EMBL &cetera

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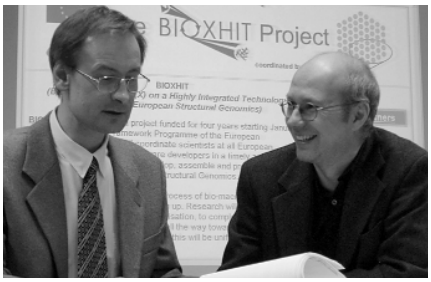
February 2004

Newsletter of the European Molecular Biology Laboratory



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New collaborative projects for EMBL

Two major grants from the European Commission will boost large new projects at the EBI, Hamburg Outstation, and the rest of the Lab. 12 million Euros goes to the BioSapiens project to create a pan-European Network of Excellence in bioinformatics. Hamburg will coordinate a 28-partner project to promote an integrated technology development project for structural biology, called BIOXHIT. Find out more... on page 2

Scientific advisors meet in Berlin

The Italian Embassy in Berlin was the place to be on Thursday, January 29, as representatives from EMBL gathered to meet with an international group of scientific advisors from several countries. They discussed some key elements of EMBL's excellence, including scientific highlights, services, recruitment and international training and education. The event is one of the first that will lead up to the Laboratory's 30th anniversary celebration in November this year. on page 3

A modest proposal regarding Mars

Friends should help one another in a time of need, and rarely has there been a clearer case of need than the recent loss of ESA's Mars lander. What an ideal time for ESA's collaborators in the EIROforum to pitch in and give a helping hand, combining their wide, interdisciplinary expertise in science to find and bring home the space probe. Wilford Terris, our correspondent from Rome, pitches in with some helpful suggestions in the column *from the sister sciences.* on page 8

November Science and Society conference to explore time and aging

Circadian rhythms, developmental clocks, genetic reprogramming, and chromosomal erosion. Human biology and genetics have uncovered much about the nature of time and aging in living organisms. But how does this affect us? Scientific discoveries can lead to cures or therapies for degenerative diseases, allowing us to live longer and healthier lives. Is aging normal and inevitable, or is it a form of disease, and therefore curable? Could we one day be immortal? To what extent is immortality desirable? These are some of the questions that experts from a variety of disciplines will discuss in an open debate during "Time and aging – mechanisms and meanings," the 4th annual EMBL/EMBO joint conference on Science and Society, to be held at EMBL Heidelberg on 5–6 November 2004. Find out more at www.embl.de/ExternalInfo/SciSoc/scisoccon04.html

Being an EMBL kid

In the last issue of EMBL*&cetera*, Selene States brought you the inside scoop on the recent baby boom at EMBL. In this issue, she follows up and explores what happens to EMBL kids as they grow up. Moving between countries is a fundamental part of a scientific career today. Many of the Laboratory's families have parents from different countries, who speak different languages. Children are exposed to their parents' cultures, but also to the traditions of their host country. They are in a unique position, and have a unique perspective. Selene tells us what it's like to grow up as an EMBL kid. She should know, because she is one... on page 10

in this issue...

EMBL-Hamburg coordinates a 10 million Euro collaborative technology project

The European Commission has given Europe a huge boost in the field of Structural Genomics, awarding EMBL-Hamburg, EMBL-Grenoble, EMBL-EBI, EMBLEM and its partners 10 million for an integrated project called "BIOXHIT" (Biocrystallography on a Highly Integrated Technology Platform).

The goal is to take the best of current technologies at major European centres for research in structural biology, develop them further and weave them into a single integrated and standardized platform and make them available to users across Europe. A proactive training effort will also take place at synchrotron facilities, and then be spread to satellite centres to disseminate biocrystallography technologies to local European communities.

"We already have all the single components necessary to solve molecular structures," says project coordinator Victor Lamzin, EMBL-Hamburg. "We have synchrotrons, we can grow protein crystals, we have the software components, and we can obtain structures. But the tools we use were not originally designed for high-throughput work. This is what is needed now because of the tens of thousands of new molecules we have discovered in the many genome sequencing projects."

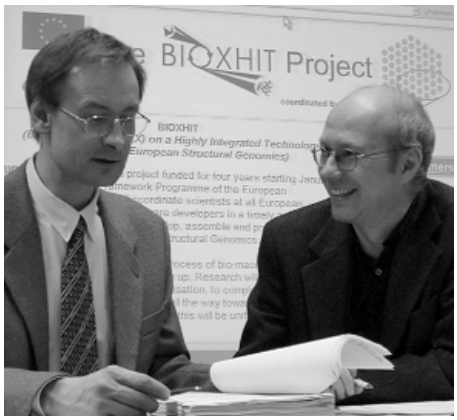
More than a quarter of the project funds will go to the EMBL units in Hamburg, Grenoble and Hinxton. EMBL-Hamburg coordinates the project and its 27 partners from nine European countries, including scientists at all European synchrotrons. BIOXHIT combines a strongly focused research programme with networking, training and mobility of staff under a single and efficient management structure.

Several new European synchrotrons, now on the drawing board, are scheduled to go online by 2006 or 2007. BIOXHIT calls for the new synchrotrons to begin using the platform from their first day of operation.

"Biocrystallography used to be a field for specialists," Lamzin says, "but today, researchers from all walks of biology want to solve molecular structures at the synchrotrons. The new platform will make this process very user-friendly; it will even allow them to send us their samples and work remotely, from their own institutions."

One immediate effect of BIOXHIT will be a significant reduction in the time needed to obtain each model. Robots, for example, will replace time-consuming manual steps to perform tasks automatically and with high precision.

EMBL-Hamburg will organize and host the BIOXHIT kick-off meeting for all partners to officially launch the project in April 2004. More information can be found at www.bioxhit.org.



EMBL Hamburg scientists Victor Lamzin and Manfred Weiss discuss the new multimillion Euro project BIOXHIT.

EC awards 12 million Euros to collaborative bioinformatics project

The European Commission has awarded 12 million to bioinformaticians based in 14 countries throughout Europe to create BioSapiens – a pan-European Network of Excellence in Bioinformatics. Janet Thornton, Director of the EBI, will coordinate the network, which includes groups at both the EBI and EMBL, and many of the EBI's data resources. The network aims to address the current fragmentation of European bioinformatics by creating a virtual research institute and by organizing a European school for training in bioinformatics.

Why is BioSapiens important to EMBL staff? The network will put structures in place to improve everybody's access to genomic, proteomic and functional data – information that molecular biologists need all the time. "The development of methods, tools, and servers in close interaction with experimentalists is one feature that distinguishes the network from previous pan-European efforts in bioinformatics," says Thornton. New methods developed by bioinformaticians will be tested and improved upon using data from experimentalists. "Although there are 24 formal partners, BioSapiens is not a closed shop: once the infrastructure is established, a primary goal is to make this an open network to promote bioinformatics throughout Europe."

BioSapiens is funded through the EC's "Network of Excellence" instrument under the sixth Framework Programme (FP6). It will be coordinated by a steering committee comprising Janet Thornton (chair), Søren Brunak (Technical University of Denmark), Anna Tramontano (University of Rome "La Sapienza") and Alfonso Valencia (Consejo Superior de Investigaciones Científicas, Madrid), and a project manager, Kerstin Nyberg (EBI).

The goal of BioSapiens is to coordinate and focus excellent research in bioinformatics, by creating a Virtual Institute for Genome Annotation. The institute will be divided into nodes, each focused on one aspect of genome annotation. The annotations generated will be integrated and made freely accessible to all through a single portal on the web, and will be used as a means of guiding future experimental work.

Another important aim of the network will be to set up a permanent European School of Bioinformatics. "There is a clear need to train and recruit creative and innovative young scientists in this field and at the same time to help users located in experimental labs to keep up with the latest developments," explains Anna Tramontano, who will coordinate the school's activities. "The network will provide extensive training at all levels, from basic courses for experimentalists to more advanced training for bioinformatics experts," she adds.

And finally, while BioSapiens is primarily a basic research network, it will indirectly benefit the exploitation of biological information to address important social objectives, including improved health-care, better drugs, new vaccines, personalized medicine, and improved understanding of diet and health.

"The network will stimulate Europe's economic growth by creating new business themes and employment, improving European competitiveness in the bioinformatics and life science industries, and promoting mobility and knowledge sharing," explains Thornton. "BioSapiens will also help to maintain Europe's strong global position in bioinformatics, allowing Europe to compete with the major investments made in this area in the USA, Canada and Japan. When Europeans work together, maximizing collaboration and minimizing duplication, we are better able to meet major challenges such as exploiting the ever-increasing volumes of data and ensuring Europe's full participation in global scientific initiatives."

– Cath Brooksbank

International scientific advisors meet for an EMBL Day at the Italian Embassy in Berlin

Thursday, January 29th was definitely "EMBL Day" at the Italian Embassy in Berlin.

As one of the first events leading up to the Laboratory's 30th anniversary celebration in November this year, EMBL was invited to the Italian Embassy in Berlin. It was a chance for the Laboratory to introduce itself as a leading European scientific institution to a group of key scientific advisors from several countries.

His Excellency Silvio Fagiolo, the Italian Ambassador to Berlin, delivered a warm welcoming address followed by a greeting from Prof. Vincenzo Dovi, Scientific Advisor to the Embassy and a proud EMBL alumnus.

Twenty-eight delegates from various countries including EMBL Member States and Eastern European countries, as well as Singapore, China, India, Japan, and Canada, listened intently as Director-General Fotis Kafatos presented EMBL's past, present and future. He described the building blocks and key elements needed to establish and maintain EMBL's scientific excellence.

Next, EMBL-Monterotondo director Nadia Rosenthal presented EMBL's Science and Culture from an American perspective. Referring to recent discussions in several European countries about how Europe can become more attractive to leading scientists, Nadia expressed what had attracted her to join a leading European institution and leave her position at top American institution, Harvard University.

To conclude the presentations, Matthias Hentze, Dean of EMBL's International PhD Programme, gave the listeners insight into one of the cornerstones of EMBL's mission: international training and education. He emphasized the mechanism of rigorous selection by which only the best candidates qualify for the programme. Matthias also stressed the importance of continuous support and independence for each student throughout the programme.

Photo by Maj Britt Hansen

Italian Ambassador Silvio Fagiolo and EMBL Director-General Fotis Kafatos at the meeting between EMBL representatives and science attachés.

The presentations were followed by a lively question and answer session, after which the participants recessed to a cocktail reception in the hall of the embassy. Enticed by a tempting Italian buffet, EMBL scientists and scientific advisors discussed at great length the benefits that EMBL brings to the international scientific community.

– Heidi Noack and Trista Dawson

Partnership for Structural Biology celebrates its first anniversary with a science day

In November 2003, the Partnership for Structural Biology (PSB) celebrated its first anniversary. To mark the occasion, researchers held a PSB Science Day at the lovely Chateau de Sassenage near Grenoble in December. The meeting was organized by Outstation head Stephen Cusack and the new scientific director of the European Synchrotron Facility (ESRF), Sine Larsen. In attendance were about 120 scientists from EMBL, the neighbouring institutes ESRF and Institut Laue-Langevin (ILL), the French Institut de Biologie Structurale (IBS) and the Institut de Virologie Moléculaire Structurale (IVMS).

Stephen Cusack started the meeting with a historical overview of the collaboration and applauded the extraordinary efforts made by all partners over several years. "Their commitment," he said, "has been instrumental in determining the success of the PSB."

Now that the partnership is a year old, things are falling into place. Construction of a new building next to the EMBL building on the joint ILL/ESRF site is expected to be completed in the summer of 2005. The facility will house the members of the PSB as well as the newly established IVMS.

That science had been the driving force all along was evident from the presentations. In many cases collaborations have been running for years across institutes: the opportunity to bring these groups into closer spatial proximity will greatly increase the efficiency of the operation. At the core of the PSB is the development of novel methods for high-throughput crystallography. Individual institutes working on their own would only be able to set up operations at a much smaller scale. Pooling resources and combining experience and equipment are allowing the partners to meet this challenge with much more power.

For example, both EMBL-Grenoble and the IBS are setting up liquid-handling robots with complementary functions which are now jointly used by all the PSB partners for high-throughput cloning, expression, solubility screening and protein crystallization. The EMBL/ESRF Joint Structural Biology Group (JSBG) is developing instruments for the automation of data collection and beamline control. Efforts are focussing now on the automated beamline ID23 specialized in high-throughput measurements and equipped with the EMBL automatic sample changer and microgoniometer.

Another example is the deuteration laboratory initiative, "D-Lab", involving ILL, EMBL, the IBS, and other European partners outside Grenoble. A deuteration facility housed in the PSB building will help develop improved systems and technologies for the production and analysis of deuterium-labelled biological macromolecules for NMR and neutron scattering experiments.

The close connection between the activities of the PSB and broader European initiatives such as SPINE (Structural Proteomics in Europe), BIOXHIT (see facing page) and D-Lab, together with the involvement of other industrial and academic partners (notably Portugal) demonstrates that the PSB is not just a local affair but very much in the spirit of "structuring the European Research area."

Bill Stirling (ESRF Director General) concluded the meeting by confirming the ESRF's enthusiastic support of PSB. He emphasized that scientific collaborations and internationality should be at the forefront of the partnership and he proposed that a similar PSB meeting is held at least once a year. Colin Carlile (ILL Director General) also commended the success of the partnership and observed that the "PSB clearly is successful given that everybody claims fathership."

The atmosphere of the meeting was one of optimism and excitement over what has been achieved in a relatively short time and what possibilities the collaborations within the partnership offer to individual groups. Many of the younger participants seemed to realize for the first time the potential that this partnership has for their own research and this excitement was tangible throughout the day.

– Silke Schumacher, Stephen Cusack and Christoph Müller

EMBL's Stephen Cusack (left) and the ESRF's Sine Larsen (right) listen to presentations at the PSB Science Day in Grenoble on December 11, 2003.

University of Heidelberg Rector Peter Hommelhoff visits EMBL

On January 20, 2004, Heidelberg University Rector, Peter Hommelhoff visited EMBL. He met with senior members of the lab to discuss the partnership for molecular medicine between the two institutes. Professor Hommelhoff and his colleagues toured some of EMBL's facilities, including the Advanced Light Microscopy Facility. From left to right are Christian Boulin, Peter Hommelhoff, Nicole Sommerschuh, Jochen Tröger and Rainer Pepperkok. (*Photo by Marietta Schupp.*)

news from EMBL's PhD Programme

- On December 5, Malgosia Duszczyk and Mikko Taipale were elected the 2004 predoc representatives on the EMBL Graduate Committee. For the next year they will serve as liaisons between the student body and the PhD Programme administration. Outstations also have local representatives. For the EBI they are Nikos Darzentas and Carolin Kosiol; for Monterotondo it's Thomas Pedersen. New representatives for Grenoble and Hamburg will be elected soon.
- Milanka Stojkovic has joined EMBL as a graduate office administrator. Together, she and Tiziana Novarini will help guide EMBL predocs through their studies at the lab. You can find them in room V308, upstairs from where their office used to be.
- EMBL has signed a partnership agreement with the University of Copenhagen in Denmark, bringing the total number of agreements that EMBL has with national universities to twelve.
- It's that time of year again! On March 8, PhD candidates will arrive on EMBL-Heidelberg's doorstep for the annual predoc selection week. Of the 423 students that submitted applications, 88 were invited for interviews. Fingers crossed!

What's new for Lab Day and the Faculty Retreat 2004

Rolf Apweiler, Christoph Müller, and Pernille Rørth are on the job to restructure Lab Day and the faculty retreat and make them events that you won't want to miss. Here's the low-down:

If you haven't already marked Lab Day in your calendar, do so now! Activities will get underway on Tuesday, June 15 at 14.00 and will end the next evening. Events will be structured so that the fascinating science going on in groups across the EMBL sites takes centre stage. It will all take place at EMBL-Heidelberg, so plan your trip now. To welcome those coming from far off places (like Hinxton, Grenoble, Hamburg and Monterotondo), Heidelberg groups will each host a visiting group. An updated program and more information will soon be available at the Lab Day website:
www.embl.de/LocalInfo/labday/2004/

Here's the schedule (with a few notes thrown in):

Tuesday, June 15

14.00-17.00 PhD graduation talks and ceremony (with a coffee break)

17.00-19.30 Group Posters (no sound effects, please, and being funny is really *not* a requirement. Beer and wine will be served in the poster area. In case you miss this session, posters will stay up all of Wednesday, too)

19.30 Dinner (Heidelberg groups will sit with Outstation groups and get to know each other a bit), followed by...

... a megagalactic party with live music

Wednesday, June 16

9.00-11.00 Concurrent activities include:

- tours of core facilities and workshops: 4 small groups. Sign-up is required.
- Demos run by EBI (in Operon, schedule to be announced)
- time for specific interactions and meetings

11.00-11.45 Group Leader seminar by Iain Mattaj in the Operon

11.45-12.30 Short news from the EMBL Centres

12.30-13.30 Lunch (in poster area)

13.30-19.00 Postdoc talks: 3 sessions of 4 talks each (15 min + 5 min) to be selected from applications by postdocs or other research staff from all parts of EMBL. (Sorry, no faculty or predocs this time!) Details on submission of abstracts will be on the website – as will the final program – later on. Prizes will be awarded to each selected speaker and a grand prize will be given for the best talk.

Thereafter ... BBQ

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This year's faculty retreat will take place Friday and Saturday, December 10 and 11 near Grenoble. It will focus on the science at EMBL, with thematically organized presentations from many group and team leaders.

...be there or be square!

report from the heads of units meeting

Here's a summary of what was discussed at the recent heads of units meetings, held on December 16 in Heidelberg and January 27-28 in Grenoble.

- Work on the EMBL Centres is on schedule. The first centres have submitted proposed activities; the remaining proposals are expected soon. Centre coordinators have been asked to finalize their financial plans and to solicit financial support from participating Units. These plans will be submitted with a brief summary of the project description to the DG for final decision.
- A working group for LIMS (Laboratory Information Management Systems) will be established. The goal is to bring together LIMS users from across the EMBL sites in order to identify common needs and consolidate development efforts. The group will be coordinated by Silke Schumacher and they'll have their first meeting on February 13 in Grenoble.
- An Internal Policy on faculty appointment procedures was discussed and received final approval. The new policy No. 52 will be distributed by the DG office.
- An integrated cost center has been established for the International PhD Programme, which will be used for PhD Programme-related expenses. More information on plans for the PhD Programme in 2004 will appear in the next issue of EMBL&*cetera*.
- The EMBL Endowment Fund has been approved by Council and local authorities. A Board of Trustees (who will serve as the executive body to decide on projects submitted to the DG) and a Supervisory Board are currently being assembled.
- An ethics committee has been established to address ethical questions related to EMBL research that uses human material. Matthias Hentze, Halldór Stefánsson and Sabine Hentze have been nominated to sit on this committee.
- A Chemical Genomics Core Facility will be set up at EMBL-Heidelberg in collaboration with the DKFZ. The facility will be open to EMBL researchers for small molecule screening. Joe Lewis will be heading up this facility.

Lost in translation?

The scene: A semiotics research facility in rural S.E. England, known to some as 'The EBI'. Within the facility, in a dimly lit room, a group of figures huddle over a small table. As we draw closer, a sheet of parchment covered in arcane symbols becomes visible.

Suddenly, the group rises as one from their huddle, and begin to congratulate each other. One of them rolls up the parchment, slides it into a courier's pouch, and departs – the others watch him go in respectful silence, then begin to discuss their bold endeavour:

First: "We must hope that our message is clear enough this time – and well received."

Next: "We have already asked much of those who toil in the laboratories. Suffering our crude attempts at translation has been difficult for them, and they are most wary of their computers. They have yet to see the fruits of their involvement in this great project."

First: "Surely they shall soon reap the benefits? When they see it assembled…"

Last: "Perhaps, but for that we must rely on the skills of those who labour below, in the Great Data Vaults. It is they who must assemble the pieces, and for that they require…"

First: "Ah yes, annotation – the key to wisdom. Truly, this shall be no prosaic mosaic!"

Next: "We must follow the example of the prophet Alvis, who guided the Transcriptome tribe through the wilderness. As the MAGE mosaic shows, it is possible to translate from the language of Bioinformaticians to that of Biologists, by employing symbolic intermediates such as the Universal Modelling Language."

Last: "Truly miraculous – for they do not just use a different language, our user reqs studies show that their minds are actually structured in completely different ways."

First: "Can now we dream of the day when all the tribes of biologists will unite their respective mosaics around a common core of descriptors? Our own Proteome mosaic MIAPE, next to MAGE of the Transcriptome, followed by that of the Metabolome, and those of all the splinter tribes looking for an 'ome from 'ome…"

The HUPO Proteomics Standards Initiative's MIAPE model describes the level of detail that should be required, by repositories and tools, to establish the provenance and context of the results and conclusions from a proteomics experiment. Much of the work occurs at the EBI; the expanding team includes Rolf Apweiler, Weimin Zhu, Henning Hermjakob, Kai Runte and Chris Taylor.

The key to the translation can be found at http://psidev.sf.net/

– Chris Taylor

EMBL selects CodeLink for its study of molecular mechanisms in tumor growth

EMBL has signed a key partnership with Amersham Biosciences to provide access to the company's CodeLink™ technology. This is one of many partnerships at the lab which allow EMBL scientists early access to key technologies. As part of the collaboration, EMBL and Amersham will co-organize training for the CodeLink technology through the GeneCore facility.

One of the trial projects that has recently used the technology include the mammalian organogenesis and endocrinology project led by Mathias Treier from the Development Biology Unit. Mathias and his group are using the mouse as a model system to carry out studies to better understand the underlying molecular changes in the transformation of a tumor from benign to the aggressive malignant stage. They required a microarray platform that contained most of the annotated mouse genes available today, and also needed to reliably record changes in expression levels of low abundant genes. The CodeLink UniSet Mouse 20k Bioarray has allowed them to carry out expression profiling on the different pituitary tumor stages in order to gain a complete picture of these expression profile changes.

"Profiling single tumor samples individually on the Amersham array allows us to get novel insights into the molecular changes accompanying pituitary tumor progression and development," comments Mathias. "The platform is user-friendly and has allowed us to establish the system in our lab easily. It has become an invaluable tool in the molecular characterization of all our different mouse models for human diseases."

GeneCore will also be offering services for the CodeLink Bioarray System to scientific groups at EMBL, and their European collaborators. This is in line with the Laboratory's role as a global research and training center. With the availability of CodeLink, GeneCore will be more able to meet the varying needs of the researchers from the EMBL scientific community, therefore broadening access to technologies in molecular biology research. GeneCore is already using other Amersham Biosciences technologies to meet in-house needs of research groups, including TempliPhi™ DNA amplification kit and microarray spotting technology.

"One of EMBL's missions is the development and implementation of new technologies and methods to provide our scientists, and the life science community, with state-of-the-art tools for basic research," says Christian Boulin, Co-ordinator of Scientific Core Facilities, Services and Technology Unit at EMBL. "The access to CodeLink and Amersham Biosciences' new advanced technological developments in the field of microarrays fits well with EMBL's strong commitment to high-throughput functional genomics."

EMBL, Amersham Biosciences and Silicon Genetics are co-organizing a joint practical course on expression profiling with the CodeLink system on April 5-8, at EMBL-Heidelberg. To find out more, contact Vladimir Benes (benes@embl.de). More information about Amersham Biosciences technologies is available at www.amersham-biosciences.com.

Photo by Marietta Schupp

Dirk Schmidt and Henrietta Uhlenhaut from Mathias Treier's group at work with the CodeLink microarray.

Science & Society

What it means to be 98% chimpanzee: Apes, people and their genes

On March 19, biological anthropologist Jonathan Marks will visit EMBL to take part in the laboratory's Forum on Science and Society. He'll give a lecture based on his award-winning bestseller, What it means to be 98% chimpanzee: Apes, people, and their genes *(University of California Press, Berkeley, 2002).*

Yes, we're primates. But what exactly does that tell us about our behavior? Nothing – and everything. The detailed physiological and genetic analyses have just begun. We may share over 98% of our DNA with chimpanzees – a quantitative value as Marks points out, that is based on a judgment of less than the complete human (or chimp) genome. There might be certain similarities in anatomy and behavior, but to link those similarities to common bits of DNA is quite difficult. Even when meaningful sequences are compared, Marks contends, the matches might be considered similar or dissimilar, depending on the geneticist's perspective and on the kinds of comparisons being done. The figure of 98% also becomes less awesome when we acknowledge that we share about 35% of our genome with daffodils yet do not consider ourselves part flower. How we understand this small difference of 2% might depend on what we wish to know.

The use of this figure is misleading anyway, Marks argues, because its apparent precision gives a false sense of scientific certainty. Chimps and man share many genes, but can we deduce from this any correlation between their behavior or 'nature' and their genetic makeup? What attributes could the percentage explain? Suggestions about genetically-based behaviors range from promiscuity to aggression to homosexuality, *etc.* So far, however, these have only been shown to have the slimmest correlation to specific sequences of DNA expressed in individuals. There is a long, long chain of deduction here. Therefore, this book is more than an argument about the precision of various genetic and biochemical methods. It is about what we make of them.

Many scientists and physicians deal daily, in one way or another, with human variation and its consequences. Marks suggests it is time to reflect on the assumptions underlying many concepts in this area. He tries to place those concepts in the historical and cultural contexts in which they were developed, and examines their implications.

For anthropologists to use genetics to trace the history of the human lineage is, in his opinion, no more biased than any other scientific attempt to do so. In 1991 the Human Genome Diversity Project was launched to map genetic distribution among populations. It set out to collect blood from more than 700 ethnic groups. But indigenous peoples were not interested in giving their blood or hearing what scientists had to say. In answer to the pronounced goal "to tell these people who they really are," Debra Harry, a Northern Paiute activist said: "I know who I really am – shall I tell you who you really are?" Human diversity is formed through an ongoing process, and the identification of distinct clusters of human genotypes (which one could then legitimately call races) has so far proved to be elusive. "Ethnic groups are categories of human invention," Marks points out. "Their boundaries are porous, their existence historically ephemeral."

This work presents a powerful critique of reductionist claims about genetics, human behavior, cognitive abilities and racial differences. For many readers this book will shed light on the new science of molecular genetics. The author makes the book highly readable and easy to understand. You may not agree fully with the author's approach, but interpreting the findings of the science of human evolution requires an uncluttered and open mind.

Come and discuss with Marks and EMBL staff on Friday, March 19, in EMBL-Heidelberg's Small Operon, at 16.00.

– Susanne Späinghaus-Monschau

Making strong links to journalists - a new focus in EMBL's Press Office

Photo by Marietta Schupp

Trista Dawson has recently joined OIPA as EMBL's Press Officer. She is working to spread the word about the great scientific research going on at EMBL.

Why is it important to have a press office at EMBL?

EMBL is an institution with exceptional scientific standing. It is very important that we communicate EMBL's accomplishments not only to the scientific community, but also to the general public. In this year of EMBL's 30th anniversary, with a celebration to take place in November, we think it's a great year to heighten our press and publicity efforts and highlight the scientific achievements of the lab.

What will be the focus of your efforts in 2004?

Our focus will be to directly reach key journalists – talking to them on a daily basis and giving them the type of information they need. It is important to take a 'tailor-made' approach when it comes to providing journalists with information – science editors need more detailed technical information compared to business writers who want more general information, for example.

How will you reach the journalists?

One essential component of our public relations strategy is to establish and maintain a comprehensive database of press contacts throughout our member states and other countries. Using this database, we will send out concise press releases on a regular basis to continually feed the media with interesting stories coming out of the lab. Journalists can also access soon-to-be completed 'news & press' web pages that will have photos and images, press releases and information, designed specifically to meet their needs.

All of these changes will help the Press Office to continue to listen to what the journalists need, and provide them with the right information. We will meet with reporters personally, bring them to EMBL events, and establish strong working relationships, so that they are open to hearing and writing about EMBL's great work.

How can EMBL staff be involved in your efforts?

It is very important that staff members let me know about anything that could be of potential interest to the scientific or general press. This can be news about a breakthrough in research, developing a new technology, securing major funding, reaching a major milestone, winning an award, or a human-interest story. We want to release regular press releases from the lab and we want all scientists to be involved in promoting EMBL – so please don't hesitate to pass along any interesting news! Just send me an e-mail at dawson@embl.de or call ext. 452.

How did you get into this field of work?

I worked at the lab bench for a couple of years after completing my Bachelor of Science degree, but found myself increasingly interested in business aspects of science. I moved out of the lab, completed my Masters of Business Administration (MBA) and have been working in communications and public relations roles in scientific-based organizations over the past six years.

the EMBO corner

Funding for EMBO: the outcome of the EMBC meeting

In the last issue of EMBL&*cetera* I summarized the discussions that took place at the November meeting of the European Molecular Biology Conference (EMBC). The EMBC is the provider of funds for the EMBO programme and in November the proposal for an increase in funding from the EMBC for the period 2004 to 2006 was not unanimously accepted. As unanimity is required on these matters, an extraordinary meeting of the EMBC took place on January 23 with a view to agreeing on a budget for the functioning of EMBO/EMBC. In the interim there had been intensive discussions, particularly with the countries that had difficulties in supporting the original proposal. The crux of the matter is that although the EMBC had unanimously agreed to an ambitious programme of activity for a nine-year period from 2004 to 2012 (similar to EMBL's Strategic Forward Look) and 15 of the member states were willing to increase the budget in the period 2004–2006 from its 2003 level of 10.8 million to just over 17 million, some countries found this too steep an increase. Coincidental with the extra funds required to meet the aspirations of the EMBC plan for 2004-2012 was a sudden growth in the number of applications for Long-Term and Short-Term Fellowships (an almost 30% increase in 2003). All of these pressures came to bear on the budget that was going to be provided. The outcome is that the EMBC agreed unanimously on January 23 to a 5% *per annum* increase for a six-year period which will bring the overall budget of the EMBC from 10.8 million to over 14.4 million (or an increase of 33%) by the year 2009.

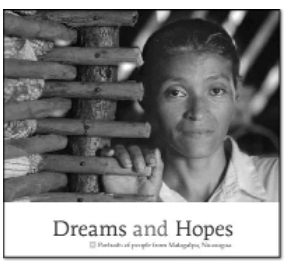
The question after this round of discussions is similar to the age-old question of whether the glass is half full or half empty? On one hand, this is an unprecedented increase that provides a growth in funding and stability in resources for a six-year period. The EMBC budget had been flat since 1997, so the growth is definitely a positive development. On the other hand, the funds that are provided are less than those needed to serve correctly the scientific community that we interact with. Indeed, this opinion was reinforced by the fact that four countries abstained from the vote because they felt that the final financial plan was sub-minimal.

In the background of these discussions are many other factors and indeed these are of general importance for EMBO, for EMBL and other European organizations. The financial situation in some key countries is very tight and at a time when governments are committed on paper to expanding their expenditure on research, they are not delivering on this promise. The other aspect is the changing European landscape. With the growth in the importance of the Framework Programmes and the possibility of a European Research Council, some countries are looking carefully at some of their traditional engagements and are redefining the balance between external and national expenditure. Taking these elements into account then the outcome of the EMBC meeting was perhaps the optimum possible. It will, however, take the next year to see more clearly whether the difference between the money that was needed and the money that is provided leaves a gap that is damaging. Practically, in the first instance, this will be evident from the selections of the Long-Term and Short-Term Fellowships and the reaction of the scientific community to what may turn out to be an uncharacteristically low chance of success.

– Frank Gannon, Executive Director, EMBO

Finding dreams and hopes in Matagalpa, Nicaragua

In late 2000, the Danish Committee for Solidarity with Central America asked me to travel to Nicaragua to take part in a project. Our delegation was to prepare a large photo exhibition, called "World Visit," organized by the Danish development community in the summer of 2003. The material we gathered, however, merited a much more permanent record – a book.



Dreams and Hopes, portraits of people from Matagalpa, Nicaragua introduces lives, hopes and aspirations through photographic portraits and short stories. These are small-scale farmers living at or beneath the poverty line, farming rain-washed mountainsides. They grow corn and beans, but all aspire to bigger things: a few cattle, a row of coffee bushes, or a vegetable plot. Some succeed.

For many this is a life of poverty and for all it is a hard one. It is unpredictable, as nature, economics and politics play games of chance with the lives of the poor. It can breed despair, but also a very necessary optimism and a great sense of irony. To live this life is to be an artist at survival. Most of the people in this book are community leaders in one way or another, organizers and mainstays of associations and cooperatives, of women's groups and churches.

Thanks to several organizations, activists and especially friends, this book has become a success. My brother, Sven Hansen, and Nicolina Agger collaborated to produce the texts in this book. In Heidelberg, predoc Felipe Mora-Bermúdez spent countless hours translating texts into Spanish; Caroline Hadley (*EMBO reports*) lent her expert editing skills.

I fell in love in Nicaragua and with the people who invited me into their lives. This experience taught me that we all have the right to hope. There is always a path to be found – especially when we help each other. Though our roles may be determined by where we are born, economic wealth is not an excuse for being a poor humanitarian. It is an invitation to help.

– Maj Britt Hansen, EMBL photographer

Maj Britt's book is 128 pages, black and white images, hard cover, in English and Spanish. Some of the funds collected through book sales will support continuing projects. For more information, visit http://dreams.mbhstudios.com or speak to Maj Britt in the photolab.

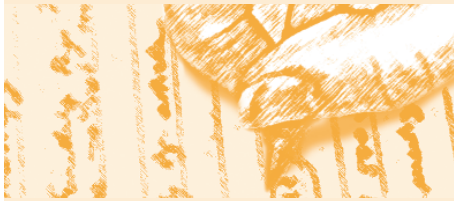
Announcing EMBO's 2004 writing prize

This is your chance to practice your science writing and win 1,500, a one-year free subscription to *EMBO reports* and a paid trip to the EMBO members meeting in Vienna this year.

All you have to do is submit an original article of no more than 2,000 words, written for a non-scientific audience. You may write about your own research or on any other science-related topic of your choice, but don't forget who you are writing for! Remember to explain any of that tricky scientific jargon.

The competition is open to all life scientists in Europe under the age of 40. Submissions should be sent to scisoc@embo.org by **15 April 2004**.

For more, see **www.embo.org/projects/scisoc/writing.html**



from the sister sciences

Saving Rover: a modest proposal regarding ESA's lost Mars lander

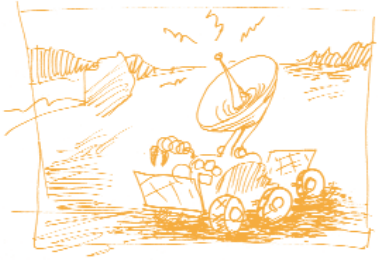
Dear Editor,

Friends should help each other in a time of need, and rarely has there been a clearer case of need than the recent events surrounding the European Space Agency's (ESA) errant Mars lander. The misfortune was compounded by the fact that scant days later, our American ~~competitors~~ friends succeeded in landing their own rovers, accompanied by an altogether excessive amount of fanfare. While reading reports of collaborations between your Institute and ESA (the EIROforum, EMBL*&cetera* issue 12, page 2), it occurred to me that rescuing the lander would be a worthy project for your group. Surely your combined expertise in multiple scientific disciplines is adequate to the task.

Allow me to put forward a few modest proposals towards this aim, keeping in mind that I am no engineer; the plans will surely require refinement by the necessary experts.

My suggestions reflect careful consideration of all qualities of the Beagle (Rover? a dog is somehow involved) distinguishing it from the Martian surface: metal content, overall reflectivity, and the fact that it has a computer on board programmed to search for water.

Method 1: Trawling. Metal means that the Beagle is magnetic. ESA still has a functioning spacecraft in orbit around the planet. A long cable could be lowered to which a powerful magnet is attached. As the orbiter moves, the magnet will sweep along, eventually coming into contact with the lander. It is doubtful that it can then be hauled up, but at least the craft's location will be established. If, by chance, one of NASA's machines is snagged instead, it should simply be dropped again. Preferably from quite a high distance.



Method 2: Synchrotron radiation. Your powerful X-ray sources in Hamburg, or those of the European Synchrotron Facility in Grenoble, can detect single atoms of metal within large molecules. Thus it should be child's play to find a very large piece of metal on Mars. Obviously there would be technical challenges in tilting synchrotrons to point at the sky. It is also not completely clear where one would place a detector to capture the diffraction pattern. On the other hand, perhaps no detector is needed. The moon might work.

Method 3: Get the contraption to come to us. A vestige of the original software may still be operational. If we deliver a few tons of water, regularly spaced, to the Martian surface, the craft's delicate sensors will no doubt sense it and prompt the craft to seek out the water. Unless, by chance, the lander was precisely equidistant from two sources of water. Then it might become confused.

Method 4: the Final Resort. If all else fails, CERN's Internet experts should simply hack into NASA computers and command one of the American vehicles to go and get the lander, dragging it to a highly-visible site, where it can be found by aiming mirrored light at it. If the lander cannot be found, then simply hijack the data signal from one of NASA's rovers, doctor the image by adding the ESA logo, and broadcast it as if all is in order.

To supplement these meager suggestions, your honorable Publication might launch a competition to garner the best ideas. I am sure that the combined mental powers at your institutes will arrive at a functional plan.

Yours sincerely,
Wilford Terris

Wilford Terris is Professor Emeritus of Genetics and a physics enthusiast, currently living outside Rome.

Sitting on top of the world: Monterotondo staff climb Mount Vettore and live to tell

EMBL-Monterotondo researcher Marion Huth and Raffaele Matteoni of campus partner institute CNR recently organized a hiking trip to Mount Vettore in Monti Sibillini National Park for Monterotondo staff and their families.

The park, located in the beautiful region of Umbria, has an intriguing history. During the middle ages the Sibillini mountains were thought to be home to demons and fairies. The goddess Sibilla was believed to have lived in a cave in the mountains, and the remains of the Roman procurator, Pilato, are said to have ended up in a lake in the mountains as punishment for not defending Jesus against his accusers.

Mount Vettore, like many of the hills in the region, was cleared to provide pasture for sheep, and is now sparsely vegetated. Its designation as a National Park in 1993 was aimed at protecting the remaining natural habitat and promoting sustainable social and economic development. Today, its beautiful and contrasting landscapes are a popular destination for hiking, cross-country skiing, horseback riding and paragliding. The towns within the park offer the visitor stunning architecture and local delicacies prepared in traditional ways.

Setting out at noon, the intrepid mountaineers climbed the 2,476 meters to reach the summit in just three hours. Despite heavy fog, they enjoyed some breathtaking views. After a brief stop for photos, signing the logbook and a quick snowball fight, the crew began their descent. Two hours later and back at base camp, appetites were raging.

Photo by Cecilia Mannironi

Monterotondo mountaineers at the top of Mount Vettore. Counter-clockwise from left are: Geert Van Loo, Che Serguera, Thomas Pedersen, Silvia Mandillo, Marion Huth, Carla Sciarretta, Daniella Marazziti, Ekaterina Semenova, and Siska Bullynck. Not pictured: Léa Serguera, Pietro Matteoni, Tommaso Mele, Maria Eugenia and Raffaele Matteoni.

The group set off for nearby Norcia, a lovely town famous for its production of salami, cheeses and lentils. Locals say that the park is at its most beautiful during the few days in early spring when the fields of lentils are in bloom, turning an immense plateau high in the mountains a vibrant violet. The streets of Norcia are lined with beautiful *norcinerie*, where the group stocked up on local delicacies – *salsicce secche di cinghiale* (dried sausages made from wild-boar meat), aged *pecorino* (cheese made from sheep's milk), and *ciavuscolo* and *fegatino* salami. Dinner was at "*Il Granaro Del Monte*," a restaurant specializing in dishes prepared with local *tartufi neri* (black truffles).

All said and done, it was a great day, and a great group! Special thanks go to Marion and Raffaele for organizing the outing. Where should we go next?

– Carla Sciarretta

kids@EMBL

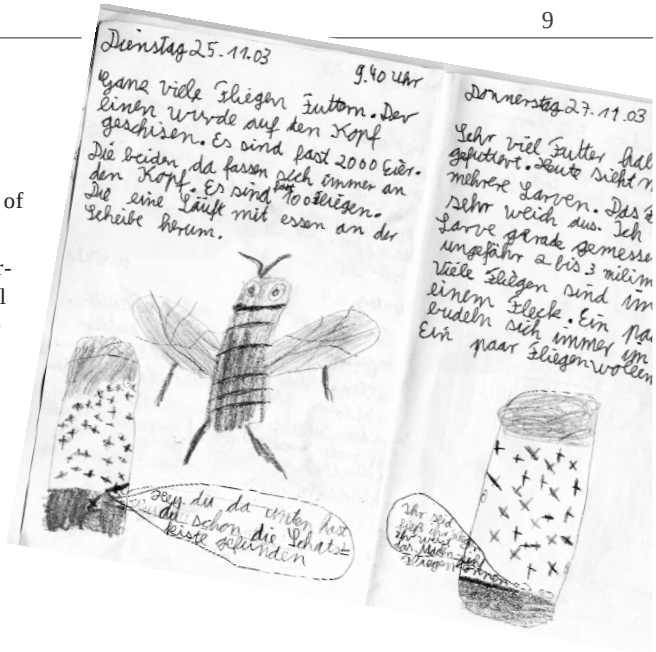
"*November 11, 2003. 10:45 am. The eggs are multiplying. 10 flies lie dead in their food. They ate too much.*"

After a visit to EMBL last November, a class of fourth graders from the Gaiberg elementary school spent three weeks observing *Drosophila* in their classroom. They discovered some surprising things about fruitflies that even many of our developmental biologists may not know. What happens when you turn a tube of flies on its head? "The flies fall off the walls, and they no longer know which way is up."

How many flies fit in a tube? "There are at least 1,000,000 eggs and approximately 100,300 flies, which is logical," one of the children wrote.

Each fourth grader made an "observation" notebook with several entries, carefully illustrated. Anyone interested can see copies of the books in the Office of Information and Public Affairs, room v324.

The most surprising discovery was that flies carry out social rituals. "The flies are enlarging the hole in the food. In the hole lie many dead flies. Others are closing the hole. Probably they want to bury their dead."



Swedish researcher awarded EMBL alumni fellowship

Johan Ledin, a predoctoral fellow from the University of Uppsala, has been selected as the recipient of the EMBL Alumni Association's postdoctoral fellowship, sponsored by the Swedish Foundation for Strategic Research.

Johan, who did his doctoral dissertation on the biosynthesis of heparan sulfate in transgenic mice, will join the group of Carl Neumann in EMBL's Developmental Biology Programme later this year. At EMBL, he will explore the function of EXT genes and heparan sulfate proteoglycans in vertebrate development, using the zebrafish as a model system.

Lennart Philipson, EMBL Director-General from 1982 to 1993 and member of the Alumni Association board, was instrumental in securing the fellowship. "I would like this fellowship to serve as a pattern for how individual member states can profit from the interdisciplinary research environment at EMBL," says Philipson. "Hopefully it will be followed by similar initiatives from other countries."

Calling one and all

to the first EMBL Alumni Association reunion: "EMBL yesterday, today and tomorrow"

November 26-28, EMBL-Heidelberg

Catch up with old friends, make new ones, and find out about the latest plans for the alumni association!

Register at www/embl.de/alumni

EMBL predocs visit EBI Hinxton for a close-up look at the world of bioinformatics

On November 24-26, a group of 40 second-year predocs visited the Wellcome Trust Genome Campus in Hinxton for an introduction to bioinformatics. Organized by PhD students Nikos Darzentas, Shiri Freilich and Carolin Kosiol, the course involved lectures and tours through the Sanger Institute's genome sequencing facility. EBI predoc Gail Bartlett expertly led hands-on practicals on protein structure prediction, expression profiling and phylogeny.

"These PhD students are the first generation to have full access to a broad variety of bioinformatics tools allowing comparative analysis of different genomes," explains Ewan Birney, head of the EBI's Ensembl databases. The completion of genome sequences allows many new questions to be asked about the whole organism, the evolutionary relationship between the different species and the molecular mechanisms of a gene of interest.

The course will be repeated next year, and will include an extra day for students to seek advice on their individual bioinformatics problems. For more, see www.ebi.ac.uk/~nikos/EBIpredocs/NovemberMeeting/

– Fabian Filipp

Holiday bazaar raises impressive sum for new activities at the EMBL Kinderhaus

On a cold winter's afternoon, a week before Christmas, EMBL parents and the Kinderhaus team gathered in the Operon foyer to have their first Christmas Bazaar.

Decorations and gifts made by children, parents and relatives were on sale. Guests made their way through the tables, buying "Plätzchen", truffles, homemade cakes, coffee and Glühwein, and were even treated to a festive performance of the "Nativity play" by the Kinderhaus kids.

In the end, all that hard work paid off, and a whopping 700 were raised. The funds will go towards the purchase of some new equipment for the Kinderhaus, such as a climbing apparatus, a crash mat for the gymnastics area, or an unbreakable mirror for the dressing-up corner. Organizers also intend to donate some of the proceeds to charity.

Despite the busy Christmas period, EMBL children, family and friends put an immense effort into the bazaar. Special thanks go to all who took part in what turned out to be a very enjoyable and successful event!

– Emma Fassmann

Photo by Maj Britt Hansen

EMBL staff and families fill up on holiday goodies at the Kinderhaus's Christmas bazaar.

Caught between cultures: Selene States tells her story of growing up as an EMBL kid

One of the principal advantages of an EMBL upbringing is that children who grow up in the EMBL world do not take being normal for granted. Most EMBL children are not natives of the country in which they are raised. Often, they are exposed to both a maternal and paternal culture, along with the traditions of their host country. This mixture of cultures can often inflict a state of internal bewilderment as to what is right and wrong. Because of their exposure, they also have a tolerance and an appreciation for a diversity of views and behaviors.

I am intimately acquainted with the richness and rootlessness that an EMBL childhood affords. Under the auspices of an EMBO fellowship, my family migrated from San Francisco to Heidelberg in 1992. My mother Sigrid Reinsch began a postdoc in the Karsenti Lab; my father David States would later pioneer the EMBL Public Information sector. I was eight years old.

The new culture was disorienting and isolating. The language sounded harsh and mechanical. Our family structure had changed and did not fit the German stereotype: my mother was the breadwinner, my father the "*Hausmann*." Most other children came home to mothers, and their families hinted at the inappropriateness of my father's role. At school, I felt silly when my teachers insisted on raising their voices when I didn't understand, rather than speaking slowly. Meanwhile, my schoolmates laughed when I could not answer simple questions, and some treated me with contempt. On occasion, physical blows and verbal insults like "*Ausländerschwein*" struck me.

The banal details of life threw me off. I missed Cheerios and chocolate chip cookies; I abhorred *Müsli* and *Stollen*. The square pillows and sheetless beds of our ISG apartment were a puzzle. Still, there were many blessings: I discovered that the duvet on those same beds eliminated the chore of making them. I learned of new holidays and traditions. Whereas my native Thanksgiving was now a minimal affair, the burning pyre of Guy Fawke's Night was a blast. Christmas would never be the same without the *Weihnachtsmarkt*, and the subdued golden glow of straw ornaments and wax candles adorning our tree. At holiday festivities, one had a sense that the EMBL network provided a surrogate family to its employees. Everyone at EMBL had left behind something of themselves in their native country. The sense of shared experience allowed individuals to accept and empathize with their neighbor's nostalgia.

Because of EMBL's emphasis on family, my parents could introduce to me the children of their colleagues who were of my age and circumstance. I have vivid memories of my first encounter with my best friend Lucrecia Dotti at the Bammental Schwimmbad. Luli had simultaneously learned to speak English and Spanish as a toddler in America, but had not retained much of the former after her parents' departure to Germany. While she taught me many new German words, I reawakened her own linguistic past.

The *Internationale Gesamtschule Heidelberg* played a large role in my integration. Its faculty were sensitive to immigrant kids. We had weekly discussions on ethical behavior and conflict resolution. International field-trips exposed us to the diversity of other nations and to that already within the class.

Immersion in a foreign country is a transfiguring event. The anomalies between native and host cultures clash within a child who is raised to value both. I learned to love Germany with a passion. I took advantage of the liberties of public transportation and became independently mobile very early on. My language skills improved and I rose to the top of my class. With my love of the new culture, the impending loss of it by returning to the States nagged at my conscience.

I could not preserve myself from the day of our repatriation. When I was fourteen, we moved to California. I felt awkward and foreign there, although I was expected to fit in. I looked and sounded American, but I wasn't. Because of my nostalgic musings and flagrant preference of everything European, my peers perceived me as arrogant and aloof. I lived in a fantasy world that whisked me off to the Heidelberg castle and Neckar River. Really, what I wanted was acknowledgement that I was someone other than the average American teenager.

Last summer, I finally gathered the courage to move back to Germany. I thought it would be a breeze to return. As I embarked independently on my journey, I underestimated the bureaucratic obstacles I would face. As a child, I had not realized that EMBL had provided so many immunities and privileges to my family. I accepted a position as trainee in the EMBL's Office of Information and Public Affairs. I felt that my language skills might be of service to the office, and the position would give me a chance to more closely inspect the German universities. Because of my International Baccalaureate Diploma, acceptance at the university has been made easier.

In constant contact with myriad cultures, scientists' kids are little cosmopolitans. They share with one another a curiosity and confusion about the world. The mobility and exposure to the diversity of a bicultural childhood have instilled in me a restless sentiment of belonging everywhere yet nowhere. I feel most at home with people who are neither from here nor there. I am glad and relieved to be back in Germany. I did not expect Heidelberg to be the same as when I left, which has guarded me from much disappointment. But, as they say, the grass is always greener on the other side. And while I missed the German autumn when in California, here I miss the sun.

– Selene States

A full version of this story is available at www.embl.de/ExternalInfo/oipa/n2004/n19/n19_story.html

The European School in Karlsruhe:

Mother tongue education and European spirit

The European School Karlsruhe, located in the Waldstadt forest, about 50 kilometers to the south of EMBL-Heidelberg, was founded in 1962. It is one of 12 European Schools established since 1953.

The European School Karlsruhe provides mother-tongue education in 5 languages (German, Italian, French, English and Dutch), from Kindergarten to the European Baccalaureate level (12 years). The Baccalaureate is considered one of the most comprehensive secondary-school diplomas available. It is recognised as a qualification for University entrance by all EU member states and by other countries including the USA.

Children start learning their first foreign language as soon as they join the primary school. The study of a second foreign language begins at the secondary school level.

There are currently six children from EMBL employees enrolled in the European School Karlsruhe and a few more registrations for kindergarten and primary school are expected for the next school year. EMBL children are picked up in the morning by a privately organized shuttle, which costs about 125 a month. School starts at 8:05 and can end either at 12.20 or 15.20, depending on the age of the pupils and the day of the week. For the long days, meals are served in the school canteen.

Children entering kindergarten must turn 4 years old in the year they start, while children entering primary school must turn 6.

Education is free for the the children of employees of EU Institutions and companies that have signed special agreements. EMBL has no such special agreement with the school and fees are payable: 2,000 per year for kindergarten and primary school, 2,600 for secondary school. The level of the fees is determined annually.

Information about the school and registration procedures can be obtained from their website: www.eskar.org/en/index.html or the secretariat (tel. +49 0721 68 000 915).

–Tiziana Novarini and Kristina Helwig

Phospho.ELM: a new phosphorylation site database

Would you like to know if your favorite protein is known to be phosphorylated without having to do a tedious search in Medline? Now you can!

As part of our efforts to catalogue short functional sites in proteins, we have launched Phospho.ELM (http://phospho.elm.eu.org) a curated database of experimentally verified S/T/Y phosphorylation sites. You can retrieve examples by protein name, kinase name or interaction domain. Annotation includes PubMed references, kinase, domain containing the site, structure, links to interaction partners, *etc.*

Is your phosphorylated protein missing from Phospho.ELM? Come and see us in room V101 or send an email to Francesca Diella (diella@embl.de) or Christine Gemünd (gemuend@ embl.de).

Getting in a SPIN

Those of you who submit protein sequences to Swiss-Prot, the protein knowledgebase hosted by EMBL-EBI and the Swiss Institute of Bioinformatics, will be delighted to know that it has a new web-based submission tool, called SPIN.

SPIN was launched on December 15, 2003, to coincide with the launch of UniProt, the unified protein resource that was created by joining the information contained in the Swiss-Prot, TrEMBL and PIR-PSD protein sequence databases.

Replacing Swiss-Prot's email-based submission system, SPIN improves the efficiency of the submission process for both submitters and curators, and allows scientists to submit more functional information about proteins.

SPIN can be accessed at www.ebi.ac.uk/swissprot/Submissions/spin. UniProt can be accessed at www.ebi.uniprot.org.

– Vincent Lombard

EMBLEM announces Entrepreneurial Seminar Series at EMBL-Heidelberg

EMBLEM
TECHNOLOGY TRANSFER

Pink, blue, yellow, green seminars, and now lime. The latest addition to EMBL's list of events is the EMBLEM Entrepreneur Seminars series. These lectures are aimed at EMBL scientists interested in the latest trends in pharmaceutical/life science R&D, intellectual property rights, the biotech market community and venture capital financing. Speakers will include business professionals with "hands-on" experience in their respective specializations.

The EMBLEM Entrepreneur seminars will be held at 14:30 on the first Thursday of every second month in the Small Operon. Dirk Vetter (CEO Complex Biosystems GmbH, Co-Founder Graffinity Pharma AG) will speak on February 19; Karsten Henco (Evotec OAI, Co-Founder Qiagen GmbH) will speak on April 1.

For more, see www-db.embl-heidelberg.de/jss/seminarlist.html

from the Safety office

Safety tips for using your laboratory microwave oven

Microwave ovens are a common appliance in many labs. In order to avoid accidents please consider the following:

- Never use microwaves in the lab for food or drink!
- Do not place microwaves at or above eye level.
- Wear safety goggles or use a face protection shield when opening the microwave.
- Never heat alcoholic solutions or flammable liquids in a microwave because of the risk of explosion!
- Do not heat formaldehyde or acids such as acetic acid in the microwave as harmful vapours would be released.
- Do not heat agarose that contains ethidium bromide in the microwave but melt the agar first, add ethidium bromide to the cooled down agarose afterwards.
- When heating agarose set only the time necessary to melt it. Take care not to set for longer times. Never overheat!
- Use simmering beads or an abrasive glass rod to prevent sudden boiling collaterally, especially when using a microwave without a rotation plate.
- Unscrew the lid when using Schott bottles.
- Do not cover vessels with aluminium foil.
- After heating wait for a moment before opening the door of the microwave in order to avoid sudden boiling caused by vibration or temperature shock.

news & events

Calling all bookworms! A group of literature lovers now meet monthly to discuss the latest in fiction from around the world. This new club is far from just read, read, read – they also feast on food and drink based on the theme or cultural origin of the book. The club held their first session on January 20 to discuss *Norwegian Wood* by Japanese author Haruki Murakami and munch on sushi. Email Will Norton at bookclub@embl.de if you want to know more.

EMBL Ventures announces that it has invested in *Ars Arthro*, an early-stage company in Esslingen, Germany, that develops matrix-assisted collagen-based biological orthopedic implants for the replacement and repair of tissues such as cartilage and ligaments. The company's first product, CaReS® (Cartilage Regeneration System), is a mechanically stable, homogenous knee transplant that has already been implanted successfully in more than 100 patients in Germany and Austria. For more, see www.embl-ventures.com.

Music for EMBL's ears. Heidelberg researchers Maiwen Caudron, Claude Antony, Paulo Cunha and Caroline Lemerle are dusting off their trumpets, triangles and tambourines and putting some music in our lives! They are planning a music evening to be held during the predoc selection week in March. "We hope to show the predoc candidates and others at the lab that EMBL is filled with people who are talented not only scientifically, but musically, too," says Caroline. If you play an instrument and want to get in on the fun, send an email to Caroline at lemerle@embl.de. Donations collected during the concert will go toward the purchase of a piano. For future jam sessions, they are also compiling a database of EMBL muscians and their instrument of choice – if you're interested, get on this list!

Housing services administrator Dieter Hinze retired at the end of 2003. If you have questions about housing, please now send them to Rüdiger Kühne at the ISG (kuehne@embl.de or isg@embl.de). Happy retirement, Dieter!

A pot of tea? Check out the beverage section the next time you dine at the canteen in EMBL-Heidelberg. Sit down with a cuppa this special brew after lunch and ... well... relax!