this time).

I'd encourage each of you to sign up for 'The PCR Primer', an Email notification of journal activities, which will be published bimonthly as each issue is released, or as necessary when other breaking news develops. You can sign up for that by clicking the 'Register' button (you can also take your name off the Email list there if you wish). You can send comments to the Editor and/or register to review papers submitted to the journal from that same page.

You might be surprised at the quality of papers you'll see being published in the journal this year, particularly as issues come out later this year that have been handled by the current board of Associate Editors. I picked my Associate Editors based on their fields of expertise, their active research in those fields, their energy levels and their opinionated views on how a top-notch scientific journal should be run at the Editorial level. We've been working together closely this past year getting ready and you'll see the fruits of our efforts in the spectacular line-up in store for you this coming year. For example, each issue will contain a Major Invited Review, a Review on a specific Pigment Gene and its associated Disease, and a Review on an Innovative Technology being developed that has application in our fields. Increasing the quality and speed of published articles has also become a top priority, and this has come at an expense, notably an increase in the rejection rate for the journal which is rapidly approaching 50%. We invite you to submit your articles to ***Pigment Cell Research***, but please make them your best ones or you may have an unpleasant surprise in store.

So the next time you're surfing, stop by and check us out - all suggestions for improvement of the Web Site, or the journal, are welcomed.

So, What's in a Name? Tales from the Internet.

The internet has definitely changed how the exchange of information takes place. The following is a series of emails that were posted over several days discussing the correct terminology for the agouti mouse. The participants in this discussion were Vince Hearing (Bethesda, Maryland), Dot Bennet (London, England), Lynn Lamoreux (College Station, Texas) Greg Barsh (Stanford, California) and Ian Jackson (Edinburgh, Scotland). I am sure that this type discussion will continue as the gene products of more loci are isolated and identified; Whether the name is based on the phenotype, or the function of the gene product.

From Vincent Hearing Thu 02/10/2000 10:56 AM

Dear Colleagues -

An interesting paradox has just sprung up and I hope you can give me your feedback on this quickly. Friedo Beermann was kind enough to offer to write (with Ian Jackson and Siobhan Jordan) a short article summarizing pigment gene nomenclature for Pigment Cell Research. There is a lot of confusion and name changing in the field right now and this article should put that to rest. We will probably publish updates of it as time progresses. In their article, they referred to the 'a' locus as 'non-agouti' and I was surprised because I thought the consensus was that it's official name was the 'agouti' locus. I thought nonagouti was a term used to refer to black mice mutant at that locus.

If one refers to the Table published on the IFPCS Web base (URL =http://www.cbc.umn.edu/ifpcs/micemut.htm) one finds that the locus is referred to as 'agouti' (as I expected). I should point out that this very useful Table has been designed and updated by Dot Bennett and Bill Oetting. Here is the shock. If you click on the 'agouti' hyperlink to the MGI database, you will find that it is called 'nonagouti' there. How did this arise? What is correct? I need to be enlightened here in the next week or two so that we can list things consistently (and as a last recourse accurately) in these various places. I'd appreciate your input on this and if you want to solicit information from your knowledgeable colleagues not on this distribution list, please feel free to do so.

Thanks in advance for your help, /s/ Vince

From Dot Bennett Thu 02/10/2000 11:54 AM

Dear Vince,
I'm no authority, but here are the first 5 places I looked for an expert opinion:

Silvers, 1979: agouti
Brilliant and Barsh , chapter in the Pigmentary System: agouti
Shibahara, ditto: agouti
Bultman et al, Cell 1992, "Molecular characterization of the mouse agouti locus"
Lamoreux & Russell 1979, J. Hered.: agouti

Howzat? What I can't figure out is how it got to be nonagouti in the MGI. Ian, do you know?

regards

Dot

From Lynn Lamoreux Thu 02/10/2000 1:30 PM

Hello, Vince,
In all my lifetime of talking about this locus I have not heard it called the nonagouti locus. However, there is a nomenclature committee which names these loci nowadays, and they often disregard the historically correct names. The Jackson Laboratory should be following the nomenclature chosen by the committee. My guess is, however, that they made a mistake on their web page and that the correct name of the locus is the agouti locus. If you want me to follow up on this I'll be happy to, but I suspect that you have already emailed a member of the nomenclature committee.

From Lynn Lamoreux Thu 02/10/2000 1:30 PM

If Lamoreux and Russell says it's agouti, then that clinches it!

LL

From Greg Barsh Thu 02/10/2000 2:14 PM

Dear Vince,

I think both terms are correct. The MGI MLC is to some extent a descendant of the "Lane list" in which loci were named after their variant phenotype, e.g. the Steel locus, the albino locus. The "normal" or at least probable ancestral allele is A^W or white-bellied Agouti (note that "wild-type" can mean the ancestral allele or the allele(s) in wild mice), but there are too many alleles of Agouti and too many isolates of wild mice with different Agouti phenotypes to argue convincingly for any particular view regarding "proper" nomenclature. I anxiously await the input of my colleagues and would appreciate learning what Little and Gruneberg had to say if anyone has the relevant volumes on their shelves.

Greg.

From Lynn Lamoreux Fri 02/11/2000 9:13 AM

How about Searle (comparative coat color genetics). Refers to as "agouti series." I think Lane would say agouti locus, since that's where I learned the term. I am distressed that Little has disappeared from my office!

LL

From Ian Jackson Mon 02/14/2000 6:35 AM

Hello All,

I am just back to the lab and have followed the debate on agouti/nonagouti with interest (in my capacity as Chair of the International Committee for Genetic Nomenclature of Mice) as it highlights a fundamental principle of nomenclature. The issue is not what the name is, but what is being named. What is a locus? Strictly speaking it is a place in the genome that is identifiable by some means. As Greg pointed out very nicely; historically genes (loci) could only be identified by their mutant phenotypes; hence albino, brown, pink-eyed dilution, dilute. Agouti is a bit different as there was, in addition to nonagouti, recessive to agouti, also white-bellied agouti dominant, but the major

reason why the name has become "agouti" is that this phenotype has a handy name. In contrast what is the name for the wild-type phenotype of these other loci? There isn't really one.

But when a phenotype is mapped, it is the locus of the phenotype that is mapped; so the nonagouti locus. So when we happily talk about the "brown locus" and the "agouti locus", we are simply giving names to phenotypes; in one case a mutant and in the other a quasi-wild-type. Once a gene is identified by other means (a protein, a DNA clone) then the notion of "locus" changes, it is now identified more precisely by that protein or DNA segment. This is the reason that the Nomenclature Committee decided that once a gene whose existence is inferred by a mutant phenotype is cloned, then a name should be given to that gene which reflects what the gene does (is?), and the mutation given the name of the phenotype. So we now have "tyrosinase" replacing "albino" as the gene name. We can still talk about "albino mice" describing the phenotype or the "albino mutation", but albino is a mutation of tyrosinase, and symbolised in italics Tyr<c> (by convention <> denotes superscript).

So now we have a problem when we get to agouti (and pink-eyed dilution and silver to name 2 more) in which the gene product does not have a name distinct from a phenotype; and this is something I plan to address in the future, so that there is no confusion between these quite distinct entities, but it will take time to contact all those who have interests in the genes.

Incidently, the entry in MGI is not in conflict with anything discussed here. If you search for "agouti" you pull up the symbol "a"; this is a mutant phenotype whose name is "nonagouti". They do not talk about a locus.

I hope this clarifies things; I look forward to any comments

Ian

From Lynn Lamoreux Mon 02/14/2000 7:37 AM

I think that does not answer the question, which was -- what is the correct designation for the agouti locus? I think it is not appropriate for us to retroactively change the name of a locus that was established by convention and by a previous nomenclature committee. Therefore, until we decide what to name the gene locus product (which is now called by me "agouti locus protein," though I would modify that designation to something a bit more precise and formal in a publication) we should not change the name of the locus.

LL

From Vincent Hearing Mon 02/14/2000 7:40 AM

Dear Ian -

Thanks for the explanation and I think it does clarify things. If I can throw my 2 cents (pence) in, it seems to me that nomenclature rules are fine as long as they clarify, standardize and simplify things. In such cases, the names proposed will be accepted quickly and used. But there also should be some degree of historical perspective here for pre-existing conditions, with 'agouti' as a prime example. The literature for the past 40 or 50 years has referred consistently to the 'agouti' locus and if the name is now changed to 'nonagouti' (as an example) the danger of everyone thinking these are 2 distinct loci seems real to me. As is mentioned in Beermann's review, if we don't agree on a universal name, much information is lost in the literature database. Take for example what has already happened with silver, which depending on whether you are an immunologist, clinician, etc goes under the guises of silver / gp100 / Pmel17 / HMB45. It is certainly true that those of us intimate with the field will know what is meant by the new 'Dct' locus, but the majority of papers now being published still refer to that as TRP2 or slaty. Have we done the field a favor by throwing additional complications into these names? I for one don't think so. I would much rather a single name be chosen that everyone can/will use, even if it is not 'appropriate' by genetics standards, than to have a plethora of names that people use almost randomly depending on their particular scientific specialty. I know mine is a lonely voice but I do hope the nomenclature committee does take practicality into consideration in its deliberations. I don't envy you this challenge in the slightest and I'll look forward to hearing what is finally decided. The next challenge will be to disseminate that information to everyone and get them to use it.

Best regards, Vince

From Ian Jackson Mon 02/14/2000 8:02 AM

Lynn Lamoreux wrote:
>
> I think that does not answer the question, which was -- what is the correct designation for the agouti locus? I
>think it is not appropriate for us to retroactively change the name of a locus that was established by convention
>and by a previous nomenclature committee. Therefore, until we decide what to name the gene locus product
>(which is now called by me "agouti locus protein," though I would modify that designation to something a bit
>more precise and formal in a publication) we should not change the name of the locus

Hi, Lynn,

What would you call it if you were being a bit more precise and formal?
In my previous mail I don't argue against use of the term "agouti locus". What I thought I was doing was arguing against the use of the word "locus" except in a genetic sense. "Gene" is much better.

Ian

From Ian Jackson Mon 02/14/2000 8:03 AM

Vincent Hearing wrote:
>
> Dear Ian -
> Thanks for the explanation and I think it does clarify things. If I can throw my 2 cents (pence) in, it seems to >me that nomenclature rules are fine as long as they clarify, standardize and simplify things. In such cases, the >names proposed will be accepted quickly and used. But there also should be some degree of historical perspective >here for pre-existing conditions, with 'agouti' as a prime example. The literature for the past 40 or 50 years has >referred consistently to the 'agouti' locus and if the name is now changed to 'nonagouti' (as an example) the danger >of everyone thinking these are 2 distinct loci seems real to me.

I'm not arguing against using agouti, but I think "locus" should be used carefully; "gene" is better.

> As is mentioned in Beermann's review, if we don't agree on a universal name, much information is lost in the >literature database. Take for example what has already happened with silver, which depending on whether you > are an immunologist, clinician, etc goes under the guises of silver / gp100 / Pmel17 / HMB45. It is certainly true > that those of us intimate with the field will know what is meant by the new 'Dct' locus, but the majority of papers >now being published still refer to that as TRP2 or slaty. Have we done the field a favor by throwing additional >complications into these names? I for one don't think so. I would much rather a single name be chosen that >everyone can/will use, even if it is not 'appropriate' by genetics standards, than to have a plethora of names that >people use almost randomly depending on their particular scientific specialty. I know mine is a lonely voice but I >do hope the nomenclature committee does take practicality into consideration in its deliberations. I don't envy you >this challenge in the slightest and I'll look forward to hearing what is finally decided. The next challenge will be >to disseminate that information to everyone and get them to use it. Best regards, Vince

I wouldn't use Dct locus; I'd say Dct gene. The problem with using slaty is that if you say "salty gene product" do you mean the wild type product of this gene or the product of the slaty-mutant gene?

Ian

From Dot Bennett Mon 02/14/2000 8:37 AM

Dear All, and Ian in particular,

Ian, correct me if not, but I think you were saying that
(a) the locus is most often called agouti,
(b) if one is specifically discussing the black phenotype, the same locus may be referred to as the nonagouti locus,
(c) the best thing to do for the future is to name it after its product, as with Dct, Myo5a etc etc.

That does seem ultimately the clearest / most scientific. I agree with Vince that one name should be agreed upon, and this seems the best way of picking one. I don't have a problem with traditional locus names like brown being dropped in favour of the gene product.

PS: After last messages I see that (c) refers to what to call the gene, not the locus.

In the case of agouti, you (Ian) said that that might be confusing, as one name for the product is the same as the phenotype: agouti protein. Right? 2 views on that: The first is that if the name agouti stays (now conveniently referring to the product), anyone who is attached to the traditional name is happy. The second view is that it really is easy to get mixed up between locus, phenotype and mutation, not to mention gene (I've done most if not all of those), and actively giving them different names therefore might make discussions clearer.

On thinking about it a bit longer, maybe I marginally prefer the second view (sorry Lynn!). Except (Ian), you wouldn't suggest having different names for the gene and the locus, would you? You are rather suggesting avoiding using the word locus at all, except in reference to map positions & the like?

We also have from other discussions that it is good to try to get the mouse and human genes (and for that matter all other homologs) to have the same name. The human gene is ASIP (Agouti signal protein), isn't it? So any votes for Asip for the mouse gene?

best wishes
Dot

P.S. for *PASPCR Newsletter* readers: actually ASIP is a gene symbol, not a gene name. The human gene name in the OMIM database is Agouti signaling protein.

From Lynn Lamoreux Mon 02/14/2000 10:02 AM

Oh,Oh, Vince, you have raised another problem. You can't refer to a locus as a gene because the term locus implies that functional location on the chromosome including ALL THE ALLELES. A gene is actually a pretty vague term, but it does tend to refer to a specific sequence (allele) and therefore is not at all synonymous with the concept of locus. Locus is a word that arose at the descriptive stage of the science and in my opinion is a valuable tool for that level of discussion. We do have to discuss at that level in order to communicate the concept of alleles.

LL

From Lynn Lamoreux Mon 02/14/2000 10:16 AM

Ian,

I must have just answered my opinions of locus in my comments to Vince, as I'm going through my emails in reverse order.

I would more formally refer to the agouti locus as the locus which encodes the ___protein or the protein encoded by/at the agouti locus, and I would be happy when we find a specific name for that protein so I could stop doing this.

However, I find the term locus essential to communicate with (especially undergraduate students) in developing the concept of what are genes. To me a specifically named gene is defined as the sequence (probably including regulatory elements) that encodes a particular protein and only that sequence -- not the variants thereof. Alleles are variants (each is a separate gene) that are supposed to have that same function (but in many cases do the function incorrectly). I'm sure you can tell by that description (as opposed to definition) that I find it necessary to take the students from the(visual? intuitive?) level of understanding toward the more clinical, definitive level of understanding. People who are already geneticists usually don't need this.

I think the term "gene" is even more hazy than the term "locus," because it means so many different things to different people. It's much easier to define a locus (at the level where the term is appropriately used, which may not be the molecular level) than it is to define a gene (at any level). I also think we should not contribute any additional meanings to the term gene.

By the way, I'm delighted you got my email. The previous was kicked back again.

Lynn

Positions - Wanted and Available :

Postdoctoral position - Ph.D. in molecular or cellular biology. Position available in the skin research center of Johnson & Johnson to study molecular and cellular mechanisms involved in pigmentation. Experience in tissue culture, molecular and cellular techniques and microscopy is required. Please send CV, brief description of experience and names of three references to Dr. M. Seiberg, 199 Grandview Rd., Skillman NJ 08558 or MSEIBER@CPCUS.JNJ.COM

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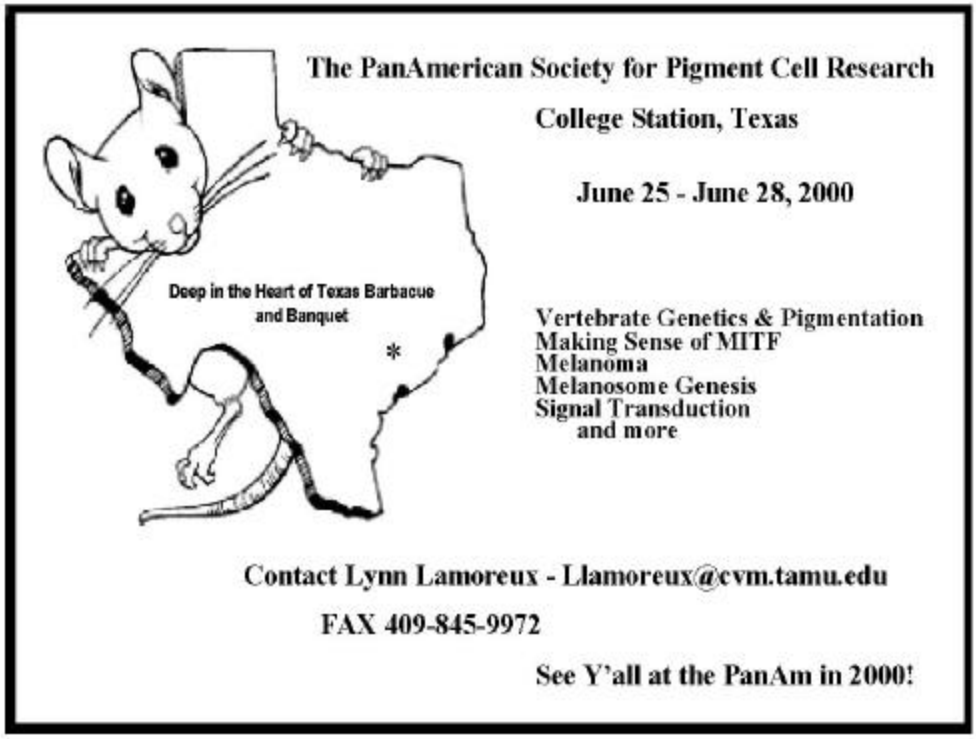
Postdoctoral Position - Ph.D. in molecular biology, biophysics, genetics or biochemistry. Position available to conduct research on molecular mechanisms of cellular response to oxidative stress in human melanocytes and melanoma cells and its regulation for preventive and therapeutic indications. Contact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



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Deadline for abstracts is March 15 (April 15 without publication in *Pigment Cell Research*)

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We plan a good old Texas Barbecue with cowboy rope spinning demonstrations and our famous student square dance group. Good food, of course, and don't forget the animal models. We don't yet know whether or not we can get "Second Chance" (you probably saw him on the morning news -- our little Brahma bull cloned from a fibroblast of his -- self?) but we will have examples of most of the murine pigment mutants that are available in our mouse colony, representing nearly all the loci that you read about in Pigment Cell Research and other journals. We hope the Sinclair (melanoma/vitiligo) swine can attend (as guests, not participants), but if not we will arrange a tour during one of the lunch breaks.

And the grand banquet will be held at our own Mesina Hof Winery. Spouses - George Bush Library, Texas A&M University, a terrific exercise facility and other attractions.

SEE YOU IN JUNE! *Lynn*

Dr. M. Lynn Lamoreux
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Texas A&M University
College Station, TX 77843-4467

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The Bibliography published in this issue covers the period November, 1999 through January, 2000. If you notice a paper that was not detected by this search that should be included, please send it to us and we will include it in the next issue. By its very nature, assignment of a reference to a particular category is arbitrary and we urge you to read through all categories to make sure you don't miss any pertinent to your field. We have attempted to highlight any publications which include a member of the PASPCR with a star (*sorry if we missed you but let us know and you'll get a free marked repeat in the next issue*).

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