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New center for modeling and simulation

EMBL is a major partner in the first German Center for Modeling and Simulation in the Life Sciences, established thanks to grants from the Klaus Tschira Foundation, the state of Baden-Württemberg, and participating research institutes. The center was launched during an opening ceremony in February.

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EuroStemCell project in Monterotondo

The groups of Liliana Minichiello and Claus Nerlov will participate in an EC-funded project called EuroStemCell, aiming to accelerate basic and applied studies of embryonic, fetal, and adult stem cells. The initiative will develop new stocks of cells, create new tools, promote therapeutic research, and foster a Forum for Ethics and Social issues.

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EMBO 3rd International Teachers Workshop

On May 21 and 22 EMBO will host its annual workshop for science teachers, who will catch up on the latest research being done at EMBL. The two-day course will include scientific talks, practical experiments, and an exhibition of teaching resources, media and experimental kits. The workshop is aimed at secondary school biology teachers from across the EU and Israel; chemistry and physics teachers may also participate. It's a good deal! Accommodation, meals and refreshments are included in the registration fee of 50 Euros. Interested teachers should register at www.embo.org/projects/scisoc/teachers04.html

Get to know EMBL Ventures

Turning scientific ideas into marketable products or even companies requires money and expertise. In addition to our company EMBLEM, the Laboratory has another group of people behind the scenes to help in our technology transfer mission. Meet EMBL Ventures...

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Mark your calendars for the EMBL Alumni Association Reunion, November 2004!

When's the last time you sat down to chat with your ex-colleagues from EMBL? If you can't remember then it's time you registered for the EMBL Alumni Association Reunion, to be held in Heidelberg from November 26-28, 2004. The event will bring EMBL alumni from across the world together for scientific talks given by past and present staff, poster sessions (yes, there are prizes!), practical discussions about how alumni can help each other, and lots of surprises. Book your seat in the Operon now, by registering at www.embl.embl/alumni.

from the photo archives

Were you there? Who's the guy with the moustache? This is a picture of the famous "Thomas Graf oncogene dance," (circa 1998) which ended up with a lot of people in a big heap on the floor. Rumor has it there's a bootleg video somewhere...



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Heidelberg institutes form Center for Modeling and Simulation in the Life Sciences

Heidelberg is internationally recognized as an outstanding location for the life sciences and scientific computing, so there is no lack of good creative ideas. The latest one is the creation of the first German Center for Modeling and Simulation in the Life Sciences (BIOMS), which was officially opened during a ceremony at the Villa Bosch on February 13, 2004.

At the BIOMS, traditional *in vivo* and *in vitro* research approaches will be combined with modeling and computer simulation to help researchers gain new understanding of complex biological processes. In the last few decades, modern techniques developed in the fields of biophysics, biochemistry, and information processing have made it possible to capture and process an overwhelming amount of biological data. But for further progress to be made it will be necessary to develop models of the way complex biosystems function. These models have to be mathematically formulated and simulated on the computer. Models of this kind have long been a staple factor in the design of cars, aircraft, and satellites. The BIOMS project will be using them to extend our knowledge in the life sciences.

A recent issue of *Nature* reports that BIOMS and other related activities could make Germany "the destination of choice" for top-flight international scientists.

Partners in the project include EMBL, the German Cancer Research Center, European Media Laboratory Research (the research institute of the Klaus Tschira Foundation), the Max Planck Institute for Medical Research, and the Interdisciplinary Center for Scientific Computing and Center for Molecular Biology at the University of Heidelberg. The Klaus Tschira Foundation has generously provided 2.5 million euros to finance one-third of the Center. Another third of the funding comes from the state of Baden-Württemberg, while the remaining funds will be contributed by the University and the participating research institutes.

The funds for BIOMS will be used exclusively for the promotion of young scientists, making the Center a pioneer in the encouragement of upcoming generations engaged in cutting-edge research. Three research groups will be formed under the leadership of outstanding young scientists. In addition, a postdoctoral program will enable about ten scientists who have recently completed



Photo by Peter Saueressig, EMBL

Eric Karsenti answers questions at the launch of the BIOMS project, held at Heidelberg's Villa Bosch on February 13, 2004.

their doctoral studies to join research groups in the institutes involved in the project.

An essential factor in the success of BIOMS will be the link-up between scientists in Heidelberg. Initially, the young research groups will be located at EMBL, the German Cancer Research Center, and the Center for Interdisciplinary Scientific Computing. In 2006 the research groups will move to the "Bioquant" building (presently under construction), which will assemble scientists working together on the quantitative analysis of molecular and cellular biosystems under one roof.

EMBL-Monterotondo groups to participate in EuroStemCell

The ability of stem cells to differentiate into the other types found in our bodies has attracted great interest on the part of medical researchers. Such cells might be useful in treating diseases, particularly in cases where cells have been damaged or lost and the body cannot replace them. Both embryonic stem cells and the many sub-types likely to be found in adult bodies might be useful for therapies. But before this happens, a great deal of fundamental research still needs to be done into the nature of stem cells and the signals that prompt them to develop.

Liliana Minichiello and Claus Nerlov (of the Monterotondo Outstation) and many other researchers came to the conclusion that this work could be greatly accelerated through a systematic, interdisciplinary effort. They teamed up with scientists from 11 academic centres and three biotechnology companies to submit a proposal called "EuroStemCell" to the European Commission; the project has now been approved for funding under Framework Programme 6. It is being coordinated by the University of Edinburgh.

"The project unites a spectrum of the best stem cell research currently going on in eight European countries," Liliana says. "The expertise of the groups ranges from cell and

developmental biology to tissue repair, animal disease models, and clinical cell transplantation. The breadth and scale of this project are unprecedented in the stem cell field worldwide."



A key aim is to develop a stock of well-characterized cell lines – including embryonic, neural, mesodermal and epithelial stem cell types – and make them available to researchers throughout Europe. That will enable scientists to attempt to thoroughly compare the properties of each type and evaluate their therapeutic potential. The project will also create new tools to identify and isolate them in living tissues, hopefully to locate elusive populations of stem cells in adults as well as to identify them in at earlier developmental stages.

Another goal is to more thoroughly explore the molecular signals that control whether stem cells remain "generic", capable of diversifying in many different ways, or

become differentiated. These mechanisms determine how cells become integrated into new tissues, where they can take on specialized functions, and are of obvious importance in the development of new therapies.

"Three 'Flagship Projects' span all the components of the work," Claus says. "As features of each cell type are discovered, we will be generating antibodies that can be used as markers to investigate them and isolate them for use in cell therapy and drug discovery. We'll also develop a prototype 'European Stem Database and Stem Cell Registry'; this information will give scientists an easy overview of who might have cells that could accelerate their research, and facilitate their exchange. Cell lines will be banked and stored at institutes throughout Europe; the basic policy of the consortium will be to make all the cells freely available for research. And last but certainly not least, the initiative will create a wide and inclusive Forum for Ethics and Social Issues related to stem cell research."

A training programme will complement all the other activities; its goal is to promote more research and draw young researchers into the field, and to make it easy for scientists to travel to carry out relevant projects.

Creating a network of excellence (BioSapiens), the *real* story

BioSapiens is a pan-European network of excellence in Bioinformatics that will be coordinated by Janet Thornton at the EBI; the project has been awarded 12 million euros by the EC.

In February, 24 BioSapiens partners from 14 countries met for their first annual meeting in Rome. Finally, real work could begin after over a year of planning, writing, negotiations with the EU, and almost missing the delivery deadline of the signed contract to Brussels because the courier lost the parcel.

The work started in earnest in January 2003, when some of the partners met for a first planning meeting in a hotel near Heathrow, London, the day of the heaviest snowfall in London in 12 years. By early afternoon most participants were anxiously calling airlines to secure a seat on the last flight home. Bad weather followed us to Rome, as Italy was hit by exceptionally harsh winter weather during the annual general meeting (AGM), and we experienced rain, hail and thunder!

The Heathrow meeting was followed by another at Hinxton, and finally by a marathon session over the last weekend

before the deadline, when the steering committee – based in Hinxton, Copenhagen, Rome and Madrid – e-worked together until 1 am on the day of the deadline, when the final product emerged from a printer at the EBI and was taken almost directly to Brussels by the first flight in the morning. Janet announced the birth of a proposal to the other steering committee members: "It's 197 pages long! And every one a gem."

By June the first leaked reports that we had been successful began to reach us, "unofficially confirmed" on July 2. Contract negotiations lasted most of autumn, becoming another race against time: the contract had to be signed by the end of 2003 to secure funding from the Swiss government for the Swiss participants. The signing was completed on 29th December, to everyone's great relief.

Back to the AGM – the job was now to get the project off the ground, but, as always, trying to co-ordinate 24 scientists is a bit like herding cats. The lecture theatre at the University of Rome was next to a busy road, and a favourite venue for street sweeping

trucks to come for their breaks, and the noise levels didn't help us focus. We had a daunting agenda, which covered everything from developing the concrete plans which would make our ideas into reality, to deciding on how the budget should be allocated. It was also the first time participants in the different work packages – the backbone of any EU funded project – had got together. The great thing was that everyone was positive – with a genuine feeling that this was the start of something good!

One important goal was to have a list of all annotations which the groups could deliver in the first 12 months, by the end of the meeting. We didn't quite achieve it, but there is always e-mail....

The meeting ended on a high note: a champagne toast for the success of BioSapiens, with our scientific officer from the Commission, Fred Marcus, as invited guest. We'll give the last word to Fred: "It sounds great, now let's make it happen"!

– Kerstin Nyberg and Janet Thornton

MIAMExpress: a virtual lab notebook for microarray experiments

Microarrays are being used in labs all over the world as major tools in functional genomics. Making "raw data" from these experiments available to the public is necessary if scientists want to compare and analyze data produced by different research groups. Thus Alvis Brazma and his colleagues at the EBI drove the development of the MGED (Microarray Gene Expression Data) society, aiming to define common standards and public repositories for gene expression data.

As one result, last year MIAME (Minimal Information About a Microarray Experiment) was accepted and adopted by many scientific journals as a standard. An increasing number of publications have begun requiring submissions of microarray data to public repositories such as ArrayExpress at the EBI. To package the datasets from large experiments a data transfer standard was defined - MAGE-ML.

This is a complex standard that is best suited to automatic generation. To help biologists all over the world to collect and submit microarray data, the EBI has developed a compact annotation and submission database - MIAMExpress. It was designed to run on publicly available LINUX operating systems, so any researcher should be able to download and install it on his local system to prepare ArrayExpress submissions.

The Ansgorge group is participating in the EU-funded Temblor/DESPRAD project, under which we needed to set up a microar-

ray submission pipeline to the EBI. In June 2003 we installed a local MIAMExpress system at EMBL (<http://miamexpress.embl.de>). During the year we entered our first dataset (22 hybridization from the Human 51K chip). During installation, data loading and MAGE-ML production we identified some problems in the MIAMExpress installation and in collaboration with the EBI team improved the system. Working on the project were Christian Schwager, Jonathon Blake, Jan Selig (HD) and Mohammadreza Shojatalab, Niran Abeygunawardena, Helen Parkinson and Ele Holloway from the EBI.

The result is that EMBL has become the first lab worldwide to use a local MIAMExpress installation to successfully submit a microarray dataset to ArrayExpress. This is open to all researchers at EMBL and their external collaborators. The MIAMExpress application is web-based and can be used like an electronic lab-book by scientists to annotate all experimental steps as experiments are done, submit experimental protocols as they are developed and validated, and store microarray data directly after image analysis. Later, upon publication, one can easily subselect the required hybridizations, saving time. Furthermore, the local installation simplifies loading the data and checking it when generating the ArrayExpress submission.

Another advantage is that we can extend MIAMExpress with analysis tools under development in our group. At present we

are converting MIAMExpress into a full microarray database with a hybridization-centered query system, tools for data filtering, batch uploading of data, and a spot annotation/re-annotation system. Other features include automatically generating ADF spot tracking files, merging the annotation database, the slide production LIMS and generic spotter deconvolution files, and a general hybridization table preprocessing and filtering tool.

Additional extensions foreseen this year include image file storage on the server, implementing different user levels to selectively share data within groups, interfaces to slide production LIMS, quality control and quality assessment, the setup of processing pipelines for data preprocessing, filtering, clustering and extended analysis, and a full query system for MIAMExpress, which will permit data mining of treatments, protocols, spotted genes or even integration data.

For more information contact Christian Schwager (schwager@embl.de), Jonathon Blake (blake@embl.de), Jan Selig (selig@embl.de) or visit the Ansgorge group page (<http://www.ansorge-group.embl.de>). For general information about MIAME, ArrayExpress and MIAMExpress visit the EBI's microarray project pages (<http://www.ebi.ac.uk/microarray/>)

– Christian Schwager

news from EMBL's PhD Programme

Have you ever wondered how the PhD Programme really works? The graduate office and administration have reviewed and reformulated the Programme's policies and have made them available via the internal webpages at: www.embl.de/LocalInfo/InternalPolicy/emblip48.pdf

On April 1, Rune Linding became the first EMBL PhD student to defend his thesis to receive a joint degree from EMBL and the Technical University of Denmark. The title of his dissertation is "Linear Functional Modules: Implications for Protein Function."

Eighty-eight candidates arrived at EMBL Heidelberg on March 8 for the annual predoc selection week. After five intense days of learning about EMBL science, meeting new friends and, oh yes, sitting through those admissions interviews (no stress!), candidates learned whether or not they were one of the 41 to be accepted into the class of 2004. Here are some outtakes...



Photos by Marietta Schupp

Science & Society

Modern biology and visions of humanity: Science and Society in Genoa

The European Group on Life Sciences (EGLS) was established in April 2000 by Research Commissioner Philippe Busquin as a means of gathering high-level advice on the life sciences and technologies (<http://www.europa.eu.int/comm/research/life-sciences/egls/members.html>). One of the tasks assigned to the group is to contribute to the organization and animation of a Life Sciences Discussion Platform, enabling scientists to engage in a debate with the various stakeholders.

The latest of such events initiated by the EGLS and organized by the European Commission was "Modern Biology and the Visions of Humanity," which took place in Genoa, Italy on 22-23 March. It brought together experts from a wide range of disciplines: scientists, psychiatrists, philosophers, sociologists, politicians, journalists, writers and poets. The aim of this unusual multi-disciplinary meeting was to put modern biology in a broader context of historical, philosophical and emotional understanding, and to assess how new knowledge is affecting humanity's vision of itself.

Groups were invited to attend, including political and lobby groups, young people, media professionals, religious organizations and representatives from the arts, broadening the debate to take in multiple perspectives. The event coincided with the publication of a book authored by some of the invited speakers (http://europa.eu.int/comm/research/conferences/2004/biology/press-corner_en.html).

For the most part participants seemed to share the view that this multi-disciplinary encounter resulted in a successful mixture of different bodies of knowledge that otherwise tend to remain aloof from one another. A challenge of the future will be to keep alive, to stimulate and to strengthen the motivations for scientists and non-scientists alike to exchange insights and views on the meanings and the appropriate applications of science to the world of living organisms, as well as to the environment. The intellectual bridges that may grow out of such encounters will not necessarily reduce the plurality of visions and apprehensions. What they will do, however, is to provide



Photo by Marietta Schupp

Cooperation agreement for new Joint DKFZ-EMBL Chemical Genomics Facility signed

A new joint Chemical Genomics Facility will give scientists the ability to screen small molecules to identify biological inhibitors and drug precursors. This cutting-edge facility will be located at EMBL-Heidelberg and will be used jointly by scientists from DKFZ and EMBL.

The scientific needs for such a facility were extensively discussed at EMBL during the second part of last year. The opening of the Facility and official signing ceremony took place on March 18, 2004. (Peter Lichter from the DKFZ and Fotis Kafatos are pictured above.)

Joe Lewis, Head of the Chemical Genomics Facility, will assist and guide scientists at EMBL and the DKFZ through the process of developing small molecule "biotools".

For more information, please contact Joe at lewis@embl.de, ext.: 8935.

the conditions for healthy democratic rivalry of different and competing understandings and values.

– Halldór Stefánsson



Participants of the ELGS Modern Biology and the Visions of Humanity gather at the magnificent Palazzo Ducale in Genoa on March 22-23, 2004.

the EMBO corner

EMBO's long-term fellowship programme: the trend continues

In recent years EMBO's Long Term Fellowship Programme experienced a very significant increase in applications. After a slow but steady decline between 1999 and 2001, we observed an opposite trend in 2002, when our office received 20% more proposals. At the end of 2002 we presumed that this was just an intermediate peak caused by a gap in calls for EC Marie Curie Fellowships before the start of Framework Programme 6 in early 2003. However, the following year demonstrated that we were completely wrong. In 2003, we received 1080 applications, which is a further increase of 27% and represents the highest figure that EMBO has

ever received in its 40 years of existence. This trend seems to continue this year with the spring deadline attracting 530 proposals, indicating that we will have to expect more than 1000 applications again this year. Apart from the high prestige of EMBO fellowships, there must be other reasons for such a demand. Several other funding agencies observed the same trend in 2003, but to a lesser extent. The more pronounced EMBO related increase could be due to two annual deadlines and the unbureaucratic evaluation process. One general reason for the recent run for postdoctoral fellowships might be the job situation in the biotech industry. When biotech companies flourished in the 1990's, joining a company directly after finishing a Master or PhD degree was an attractive career prospective for many young people. In recent years, many companies faced problems that forced them to stop hiring new scientists or even to decrease their workforce. However, this cannot be seen as the one and only reason since the increase in applications varies between EMBO member countries. While the number of proposals from some countries remained relatively constant, the applications from other states increased by at least 20% with particularly

large increases seen for France and Germany. The reasons behind this trend need to be investigated more closely, but one might guess that some countries put less money into their national funding agencies and expect that the demand will be met by slightly increased funds of international programmes. In contrast, the percentage of applicants wishing to move outside Europe declined steadily since 2002. Most of these applications are for laboratories within the United States and in the past a relatively constant number of about 40% of all candidates applied to the US. This spring, only 24% of the applicants wish to pursue their postdoctoral training in the United States. It is obvious that there is no scientific reason behind this trend. Possibly many scientists in the United States have become frustrated by the delays in visa applications for their foreign postdocs and students. Last year, an EMBO Fellow had an unfortunate experience with US immigration officials when he was arrested and sent back after returning from a trip to Europe where he attended the EMBO Fellows Meeting at EMBL Heidelberg.

Let's hope that this was an exceptional case!

– Jan Taplick

"What's all the fuss about genomes?"

Genomics promises to have an enormous impact on society, and students should leave school understanding how genomics will affect their lives – from the diagnosis and treatment of disease to their food supply. But how can teachers hope to keep up with this fast-moving field?

Over Valentine's weekend 55 teachers from throughout Europe discovered first-hand what the fuss is about. The EBI, Wellcome Trust Sanger Institute and Roslind Franklin Centre for Genomics Research organized and hosted "What's all the Fuss about Genomes?" – an intensive weekend of practicals, lectures and discussions.

Participants experienced the vast scale of the genome-sequencing facilities on campus. They familiarized themselves with how genomic data are managed and made available through the EBI's data resources, and they used some of the tools available to mine and analyse data. Practical runs by the UK's National Centre for Biotechnology Education (www.ncbe.reading.ac.uk) allowed them to amplify a region of their own mitochondrial DNA and have it sequenced. Guest lecturers included Mark Walport (Director of the Wellcome Trust) and bioethics expert Onora O'Neill.

Participants left the campus raring to transfer their enthusiasm to their students. Many

were delighted (and some quite emotional!) about being able to visit the bosom of genomic sequencing in Europe; they praised the provision of resources that could be taken straight into class, the clarity of the presentations and the willingness of speakers to answer questions. It might not have been everyone's idea of a romantic weekend but we hope it will be the beginning of a long and happy relationship between the campus and schools throughout Europe.

The workshop was funded by the European Union as part of the project 'Continuing Education for European Biology Teachers' (CEEET), coordinated by EMBO. (see www.ceeet.embo.org for more information).

– Cath Brooksbank, Don Powell,
Lisa Mullan and Liz Ford



Workshop participants count colonies to find the best bacterial transformation. Photo courtesy of the EBI.



German MPs meet with EMBL scientists in Berlin

Members of the research and the health committees of the German Parliament as well as officials from the Ministries for Research and Education and for Health and Social Welfare gathered with EMBL scientists at the *Parlamentarische Gesellschaft* in Berlin on March 31, 2004, for an introduction to the Laboratory and its activities. Presentations focused on research at EMBL that can be applied to medicine. EMBL has been increasingly involved in such events, which serve to inform Members of Parliament about the Laboratory and its contribution to research in the Life Sciences. The meeting was well attended and EMBL is planning to host many more in the future on various topics.

Pictured are Carsten Schultz, Reinhard Junker (BMBF), Matthias Wilmanns, Lars Steinmetz and Erhard Schmidt (BMGS).

EuroScience Open Forum

Europe has long envisioned having an integrated platform for the advancement of science, along the lines of the AAAS in the US. Later this year, the organization EuroScience will take a major step toward achieving this goal, with the EuroScience Open Forum 2004 (August 25-28 in Stockholm, Sweden). The event will be the first pan-European meeting highlighting science, technology and innovation for the benefit of society, and aims to create an inspiring and exciting open discussion.

More than 250 leading scientists, representatives from science policy, media and industry from 33 countries will speak on topics ranging from nanotechnology to climate change, arts and science, culture and language, medicine and science policy. The EIROforum institutes, which include EMBL, will organize a 3-hour program of scientific presentations. The EMBL speaker will be François Nédélec.

The Forum is open to scientists, policy makers, politicians, industry representatives, journalists, teachers and the public. For more, see www.esof2004.org

What to do when you have a visitor at EMBL

EMBL's Visitors Programme has a new face: Stephanie Weil has recently joined the Lab as the Programme's administrator. "The next time you walk through the halls of EMBL-Heidelberg, take a look around," says Stephanie. "Chances are, many of the people you'll see are visitors who have come to use the Lab's facilities, participate in a course, or collaborate with EMBL scientists on a research project. One of EMBL's missions is to provide high-level training, and visitors are an important part of this."

External scientists and students interested in a visit can contact EMBL through the Visitors Programme website (see below). Once Stephanie receives an application she'll contact research groups to find a host. Applications will also be posted on the internal web pages (www.embl.org/staffonly/visitorsprogramme/hdrecentapps.html), which interested group leaders can check regularly. They can also receive email notification of new applications by informing Stephanie.

If you have plans to host a visitor, please inform the Visitors Programme, preferably before the visit begins. Stephanie will be glad to arrange accommodation and provide help and information. All visitors should stop by the Visitors Programme office at the beginning of their stay to get registered in the database. The information collected there helps us to keep statistics and provide important information to EMBL Council.

For more information, contact Stephanie (room 408, ext. 276, weil@embl.de), or visit the Visitors Programme webpages at www.embl.org/services/visitors_programme/

A conversation with EMBL Ventures: behind the scenes of Venture Capital

Stefan Herr and Christof Antz head up the EMBL Ventures, EMBL's primary venture vehicle and early stage life science investor. Here they speak with EMBL&cetera.

What is EMBL Ventures?

Over recent years, technology transfer activities at EMBL have gained solid professional footing. In addition to EMBLEM's activities in the commercialization of intellectual property rights, it soon became evident that there was a need for venture capital funding to be available to support intellectual property created at the Lab that could provide the basis for a company. EMBL Ventures was established in 2001 to manage a fund called the EMBL Technology Fund (ETF), which currently holds 26 million euros to be invested in Life Sciences technologies.

Who has invested in the ETF?

The contributors to our fund include private and industrial investors, ranging from local investors, to large European VC companies,

such as 3i (the largest investor in Europe) and the European Investment Fund. EMBL is also an investor, and has a vested interest that the ETF become a success. Raising money for the fund has been very successful, and we were able to exceed our original closing target of 15 million euros. Why? The concept convinced investors. They believe that the projects coming out of the EMBL community are valuable and have a good chance to be successful in the market.

What advantages do EMBL staff have with EMBL Ventures on campus?

As scientists with a strong background in industry, we have the expertise and experience to know what makes for a good start-up company. We also have in-depth knowledge and access to experts who can tell us whether there is a market for a technology. Also, because we are closely linked to the work going on at EMBL, we can give potential co-investors better insight into interesting new projects.

Where have you invested?

We make investments in Life Sciences technologies. Our roots are in EMBL and the work that is done at the Lab, though we also make investments in external projects. We have made four investments so far: Cenix Biosciences (an EMBL spin-out based on RNAi technology), Hybricore (high-throughput monoclonal antibody technology stemming from the Lab's Core Facility), Febit AG (who have developed a DNA chip device, the prototype of which is in EMBL's Genomics Core Facility), and Ars Arthro (a company that has developed a new type of cartilage implants for use in orthopedics).

What steps should staff take if they have an idea and are looking for financing?

If you have an invention of any kind and are interested in commercializing it, you should first see our colleagues at EMBLEM. If you are thinking of a start-up based on your invention, get in touch with us. You can sketch out your idea, no matter how crazy, and we'll let you know if we think your idea has potential for financing. If we find that what you have at the moment is too weak, don't be discouraged. Our analysis will serve as a starting point to strengthen your idea, explore new possibilities, and put together a critical nucleus of technology and/or expertise that will stand a better chance of success. One thing to keep in mind is that it is never too early to discuss your ideas with us. It's often too late, but never too early.



Photo by Marietta Schupp

Christof Antz and Stefan Herr head up EMBL Ventures, an early stage investor in life sciences technologies.

— interview by Sarah Sherwood

report from the heads of units meeting

The Heads of Units and Senior Scientists met in Monterotondo on March 22-23, 2004, to discuss upcoming developments at the lab. Here's a summary of topics discussed:

- **Bioethics advisory committee:** Draft internal policy was discussed and will be amended, final approval expected at the next Heads of Units meeting in May.
- **OIPA:** Silke Schumacher has taken over the overall management of OIPA.
- **EMBL.org:** progress on new EMBL web site is slower than expected. A new Web designer will join in mid-April, and the new launch date is June 2004.
- **Centers:** most centers have submitted detailed project proposals, last proposals

are expected by April 23 for discussion of Units contributions and final decision at next Heads of Units meeting.

- **Transgenic services** at EMBL will use capacities in Heidelberg and Monterotondo as they become available.
- **Partnerships:** Fotis is visiting new EU member states to acquaint them with EMBL. The Molecular Medicine Partnership Unit will be reviewed in May.
- **EMBL will participate in a large scale mouse knock-out project** focusing on making conditional knock-outs of disease-related genes and unexplored areas of the genome.

EBI launches BioMart data integration system

In March 2004, researchers at the EBI launched a new project, called BioMart. BioMart is a simple and robust data integration system for large scale data querying. It has been designed to provide researchers with an easy and interactive access to both the wealth of data available on the Internet and for in house data integration. BioMart is a successor to the generic query system originally developed for the Ensembl genome database (EnsMart). The BioMart data

model has been applied to the following data sources: UniProt, Macromolecular Structure Database (MSD), Ensembl, Vega and dbSNP. The data can be accessed through the web-based and standalone BioMart interfaces or downloaded from an anonymous ftp site. All data and software are free without any restrictions. For more, see www.ebi.ac.uk/biomart

– Arek Kasprzyk

Staff Association: election results and more

Voter participation in Staff Association elections increases.

Almost 250 people, or 36 percent of eligible voters, voted in the Staff Association elections at Heidelberg on March 16, an increase of 6 percent over 2003. Elected to the Heidelberg committee were Thomas Heinzmann (General), Genevieve Reinke (Administration), Liselott Ahlgren (EMBO) and Stephan Meister (Pre-doc). Elected to the Standing Advisory Committee (StAC) were Christine Gemünd, Gareth Griffiths, Tom Cord and Frieda Gloeckner and, as alternates, Thomas Heinzmann, Jorma Tapola, and Mike Winnen. Tom Cord was elected to the Joint Advisory Disciplinary Board.

Board membership open to all duty stations.

Apparently many staff do not know that since 2002 they have been able to vote for candidates to one of the boards (StAC, JAAB, or JADB) and may also run themselves for one of the positions. This was reflected in the low voter turnout at the outstations. Three positions are still open on the Joint Advisory Appeals Board and the Joint Advisory Disciplinary Board. If you are interested in sitting on one of these boards, first check the Rules and Regulations on what the job entails and then contact Ann Thüringer in the Staff Association office.

Annual Summer Party to be held July 3.

Before you plan your summer holidays, note that the Staff Association summer party will be held on July 3 this year!

news & events

About 200 representatives from the French research community

are expected to gather at the CNRS headquarters in Paris on April 27 2004 for an in-depth look at EMBL research and the possibilities that the Laboratory can offer researchers in the life sciences. The event, organized by EMBC/EMBL delegates Myriam Néchad and Jean-Pierre Lafont, will be opened by the Director of Research for the French Ministry of Research and the Director of Scientific Cooperation for the French Ministry of Foreign Affairs. On hand to present the Lab's activities will be Fotis Kafatos, Stephen Cusack, Nadia Rosenthal, Eric Karsenti, Janet Thornton, Nicolas LeNovere and Stephanie Blandin. Les Grivell from EMBO will present the latest from the E-BioSci initiative.

PSB launches newsletter. To keep abreast of the fast-paced developments in the Partnership for Structural Biology, check out their newsletter. The first issue (March 2004) is available at <http://psb.esrf.fr/>.

BIOXHIT partners to convene in Hamburg.

DESY will play host to the partners involved in the BIOXHIT consortium on April 26-28. Project contributors, including research groups from the EMBL Hamburg Outstation, will present their activities. External speakers will also be invited and the meeting is open to all interested parties. Contact Victor Lamzin at lamzin@embl-hamburg.de.

EMBL's Proteomics Core Facility welcomed its first non-European visitor

in February of this year, when Chartchai Krittanai from Thailand's Institute of Molecular Biology and Genetics arrived in Heidelberg for a two-week stay. He used the facilities to identify proteins involved in the infection pathway of the Yellowhead virus, with the goal of understanding how the virus enters and interacts with cells. The virus represents a particularly dangerous threat to the economy of Thailand; it affects shrimp, the country's number one export. "This visit has been very useful," says Krittanai, "I look forward to a continued collaboration with EMBL's knowledgeable and friendly staff."

Is your back sore from standing at your lab bench all day? EMBL's safety office will help ease those aches and pains with a special exercise programme called the *Rückenschule*. The *Rückenschule* offers guided low-impact stretching exercises aimed at building strength in the muscles in your back. The group meets on Thursdays from 5-6 pm in EMBL-Heidelberg's Large Operon. If you want to join in, wear some comfortable clothes, bring a gym mat or big towel, and the 5 euro per month fee (the rest is contributed by the Staff Association). For more information, talk to Annabel Goulding or Corinna Gorny, or follow the link on the Safety office web page: www.embl-heidelberg.de/LocalInfo/SafetyOffice/

people @ EMBL



Stephanie Weil has joined EMBL-Heidelberg as assistant to the Visitors Programme. It will be her job to help facilitate the numerous visitors that come to the lab to collaborate on scientific projects, use the facilities, or participate in workshops and courses. All visitors should make sure they check in with her to be registered into the Programme's database. See page 6 for a note from the Visitor's programme.

faculty appointments

Manfred Rössle has been appointed Staff Scientist at EMBL-Heidelberg. **Emmanuelle Guillant** has joined the Personnel section to head up the Laboratory's social services.

Holger Schwarz joins EMBLEM GmbH as a Business Development Manager. Holger graduated with a biology degree from Heidelberg University, and did his PhD work in the group of Prof. Sakmann at the MPI in Heidelberg. Before joining EMBLEM, he was Product Development Manager with Qiagen. Holger can be reached at schwarz@embl-em.de.

awards, honours and prizes

Walther-Flemming-Medaille for Jan Ellenberg. For his groundbreaking work on mitosis Jan Ellenberg has been awarded the first ever Research Award of the German Society for Cell Biology, the Walther-Flemming-Medaille. The prize was awarded on March 24 in Berlin, and is named after one of the pioneers of cell biology, Walther Flemming (1843-1905), who described cell division around 1875 and named it mitosis after the Greek mitos = string. The prize will be awarded for excellent research in all areas of cell biology to young scientists under the age of 38.

visits to the lab

In March 2004, EMBL hosted more than one hundred high school students for the annual European Junior Science and Humanities Symposium, an event organized by the US Department of Defense-dependent school systems to promote science in high schools.

Polish science teachers Jerzy Jarosz and Aneta Szczygielska spent the first week of March at the main Laboratory in Heidelberg, visiting with research groups and learning the latest about the life sciences. The visit was a prize for their presentation on embryonic development in chicken eggs at the EIROforum's Physics on Stage science festival held in Noordwijk in November 2003.



Photos by Maj Britt Hansen

If you happen to be in Germany in the week before Lent and see witches, devils, forest trolls and swamp ghosts traipsing through the streets, don't be alarmed. You haven't stumbled onto the latest set of the Lord of the Rings - you've just entered the magic and merriment of Fasching. The yearly celebrations are a cross between Catholic Carnival and ancient pagan Rites of Spring, in which revelers adorn themselves with elaborate costumes and take to the streets to sweep winter away. To participate in Fasching, you need a good dose of merriment, a touch of craziness ...and a lot of face paint. Here are some of EMBL's Kinderhaus kids in their finest Fasching gear.

Who's new?

Tiago Alves Ferreira (Gross), Sylvia Badurek (Minichiello), Shannon Black (Schultz), Miro Brajenovic (Karsenti), Arnaud Clere (Cipriani), Anna Cohuet (Kafatos), Guillaume Evraud (Lamzin), Emmanuelle Guillant (Personnel Section), Pavel Ivanov (Hentze), Shin Woo Kang (Minichiello), Aris Katzourakis (Goldman), Brice Kauffmann (Weiss), Pierre-Yves Lanquetin (Cipriani), Melanie Leuener (Monoclonal Antibodies Facility), Ian David Longden (Ensembl), Ralph Neujahr (EM Core Facility), Francois Pouthas (Genomics Core Facility), Tim Rayner (Microarray), Manfred Roessle (Svergun), Lucia Sironi (Ellenberg), Barry Thompson (Cohen), Gyula Timinszky (Mattaj), Stephanie Weil (Visitors Programme), Eli Zamir (Bastiaens Group)

events @ EMBL

17-20 April 2004

EMBL Heidelberg

EMBL/EMBO/SALK Conference on Oncogenes and Growth Control

14 May, 2004

EMBL Heidelberg

Science and Society Forum lecture

Ullica Segerstrale: "The scientist as activist. Glimpses from recent controversies"

14-15 May 2004

EMBL Heidelberg

Symposium on Lipid Binding Domains and Signalling

21-22 May 2004

EMBL Heidelberg

EMBO's 3rd international teachers workshop

For more events, see

www.embl.de/ExternalInfo/todayAtEmbl/

obituary

We are saddened to report that EMBL alumna Katrin Gawlas passed away in March 2004. Katrin was a predoc in Henk Stunnenberg's group from 1995 to 1997. After leaving EMBL, she worked at the German Cancer Research Center in Heidelberg. She will be missed by her friends and colleagues.