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December 2002

EMBL &cetera

Newsletter of the European Molecular Biology Laboratory
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EMBL groups help wrap up mouse, mosquito genomes

Groups at the EBI and EMBL Heidelberg played important roles in the recent completion and analysis of the mouse and mosquito genomes, published this fall in *Nature* and *Science*. The Ensembl team at the EBI is working hard on assembling and annotating the genomes – visible at www.ensembl.org. The *Anopheles gambiae* sequence was published simultaneously with that of *Plasmodium*, the malaria parasite, and researchers hope that all the new information will give a jump-start to research related to this and other insect-borne diseases. The groups of Fotis C. Kafatos and Peer Bork did a functional comparison of *Anopheles* and *Drosophila* genes, turning up nearly 250 genes that probably play a role in the insect immune system. And a comparison of mouse and human genomes has fascinating implications for evolution. Both stories can be found on the EMBL website.

Education initiative takes off at EMBL and EMBO

EMBO and the EMBLhave been awarded funding by the European Commission to take a much more active role in the field of science education. The project will sponsor a number of major teachers workshops throughout Europe. Additionally, it will create a new facility called the European Learning Laboratory for the Life Sciences (ELLS), where two science educators will carry out practical activities with small groups of teachers and train scientists to work with them. The facility will also create and maintain an archive / resource center for European science teachers.

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ArrayExpress set to receive submissions of microarray data

On December 1, the EBI's new resource for data from microarray experiments opened its doors to submissions from external users. The database will provide a standard platform for the storage, exchange and comparison of microarray data. It will be free and accessible to researchers all over the world. Creating the database required the development of standards for describing gene functions and experimental protocols. For details on this service and how to submit data, see the article on page 4.

European research organizations sign EIROforum charter at the launch of FP6 in Brussels

Nearly 9,000 scientists, science administrators and policy makers gathered in Brussels on Nov. 11-13 to attend the Launch Conference of the EC's Sixth Framework Programme. A key event, attended by European Commissioner for Research Philippe Busquin, was the signing of the EIROforum charter by the Directors-General of the seven major European Intergovernmental Research Organizations. This document sets out the common aims of our organizations and establishes a platform for a number of collaborations, particularly vis-à-vis Brussels.

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EMBL celebrates 25 years in Heidelberg

Time flies when you're having a good time. It's already been 25 years since scientists moved into labs at the Main Laboratory in Heidelberg. If that isn't a good excuse for a party, what is? Mark the dates June 28 and 29 in your calendar. In addition to official festivities, EMBL will hold an Open House for the general public.

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EIROforum at the Sixth Framework Programme launch in Brussels

Nearly 9,000 scientists, science administrators and policy makers gathered in Brussels on November 11-13 to attend the Launch Conference for the 6th Framework Programme of the European Community for research, technological development and demonstration activities. While most participants came from the member states of the European Union, candidate countries and associated states, the meeting was in fact attended by people from 65 countries, demonstrating the wide scope and the importance of the process set in motion to create the European Research Area (ERA). Some 50 TV teams and 230 journalists from the print media covered the event. The strong media interest bears witness to the fact that science and technology (and with them, also education) are playing an increasingly important and visible role in the public sphere and that the organization and execution of research, as well as the exploitation of scientific results, are assuming importance in the mainstream political debate.

One of the first tangible results of the ERAprocess was the wide-ranging collaboration between the European Intergovernmental Research Organizations (CERN, EFDA-JET, EMBL, ESA, ESO, ESRF, ILL), leading to the formation of the EIROforum. EIROforum has been active for a while and already achieved significant, practical results. The collaboration was formally sealed during a press event at the conference in Brussels. On Tuesday, November 12, the Directors General of the organizations signed the EIROforum Charter in the presence of Philippe Busquin, European Commissioner for Research, and numerous journalists. "The establishment of EIROforum is a concrete example of the dynamic created by the European Research Area. Europe has unquestioned excellence in science. By working together, Europe's leading research organizations can make that more visible on the European and world stage," said Busquin in a press statement.

The signing of the charter was also marked by the launch of the EIROforum web site (www.eiroforum.org) and a brochure describing the collaboration.

EIROforum maintained a high visibility at the conference. Representatives of the member organizations took part in several roundtable discussions and workshops. The EIROforum exhibition, 400 square meters consisting of displays from each organization and a common stand, attracted many visitors and provided inspiring surroundings for many discussions.

– Claus Madsen, European Southern Observatory

One practical result of the EIROforum has been a steady exchange of ideas and expertise about how to help European science teachers and students. Together our institutes have been able to mount several high-profile, large-scale programs, with a high level of support from the EC, which would have been too expensive or too demanding for any one of us alone. So far the list includes the "Physics on Stage" festivals, a student science and arts fair called "Life in the Universe," and a survey/webcast/ teaching program called "Couldn't Be Without It." This last project is described in another article in this issue. It enabled us to produce teaching kits from our institutes that have been sent out to 2000 European classrooms and will eventually reach many more.

Documents from the EC have cited these programs as models of educational activities for several reasons: particularly because they have the potential of getting thousands of teachers and students interested in science. Now the EIROforum's Working Group on Outreach and Education, which has been planning the projects, has set its aims higher. We hope, with strong support from our institutes and the EC, to create a European Science Teacher's Initiative (ESTI). This programme will be carried out in close conjunction with the Sixth Framework Programme and aims to take our work a step further. Everything that has been accomplished so far has been done on a project-by-project basis; each program has required new grants and a new management and financial structure. ESTI would operate over a longer time-frame to put things on a firmer financial and management basis. It has been designed to fit in well with activities already going on at our organizations – for example, the new EC-funded education initiative described on page 6.

All of these activities offer very concrete opportunities for scientists to get involved in education. Anyone interested should get in touch with the EMBL Office of Information and Public Affairs, at info@embl.de.

EIROforum Charter

A number of powerful research infrastructures and laboratories which are used by an extensive network of scientists have been developed and deployed within Europe by European Intergovernmental Research Organisations since the early 1950s. These organisations have set up a coordination and collaboration Council (EIROforum) with their Directors General or equivalent as its members.

A primary goal of EIROforum is to play an active and constructive role in promoting the quality and impact of European Research. In particular the EIROforum Council will be a basis for effective, high-level interaction and coordination between the member organisations. It will mobilise its substantial combined expertise in basic research and in the management of large international infrastructures, facilities and programmes, for the benefit of European research and development. This will be pursued by exploiting the existing intimate links between the member organisations and their respective European research communities.

The aims of EIROforum are, in particular, to:

1. Encourage and facilitate discussions among its members on issues of common interest, which are relevant to research and development.
2. Maximise the scientific return and optimise the use of resources and facilities by sharing relevant developments and results, whenever feasible.
3. Coordinate the outreach activities of the organisations, including technology transfer and public education.
4. Take an active part, in collaboration with other European scientific organisations, in a forward-look at promising and/or developing research directions and priorities, in particular in relation to new large-scale research infrastructures.
5. Simplify high-level interactions with the European Commission (EC) and other organs of the European Union, and enable an effective response to specific requests for expert advice in the areas covered by the member organisations.
6. Provide coordinated representation to the outside world including the general public, national governments, non-European countries, *etc*.

Notes from EMBL Council meeting in Hamburg

EMBLCouncil held their annual winter meeting at the Hamburg Outstation on November 18-21. Director-General Fotis C. Kafatos summarized recent developments in the lab and explained how EMBL is meeting the challenge of Functional Genomics through close integration of the different EMBL units, as well as through strategic partnerships with other institutions in Europe. Specific topics for discussion included:

Partnership for Structural Biology (PSB). Three international organizations (EMBL, ESRF and ILL) signed an agreement to form the PSB, thereby creating a unified structure for structural biology and structural genomics (see page 4). This is an example of an intergovernmental partnership with national institutes to create a strong pole of science, and shows the commitment of all institutes to move toward a unified European effort. The ESRF, ILL and EMBL will fund an extension to the EMBL building to house the joint facilities.

EIROforum. This interdisciplinary collaboration of seven European research institutions (see facing page) is an important component of the European Research Area. The thematic working groups of the EIROforum currently deal with the GRID, instrumentation, outreach and education, and with exchange of information on personnel matters.

National partnerships

- **Swiss partnership.** A partnership has been agreed in principle between EMBLand the Institute of Neurosciences in Zurich, to focus on advanced imaging methods as applied to neurosciences and other integrative biology fields. The partnership will involve methods such as image analysis, bioinformatics and gene expression.
- **Spanish partnership.** EMBL has agreed in principle to a partnership to establish a new department of regenerative medicine in the new medical center in Madrid. Under this plan EMBL would run the facility, with funds to be provided locally.
- **Nordic EMBL-Affiliated Center of Molecular Medicine.** This partnership aims to engage EMBL in a planned new institution to be organized by the Nordic countries, with a major centre in one country and branches in the others. Major themes of this initiative would be molecular epidemiology and translational cancer research.

Other collaborations discussed at the meeting included joint degree agreements between national universities and **EMBL's International PhD Programme** and the **EMBL Alumni Association.** News on each of these appear later in this issue.

Technology Transfer. Gábor Lamm, Managing Director of EMBLEM GmbH, presented the laboratory's technology transfer activities to Council, generating enthusiasm in spite of the current global economic environment. Council noted the strengths in EMBL's spinouts, and look foward to future benefits.

Endowment Trust. Though not yet common in Europe, this type of fund is a common feature in US and UK institutions. The aim of this fund is to provide independent flexible funding to support innovative activities, and allow the Laboratory to move quickly to open new research avenues. It would be separate from and complementary to Council's normal five-year funding schemes. Income from EMBL's technology transfer funds will be used to start, allowing the EMBLto proceed to develop the legal structure of the Endowment Trust. Council approved, in principle, this fund.

The **Strategic Forward Look** is a broad outline that will set the direction for the Laboratory over the next 10 years. The scientific administration of the lab will be working closely with Council over the next 12 months to produce this outline. One of the plan's goals is to set the framework for the selection committee to recruit the successor of F.C. Kafatos as Director-General when he retires in May 2005.

Eero Vuorio has taken over as Chair of EMBL Council, replacing Peter Gruss who is stepping down and is the new President of Germany's Max Planck Society. Vuorio is a professor of Molecular Biology at the University of Turku, Finland, and Chair of the Research Council for Health at the Academy of Finland. The Vice-Chairs of the Council are Denis Duboule from the University of Geneva and Reinhard Lührmann from the MPI for Biophysical Chemistry in Göttingen.

Hamburg inaugurates updated facilities at Council meeting

photo: M. Schupp

Eero Vuorio, Fotis C. Kafatos and Matthias Wilmanns inaugurate the renovated Hamburg Outstaion facilities.

Council delegates had a special treat at the November meeting: they were among the first to have a look at the revamped Hamburg Outstation. Located on campus of the German Synchrotron Research Centre (DESY), EMBL's facilities underwent extensive renovation and expansion this year. "With close to 80 staff and fellows working at EMBL Hamburg and 300-400 visitors each year using its facilities, the 30-year-old building was no longer enough," says Matthias Wilmanns, Head of the Hamburg Outstation.

With off-line investment funds from the current indicative scheme, building '25A', which is attached to the DORIS storage ring and dedicated to synchrotron radiation experiments, was renovated to state-of-the-art safety standards. A third floor was added, nearly doubling lab space needed for protein production for crystallization. The extension has also considerably improved user off-beamline facilities.

With construction nearing completion in November, EMBC, EMBO and EMBL council members took time out from their schedule for a special tour, followed by ceremony in the bistro of DESY. The new Chair of Council, Eero Vuorio, with Director-General Fotis C. Kafatos and Matthias Wilmanns, cut the ribbon to mark the reopening of the facilities. Ernst Heinmöller, head of EMBL's building and maintenance section and supervisor of the construction work, presented Matthias with a broken key, a symbol of the critical role that complementary surfaces play not only in building but also in biological processes.

Soon after the reopening, the new building facilities were broken in as they hosted the PEP3 advanced training course, sponsored by EMBO. The support of Council in the renovations is gratefully acknowledged.

Simplifying microarray data sharing

ArrayExpress, the EBI's database for microarray data, opened its doors to web-based submissions on 1 December. The resource will make it easier for scientists to share and publish their microarray experiments, protocols and array designs.

"ArrayExpress has three major goals," explains Alvis Brazma, who heads the project. "To serve as a repository for data supporting publications; to provide the community with easy access to high-quality gene expression data in a standard format; and to facilitate the sharing of microarray designs and experimental protocols." It is achieving these aims by supporting community standards that have been developed by the Microarray Gene Expression Data Society (MGED). One of these, *MIAME*, specifies the *Minimum Information About a Microarray Experiment* needed to interpret the experiment unambiguously. Another, *MAGE-ML*, is the *Microarray Gene Expression Markup Language*, a standard format for exchanging data among microarray databases and data-analysis tools.

Why should researchers submit their data to ArrayExpress? Helen Parkinson, curation coordinator, explains: "Microarray experiments produce datasets that no single biologist can analyse, and that have the potential to answer questions about biology beyond the scope of the original experimental design. At ArrayExpress we have a team of biologists who curate these datasets and who work with the biologists who submit data."

Nature and *EMBO Journal* now require any microarray data that is integral to a paper's conclusions to be submitted to a publicly accessible microarray database. Other journals, including *Science*, *Cell* and *The Lancet*, are encouraging authors to adhere to MIAME standards when submitting microarray papers.

Fortunately, biologists won't have to brush up on their bioinformatics skills or start hiring bioinformaticians to comply with these requirements. They have free access to a web-based data submission and annotation tool called MIAMExpress to produce data compliant with MGED standards. The tool works on current versions of all the major web browsers and has been designed for use by biologists with minimal experience of bioinformatics.

Mohammadreza Shojatalab, MIAMExpress's development coordinator, says "We have provided as much explanation as possible on the MIAMExpress submission pages, in a context-sensitive way so that labs with little or no bioinformatics support will be able to send their data." The MIAMExpress support team can be reached by e-mail at miamexpress@ebi.ac.uk. Regular submitters can keep up with improvements by subscribing to the mailing list: miamexpress-announcement@lists.sourceforge.net.

Many microarray labs use laboratory information management systems (LIMS) that convert their data directly into MAGE-ML. There is a direct LIMS-to-MAGE-ML route that is made easier by MAGEstk, a suite of programmes that can export MAGE-MLdocuments from existing gene expression databases.

In the near future, annotations of popular microarray types will be loaded once into ArrayExpress to simplify the submission process even further. This will provide another shortcut; researchers will be able to call up pre-written descriptions of many popular chips.

– Cath Brooksbank

PSB: Partnership for Structural Biology

On November 15, a one-day ceremony was held on the common site of the EMBL, ILL and ESRF in Grenoble to formalize the Foundation of the Partnership for Structural Biology (PSB). Fotis C. Kafatos joined Directors-General Colin Carlile (ILL), William Stirling (ESRF), and the Directors of Life Sciences at the CNRS and CEA who support the IBS, Bernaud Pau and Andre Syrotta, to sign a memorandum of understanding creating a unique organization linking three international organizations with major French national partners.

Starting in 2003, the EMBL Outstation in Grenoble joins forces with three other Grenoble-based leading European research institutes with the aim of combining their skills to create a centre of excellence for Structural Biology. The partnership will concentrate on developing an integrated technical platform in high-throughput structural biology techniques, making more efficient the passage from gene to atomic structure. These technologies will be used for scientific projects focused on proteins of human health interest, such as viral proteins, human kinesins, and the family of human leucine rich repeat (LRR) proteins which have diverse important functions.

The Directors of the Institutes involved in the Partnership for Structural Biology seal the deal with a handshake.Photo by M. Schupp.

The PSB will construct and equip a new building of about 1400m^2 adjacent and connected to the present EMBL building. It will house offices and laboratories and a core infrastructure for high-throughput protein expression, characterization and crystallization to be overseen by EMBL and IBS. It will also house the newly-funded Deuteration Laboratory which is being set up jointly by EMBL and ILL to develop techniques in isotopic labeling of proteins. Deuterium labeling permits the study of enzyme mechanisms at the neutron beamline, and is also of great interest to the NMR community. Finally, the PSB project includes a new dual endstation undulator beamline (ID23) at the ESRF, which will be optimized for high throughput data collection.

The four founding partners of the PSB are enthusiastic to involve industrial and interested European academic parties. Both established pharmaceutical enterprises and promising start-up biotechnology companies are being invited to become Associate Members of the PSB and contribute to its development.

According to Stephen Cusack, head of the EMBL Grenoble Outstation, the PSB is an exciting joint venture between four separate institutes who should all benefit from enhanced facilities for high throughput structural biology. It is both in line with EMBL's view of the future of biology and the European view of networks of excellence.

More information on PSB can be found on www.psb.esrf.fr.

– Lena Reunis

EMBL Alumni Association sets agenda for the future

Plans for the EMBL Alumni Association are well underway! On October 2, a small group of alumni met at EMBLHeidelberg to work on shaping the future of the Association. The goals of this meeting were to 'activate'the membership of those who had registered, to set a timetable for future alumni meetings, and to plan the future growth and development of the Association. Here's what was discussed:

Official acceptance of members. The 544 alumni who had registered by October were officially elected to the EMBLAlumni Association. This induction by the chairmen of the board (represented by Angus Lamond and Bernard Dobberstein) is a formality required by the German authorities. Members who have registered since this date will be officially inducted at subsequent meetings of the board, subject to their eligibility being confirmed. Alumni who haven't yet signed up should do so at www.embl.de/alumni. (Just being an alumnus doesn't automatically make you a member!) You'll get access to the growing list of members and regular updates on Alumni Association activities and events.

Composition of Board and Elections. The Alumni Association currently has two layers of organization: the 544 official members, plus a governing board. An interim constitutive board has been established to allow activities to begin. This includes Angus Lamond (Chair), Albert Stegmüller (Treasurer), Giulio Draetta, Sabine Hentze, Werner Kühlbrandt, Lennart Philipson, Juan Valcárcel and Marino Zerial. Elections will be held by April 2003 to establish the official board. Information on candidates, issues and voting procedures will be available at the EMBL Alumni Association webpages in the near future. We are actively seeking alumni who are willing to serve on the board, so please send us your nominations. We aim to form a board that will represent gender and nationality, as well as fairly reflect the different categories of EMBL alumni, including representatives from the Outstations, different fields within molecular biology, non-scientific staff, and alumni working in industry as well as in academia. Members will be elected for a four-year term.

Future activities. We hope to organize a number of activities during 2003, subject to obtaining the necessary funding. Suggestions for activities include fellowships, lecture series, meetings, traveling workshops and science education initiatives. Please forward your ideas and suggestions. Initiatives already established include a postdoctoral fellowship at EMBLsponsored by the Swedish Foundation for Strategic Research. We are actively looking for other such sponsors who might do the same. More information on future activities will be available soon.

National alumni networks. Individual alumni can contribute to the success of the association by organizing local events and chapters. If you live in a city where other ex-EMBLstaff live and work and are interested in setting up a local alumni node, please get in touch (alumni@embl.de).

Matti Saraste Fellowship Fund. This fellowship fund, set up as a memorial following Matti's death in 2001, will be used to support one or more PhD students from non-member states while they carry out their postgraduate studies in the EMBL International PhD Programme. If you would like to contribute and have not yet made a donation, please use the following bank account details:

Deutscher Bank Heidelberg
Account name: EMBL Alumni Association eV
Account no: 0169615; BLZ (Bankleitzahl): 672 700 03

Clearly, the EMBL Alumni Association can be useful and beneficial to the European science community. Unlike many other alumni associations, we do not request membership fees. Getting started with our activities, however, will require resources. We invite you to make a donation to help us get us going. General bank account details:

Deutscher Bank Heidelberg
Account name: EMBL Alumni Association eV
Account no: 0169615-01; BLZ (Bankleitzahl): 672 700 03

The next general EMBL Alumni Association meeting is planned for November 25-27, 2004. Check our website for details as they become available.

– Angus Lamond, Chair of the EMBL Alumni Association

from the Administration

EMBL Council has agreed to the proposed changes to the health insurance scheme, which addresses concerns raised by staff at all of the units. The working group will continue to work on a number of remaining issues. Details on the new scheme, which will be implemented as of January 1, 2003, are available from the Staff Association (see page 12).

Council has also approved the revised Financial Rules and Regulations, the guidelines by which EMBLconducts business with its financial partners. The revision was requested by EMBL's external and internal auditors in order to bring EMBL's accounting practice up to date with current developments. Council warmly welcomed the completion of this task.

EMBL plans 25th year anniversary celebrations

Next year marks the 25th anniversary of the opening of the EMBL Main Laboratory in Heidelberg – and the laboratory is going to celebrate in style. Special events will include a festival with prominent local and national representatives on June 28. The next day EMBL will hold an open house for the public. Activities will include tours of the lab, hands-on experiments, games, music, food and drink.

The events will be organized by the Office of Information and Public Affairs, with lots of help from the EMBLcommunity to give tours, explain the exciting science that's going on at the lab, and to make sure everyone has a good time. If you have ideas about cool activities to do, or things you would like to see happen, send an email to info@embl.de.

EMBO / EMBL science education initiative gets

EMBO and EMBL, in collaboration with the European Federation of Biotechnology (EFB), will receive significant funding from the European Commission in 2003-2004 to launch a major new education initiative. The initiative, coordinated by EMBO, will provide badly-needed opportunities and material for biology teachers across Europe to improve their practical and theoretical knowledge in modern biology.

The award, which totals 710,000 Euros, will be used to support three closely-integrated areas of activity. EMBO will be coordinating a series of nine workshops in molecular biology for secondary school teachers in eight countries. These will start in May 2003 with the second EMBO international workshop for biology teachers, at the EMBL. This event will attract not only teachers from across Europe, but also teaching experts and media developers from various countries.

The grant will allow EMBL to hire two "Education Officers" who will develop and conduct practical laboratories for groups of visiting teachers. Participants will be led through activities that they can take back to the classroom. The teaching facility, called the European Learning Laboratory for the Life Sciences (ELLS), will simultaneously use the sessions to train visiting scientists to work with teachers. Researchers will then be qualified to conduct similar programs at other institutes. The staff will encourage EMBL scientists and visitors to bring along ideas that can be turned into activities for schools.

Another project of the ELLS is to develop a resource center / archive, a physical and virtual collection of excellent teaching materials. Many such resources already exist, and the archive can serve as a collection and distribution point for their dissemination throughout Europe. The archive has already been launched with the publication of a teaching kit on malaria, exercises on surfing the human and mouse genomes, and a DNA chip activity.

Additional material will be added quickly through the education projects of the EIROforum, such as next year's "Physics on Stage" event. This is an international science fair where teachers from all over Europe will bring projects that have already won national competitions. EMBL will coordinate a workpackage aimed at archiving these materials, making them available to teachers everywhere, and bringing them to the attention of publishers who may develop them further.

Many major laboratories – chiefly in the U.S. – have long been actively involved in the field of education. The fact that EMBLand EMBO already occupy a central position in European life science networks has encouraged us to try to fulfill a similar function for European teachers. Creating a successful, meaningful program doesn't require reinventing the wheel; model programs can be found at Cold Spring Harbor and elsewhere. Many of their solutions can be adapted to the European educational landscape.

Europeans reveal the technologies they 'couldn't be without'

Against a studio backdrop of flashing lights and talking robots, contestants stand at their podiums, hands on buzzers. "What was the name of the scientist who discovered the X-ray?", a voice asks, breaking the silence. A green light flashes and a voice rings out: "Röntgen". Correct! The audience roars with delight. The score is tied and one question remains to decide who will win the grand prize. No, this is not Chris Tarrant in a BBC television studio, and the contestants are not frustrated office workers or bored housewives hoping to change their dreary lives with a quick million-dollar jackpot. This scene unfolds in the 'Live from CERN' studios in Geneva: the quiz show host is a particle physics postdoc, the contestants are high-school students from across Europe who have spent the past several months brushing up their science knowledge. Their grand prize is a trip to visit the EFDA-JET research facilities in Oxford.

The 'Couldn't be without it!' webcast broadcast live from a studio at CERN in November. Photo by CERN.

The quiz show webcasts were the culmination of a year-long project called *Sci-tech*: *Couldn't Be Without It!*, organized by the EIROforum research institutes for the European Science and Technology Week. Its aim was to show students, teachers and other websurfers throughout Europe how today's society could not exist without cutting-edge scientific research. Throughout the year the project website offered in-depth looks at different modern technologies. At the live event, scientists from the EIROforum research organizations and from companies, such as Sun Microsystems, Siemens, L'Oreal and Luminex, took their audience of websurfers on a trip inside popular gadgets including cell phones and computers, to discover the science that made them possible. They showed, for example, how the behaviour of electrons in silicon was essential to the development of transistors and computers, how new medicines can be developed by looking at the genome of malaria-carrying mosquitoes, and how cancer can be diagnosed and treated with particle beams.

To identify which gadgets Europeans consider indispensable, the organizers commissioned a telephone and on-line survey of thousands of Europeans. The result? Apparently Northern Europeans can't imagine their households without ovens, whereas Southern Europeans covet the refrigerator as the most essential household appliance. Italians treasure their cars and motorbikes, unlike Norwegians and Germans who regard them as less important. For entertainment, the personal computer is a clear winner as the device considered most essential by all Europeans, followed by the TV and the Internet.

To help science educators throughout Europe teach their students about the latest breakthroughs in basic research, the EIROforum organizations designed and produced an education kit. The kit and website, are the beginning of a permanent resource center of activities and teaching materials that will be free and open to teachers across Europe.

For downloadable versions of the teaching kit, and access to the webasts in Italian, French and English, visit the *Couldn't Be Without It!*, website at www.cern.ch / sci-tech / .

– Sarah Sherwood

go-ahead from EC


photo by D. Young

Just as our organizations have broken down national barriers to do the best science, we can also identify good local educational practices and bring them to international audiences. The foundations have been laid: EMBO, by organizing two major teachers workshops, one of them international, has studied national curricula and analyzed teacher's needs. EMBL has harvested information from frequent visits of teacher and student groups. We have also learned a great deal from EIROforum partners such as CERN, ESA and ESO, where there are already well-developed education programs, and enlisted the help of Cold Spring Harbor and the San Francisco Exploratorium. Now we hope for the active support of the community.

– Russ Hodge

François Gros visits EMBL

François Gros, permanent secretary to the French Academy of Sciences, former Director of the Pasteur Institute, and advisor for the life sciences and medicine to the French government visited the EMBL on October 22. He was in Heidelberg to participate in a French-German round table discussion on bioethics and stem cells.

Long-time supporter of EMBL and EMBO, Professor Gros is a pioneer in the world of developmental biology. Together with Jacques Monod and François Jacob, in 1971, he proved the existence of mRNA. Gros has authored several books on genetics and bioethics (see Les secrets du gene, 1986, Editions Odile Jacob), which have become an important contribution to French heritage.

While in Heidelberg, Professor Gros took some time to come up the hill to EMBL to visit with Fotis Kafatos and several researchers. He also met with the Science and Society committee. At a reception with French graduate students and postdocs, he spoke of his philosophy that "Science is not everything! There is art, literature, philosophy and poetry. But science is the art of knowing and often the only means of understanding – two of the greatest aspirations of the human spirit."


François Gros (right) meets with French researchers during his visit to EMBL. Photo by M.B. Hansen

news & events

EMBL participates in Virtual Cell exhibition. In July, the Deutsche Museum in Munich staged a multimedia science exhibition called "vCell: the Virtual Cell". Organized by the Max-Planck-Gesellschaft, vCell aimed to bring the intricate world of the life sciences to a wide audience through hands-on activities, presentations and webcasts. During the exhibition, five EMBL scientists – Matthias Hentze, Tommy Nilsson, Cayetano Gonzalez, Jochen Wittbrodt and Detlev Arendt – participated in a live question-and-answer session which was broadcast to audiences around the world via webcam. After giving a short introduction to their work, the scientists fielded questions from the audience about basic science and new developments in their areas of research. For more information on the vCell initiative, visit www.vcell.de.

Microarray collaboration leads to development of human DNA chip. A collaboration between the Ansorge Group at the EMBL and the Ressourcenzentrum für Genomforschung GmbH Berlin-Heidelberg has resulted in the development of human DNAmicroarray, or chip, based on the Human Unigene RZPD-3 library. These arrays will serve as important tools in basic biological and medical research and will be applied for the first time in stem cell research at the University of Heidelberg and therapy analysis of lung tumors at the DKFZ. The news was announced at a press conference in Berlin on November 18.

EMBL alumna speaks at Heidelberg Forum on Science and Society. On Sunday, December 1, Nobel Prize winner and EMBL alumna Christiane Nüsslein-Volhard was the guest speaker at the Heidelberg Forum on Science and Society. She gave two lectures: one to a packed house at the Print Media Academy auditorium in downtown Heidelberg entitled "Wann ist der Mensch ein Mensch" (When does a human become a human?), and the other to a scientific audience at EMBL on "Genetic analysis of Cell migration in the zebrafish," the focus of her current research at the MPI for Developmental Biology in Tübingen. The Heidelberg Forum on Science and Society is a joint activity of the EMBL, DKFZ and the University of Heidelberg.

EMBL group leaders submit Expressions of Interest to FP6. If you were to visit a group leader last spring, chances are he or she would be in the midst of developing a love/hate relationship with their current Expression of Interest (EoI). A straw poll conducted at EMBL's annual group leader retreat (held in Ladenburg, Germany, on October 16-17) revealed that group leaders submitted about two EoIs per capita. For those of you who have never heard of EoIs, they are the EC's way of establishing themes of calls to be made under the funding mechanisms of the Sixth Framework Programme. The EC would be delighted to give you more information; all you have to do is visit the website www.cordis.lu/fp6/eoi.

Science, please! Portuguese students take EMBL by storm

Five Portuguese students and their teacher arrived on EMBL's doorstep in August laden with suitcases full of notebooks, pencils, pens, cameras... and costumes. An unusual visit for Meyerhofstrasse 1, but a very special one. Their trip to EMBL was a grand prize that they won with their play, "Demiurges contest", which they wrote and pro - duced for the Life in the Universe science fair held at CERN in Geneva in November 2001. During their week-long visit, they visited many labs, spoke with lots of scientists, and treated EMBL staff to a command performance of their play. Here they tell us about the play and their trip to the lab.

"DEMIURGES CONTEST" TELLS THE STORY OF FOUR GODS WHO STAGE A CONTEST TO SEE WHICH OF THEM WILL CREATE THE BEST FORM OF LIFE ON A DIFFERENT PLANET. HOWDID THE IDEAFORTHIS PLAY COME ABOUT?

We wrote this play, with some help from our teachers, to participate in the Life in the Universe science fair. We are all interested in science and theatre, and we thought this would be an original and funny way to combine the two and answer the question of whether there is Life in the Universe, and to get people to really think about it. We won the Portuguese national contest and were selected to participate in the European competition at CERN. We were really happy to win second prize in this, and to be given a trip to EMBL.

Many EMBL scientists came to watch our performance, and we think they enjoyed it. A lot of people came up to us afterwards to congratulate us and ask us how we came up with the ideas.

WHAT DID YOU EXPECT TO SEE AND DO AT EMBL?

We were really excited to visit EMBL and Heidelberg. We had heard a lot about the lab during the Life in the Universe fair, and were interested to see how things work in a scientific environment. The visit started off with a basic introduction to molecular biology. Russ Hodge did a wonderful job of explaining the difficult science going on at the lab by using analogies and metaphors; he really got us interested in the work that is going on here. Over the next few days we visited different labs and really got to see how science is done. For example, Detlev Arendt told us all about the evolution of development processes in a worm called *Bilateria;* we also saw the fish house where they have fluorescent fish! Another day we had a chance to do some experiments with Vladimir Benes and his group in the Genomics Core Facility. It was great! We felt like real scientists.

During a visit to EMBL, Portuguese students got a hands-on look at life in the lab. The group won a week-long visit to EMBLfor their participation in the EIROforum science fair, Life in the Universe. Photo by M.B. Hansen.

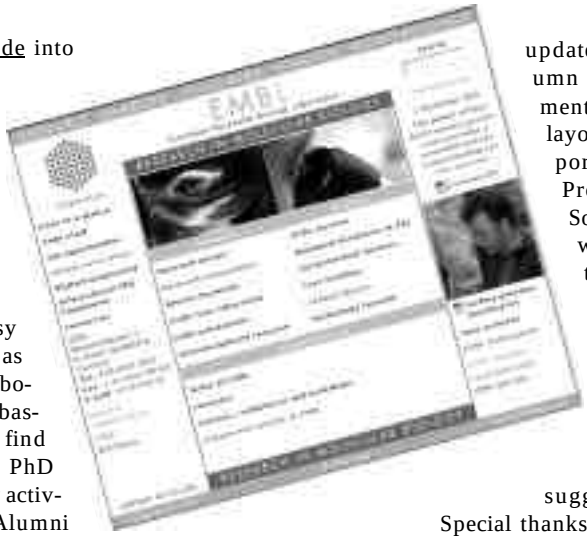
Despite the full scientific schedule, we also had time to visit Heidelberg and do some sight-seeing and shopping. By the end of the week we were tired, but happy. The visit was a special one and we were excited to get home to tell our family and friends all about the trip and the things we learned. We'd like to thank Claudia Hagedorn, Russ Hodge and the others at EMBL who made our trip so enjoyable.

The Science, please! team is Cátia Lopes, Cristiana Azevedo, Tiago Dias and Victor Ferreira, with teacher Manuel Teles Lagido.

- Sarah Sherwood

A new look for EMBL on the web

If you haven't done so recently, type www.embl.de into your internet browser, and you'll get a surprise. Jason Soffe and the Office of Information and Public Affairs decided it was high time to breathe some new life into the EMBLwebpages, not only to make the interface a more dynamic and attractive space, but also to better structure the amount of information that the website provides to a growing number of users.



Major features of the new design include an easy navigation tool for the five different EMBL units, as well as clear links to the research groups at the laboratory and services, including core facilities, databases, the library and technology transfer. You also find links to important information on the EMBL PhD Programme, job opportunities, Science and Society activities, the Visitors Programme and the EMBL Alumni Association. Another feature of the page is a regularly-updated news and events column with the latest developments from the lab. The new layout has already been incorporated into the Phd Programme, Science and Society and other pages. We will continue to redesign the remaining pages, including those for internal services and local information to ensure that users can quickly and easily find the information they need. If you have any suggestions, let us know!

Special thanks go to Bjoern Kindler and the EMBL photolab for their help and support.

EMBL PhD students break boundaries with their third symposium

After a full year of preparation, EMBL predoctoral students brought their third annual symposium to center stage at EMBL's main laboratory in Heidelberg, on November 14-16. "*Life within boundaries: membranes and compartments in biology*" was the theme of this year's event, a topic that touches on a wide range of disciplines within molecular biology, and one that was sure to attract an interesting and diverse audience. Sessions ranged from the origins of life, to the biophysical properties of membranes, signaling and trafficking, intracellular compartments and supracellular architecture.

The annual EMBL Predoc Symposium is run by students from beginning to end. "We do everything from deciding on the topic of the conference, to selecting and inviting the speakers, to taking care of the nitty gritty details, like reserving hotel rooms, ordering buses, and choosing the dinner menus," says predoctoral fellow Federico De Masi. Students are also in charge of raising the funds to support the conference. This year they managed to garner a lot of support from commercial sponsors and other organizations, such as the EMBO and the European Union. EMBO, for example, advertised the symposium in EMBO Reports (April 2002), sponsored two speakers from the EMBO and EMBO YIP Lectures series, and will publish the final conference report in EMBO Reports. To obtain EU funding, the students also submitted a detailed grant application to the "High Level Scientific Conferences" programme. "It was not an easy application to prepare, but it was well worth it," says Rebecca Forster. "We had very positive feedback from the examiners and managed to secure a very generous grant." A report will soon be posted on the EU website, highlighting the symposium as a model for other institutions to follow. Check the next issue of EMBL*&cetera* for details.

10 student organizers and one Director-General at the EMBLpredoc symposium, Life within boundaries: membranes and compartments in biology.

Part of the EU grant was reserved for reimbursing the costs of PhD students who came from across Europe to attend the meeting. The EMBL PhD symposium series is gaining such popularity worldwide that the organizers received applications from scientists from places as far away as South Africa, India, Japan, Armenia, Iran, Argentina and the Ukraine. Though most did not fulfill the EU reimbursement criteria, they still made the long trip to Heidelberg in order to attend the conference – clearly a sign that the symposia was well worth the journey.

"Much of the success of this year's conference is due to our fantastic speakers," says Christian Tischer. "They were very enthusiastic about the topic of the conference and jumped into the spirit of the meeting. They helped to create a relaxed atmosphere, which encouraged discussion and interaction among the participants." The organizers made sure there was ample time after each speaker for detailed discussion with the students.

Poster sessions allowed participants to present their own work to conference-goers and helped to break the ground for discussions between speakers and participants. Some speakers even found possibilities for collaborations between their groups. Prizes for best poster were presented by the German Society for Biochemistry and Molecular Biology to Matthias Quick (UCLA) and Christoph Reese (Tübingen), while the "outstanding poster" awards went to Husam Alwan (Amsterdam) and Christine Boeddinghaus (Heidelberg). "We were pleased with the high quality of the posters," says Michael Huebner. "It took two days for the Selection Committee to decide on the winners." The committee ended up suggesting that two additional prizes for outstanding poster be awarded.

"All this would not have been possible without the great friendship and team spirit among the group of organizers," says Federico. "It was a great experience for all of us, we worked hard, we worked long, and got the job done. Cheers and thanks everybody!"

For a full list of speakers and their topics, see http://symposium.predocs.org/

The organizers of this year's symposium are Federico De Masi, Daniel Forler, Rebecca Forster, Michael Huebner, Jan Korbel, Rune Linding, Christoph Schatz, Parantu Shah, Christian Tischer, and Ivan Yudushkin

...more news from EMBL's International PhD Programme

The University of Heidelberg and EMBL have agreed to a partnership enabling them to award joint PhD degrees. Formal signing of the agreement will take place in December. Students of EMBL's PhD Programme who are interested in this new opportunity are asked to get in touch with the predoc secretary, Tiziana Novarini (predocs@embl.de).

In a separate agreement, the **University of Dundee** has joined the list of institutions having a partnership with the EMBL PhD Programme, bringing the number of Universities awarding joint degrees to 10. With these two new agreements, EMBLhas now established partnerships with institutes in Germany and the United Kingdom.

EMBL graduate ceremony. Congratulations to this year's graduates, who received their PhD degrees at the graduation ceremony held on November 14. They are Stephan Altmann, Serge Cohen, Silvia Curado, Giovanni Frazzetto, Boyan Garvalov, Paolo Filardo, Evgenia Kriventseva, Ingrid Mechin, Philipp Selenko, Remco Sprangers, Rebekka Valsdottir, Tobias Walther, and Silke Wiesner.

Changing of the predoc guard. Barbara di Ventura and Mirco Castoldi have replaced Federico de Masi and Jan Korbel as the predoc representatives to the Graduate Committee. They will now serve a one-year term as liaisons between the predoc student body and the EMBL Graduate Committee.

Check out the latest information on the website written by and for predocs **http://forums.predocs.org/**

names to faces

Equal care for everybody: EMBL's caretaker service

We all know and need them... Mustafa: the man who fixes and moves everything around EMBL, together with his Caretaker team of five (Mario Hopf, Andreas Schlecht and Bernd Bonnawitz, as well as Klaus Eberlein the window cleaner).

Mustafa Uyguner joined EMBLin 1993 at a time when the Service consisted of 8 people. "The workload spread over our work areas at EMBL, EMBO, the Kinderhaus and the guesthouses has been increasing considerably compared with when I started, but we outsource more than we used to," he says.

Mustafa has been the head of the caretaker service since 1998, a role he thoroughly enjoys. The independence of his job reminds him in a way of the time in the 80s when he ran his own carpentry workshop in Turkey. "The bad economy at the end of the 80s forced me to close up my business and return to Germany where I had lived since 1969."

EMBL's caretaker team: Bernd Bonnawitz , Klaus Eberlein, Mario Hopf, Andreas Schlecht and Mustafa Uyguner. Photo by M. Schupp.

In order to keep cultural links to his home country, Mustafa has been involved in setting up a Turkish folklore dance group in Heidelberg. The main focus of the group has been to teach Turkish teenagers about their parents' culture through music and dancing.

When he is not playing the drum with his folklore group, Mustafa is likely to be found in or around his self-fabricated small office space in the Caretakers corner. The service's areas of responsibility include removals (and there have been quite a few recently, in and out of portacabins and new buildings), setting up conference and workshop infrastructure, office renovations and small repairs. Building Maintenance centralizes the workload and informs the caretakers of the jobs ahead. Mustafa is very proud of the fact that he has gained the full trust of his superiors: "They know that a job will get done once the request lands on my desk, and they just leave us to it".

Mustafa feels at his best when he is faced with a particular problem that requires some creative thinking. He recalls the canopy design for this year's staff association summer party in front of the reception area. His colleagues were convinced his construction was not going to hold up in the event of heavy rain, but he trusted his problem-solving instincts. Unfortunately for Mustafa, but fortunately for the rest of us, it did not rain on the day so he couldn't put his design to the test!

The main problem the service is facing – one, in fact, which applies to the whole of the laboratory – is a lack of storage space. "This is why certain free spaces gradually turn into storage areas, even though they are unsuitable," he says with a sigh. An example is the covered area next to the main entrance. "We don't want to dispose of those desks and tables because they are in good shape and always get used again, somehow."

Working with five people in a sometimes hectic environment is not always easy, but by regularly taking time out to talk things through, Mustafa feels his team is a close-knit one. With a big smile he adds: "And each of them knows my motto: the caretaker service has to continue…"

Mustafa feels he has an equally good working relationship with the scientists: "They are very understanding and accept that a service request will be followed-up on as soon as possible, but not immediately," he says, and adds: "All requests are equally important, regardless of who sends them to us." Which brings him to the one issue he would like to bang his drum about within the EMBL Community: "If you need us, please send a caretaker service request (available from the local info pages) rather than calling me. There are days when my phone does not stop ringing, and I can't get my work done."

It's the least we can do for you, Mustafa!

– Lena Reunis

Researchers at the EBI launch a new science and society initiative

Following the successful models established at the main laboratory in Heidelberg and Hamburg, PhD student Matthieu Louis and postdoc José Pereira Leal, decided that it was time to initiate a science and society forum at the EBI. Their proposal was enthusiastically welcomed by Director Janet Thornton, and now has a solid place in Hinxton's regular seminar series. "Alot of the work that goes on at the EBI is particularly relevant to current dialogue between science and society," says Matthieu, "We hope the entire community here will find the seminars and debates on the impact that advances in the life sciences has on people and society to be a useful and thought-provoking part of their regular work."

Brian Wynne inaugurated the series on December 9 with a seminar entitled, "From Public (Mis)Understanding of Science, to Scientific (Mis)Understanding of Publics? Uncertainty and ignorance in the genomic sciences." Wynne is currently Professor of Science Studies, Research Director of the Centre for the Study of Environmental Change and Chair of the Centre for Science Studies at Lancaster University. He has been a consultant on risk and related issues for the UK government, OECD, EEC, UN, and Greenpeace UK, and others and until recently was a member of the Management Board of the European Environment Agency. For information on future EMBL/EBI science and society activities, see www.ebi.ac.uk/~jleal/science_society.html.

the EMBO corner

EMBO's World Programme

Globalisation is a relatively new phenomenon for many sectors of society but it has always been at the heart of the scientific enterprise. The EMBO Fellowship Programme, for instance, has always allowed fellows to travel from Europe to leading laboratories worldwide. The same works in the opposite direction with approximately 10% of the fellowships being awarded annually to scientists from outside Europe who wish to come to work in Europe. An assessment of the articles in EMBO Journal and EMBOreports also reflects this world presence of EMBO and less visibly the referees who are engaged in assessing manuscripts submitted to the journals are chosen on their scientific merits and come from all corners of the world. Given the visibility of EMBO through these actions and through the very wide readership of the EMBO Journal and EMBOreports, it is not surprising to have an instant recognition of EMBO when attending a meeting outside Europe.

In 1998 a first step towards an active engagement by EMBO with the universal scientific community was taken when we were given responsibility to organize interactions between the European Biotechnology community and scientists in China. That programme, funded by the EU, slowly permitted us to identify the leaders in the scientific community in China. The next, perhaps inevitable, step was to establish the EMBO World Programme in September 2000. This decision opened EMBO's horizons to all scientists worldwide. The programme is managed by Mary Gannon, assisted by Kathy Oswald, and now delivers practical courses and workshops on all continents on an annual basis. It also acts as a conduit for those who need support to visit a particular country for scientific reasons. It is planned to establish a screening service based on the local experts throughout the world to allow European scientists to identify the best of those applicants for postdoctoral or PhD positions in European laboratories. This year a first medium term (up to nine months) fellowship programme was launched with the initial successful candidates coming from Bangladesh, India, Cuba and Brazil. The programme has also been instrumental in organizing input from European scientists on advisory boards worldwide including Australia, Chile and South Africa. One can see that in this way the influence of European science on local communities will grow.

Finally, a recent milestone in the development of this programme was reached earlier this month when a formal agreement was signed between the Chinese Academy of Sciences (CAS) and EMBO under which joint actions would take place and are planned for the next two years initially.

For more information on the EMBO World Programme, please visit the EMBO website at www.EMBO.org/projects/world/index.html or contact EMBO directly. Many of you have potential collaborations that are outside the European zone and for which support is sometimes difficult to obtain. We hope through this programme to lower the barrier of entry of scientists into Europe and in this way add to the efforts of others to make the European Research Area truly global.

– Frank Gannon

Science & Society

Infectious Diseases: Challenges, Threats and Responsibilities

On November 8-9, 2002, EMBL and EMBO held their third annual conference on science and society. The theme of this year's event was 'Infectious Diseases: Challenges, Threats, and Responsibilities'. The two-day conference brought people working in all fields of infectious diseases – scientists, policy makers, field workers and communicators – together with interested members of the public for a fascinating debate. Here's what some of the participants had to say...

Patricia Kahn, Arachu Castro and Michael Boutros discuss the consequences and responses at the EMBL/EMBO science and society conference on infectious diseases. Photo by M.B. Hansen.

"What impressed me most at this meeting were the personal accounts of scientists and journalists working in the field. Each of them had the knowledge and rhetorical skills to convince the audience that a global plan of action is required to change the inequalities in attacking infectious diseases throughout the world."

*

"The conclusions must really be made public, by means of mass media, lectures in museums, universities… and more importantly, though this might be more difficult, by contacting educational authorities so that they incorporate these conclusions in what children learn at school."

*

"I was glad to see that the speakers gave so much overall information and didn't get buried in arcane issues and details. Especially for me as a student at the Gymnasium this was very useful, because I could understand everything and I really learned a lot about infectious diseases and the situation in the world."

*

For full details on the speakers and summaries of their talks, please see the conference webpage at

www.embl.de/Conferences/SciSoc02/index.html

German–Israeli Foundation offers grant possibilities

EMBL researchers of German nationality can now apply for grants from the German-Israeli Foundation for Scientific Research and Development (GIF). The foundation, established in 1989, supports joint German-Israeli basic and applied research projects in the natural sciences, social sciences and humanities.

Israeli researchers currently at EMBL may submit a proposal together with a German partner at an eligible German institution, while German scientists during their stay at EMBL may submit with an Israeli partner at an Israeli institution. Researchers from both countries taking up a temporary appointment at the EMBL while engaged in an ongoing GIF project, will be permitted to conclude their research there.

The GIF is funded jointly by the German BMBF and the Israeli Ministry of Education. More information about the foundation can be found at www.gifres.org.il.

Israel has been a member state of the EMBLsince 1974. Additional news about collaborations will appear in future issues of EMBL*&cetera*.

Long-time collaborator wins State Prize of Israel

Ada Yonath, renowned structural biologst, EMBO member, and familiar face at the beamline facilities in Hamburg was awarded the 2002 State Prize of Israel for her pioneering work in the study of ribosome structure and function. Among her achievements, Professor Yonath is the first to have successfully crystallized ribosome subunits and analyzed their three-dimensional structure by X-ray crystallography methods – a feat which had previously been considered impossible. Professor Yonath's collaborations with EMBL date back to the mid 1980s when she and Kevin Leonard worked on image reconstruction of the initial ribosomal microcrystals. This work revealed the ribosomal tunnel, a feature that remained controversial for over 8 years, until rediscovered by cryo-electron microscopy. This tunnel recently gained importance, when it was shown (first biochemically and then by using crystallography) that it is not just a passive path for an emerging protein, but that it also has gating properties and provides the means for the regulatory roles of the ribosome.

The prestigious State Prize of Israel is awarded each year in fields of science, arts, humanities and other special contributions to society, and is presented during a televised ceremony in the presence of State dignitaries.

Professor Yonath serves as the director of two research centers at the Weizmann Institute which provide support to young Israeli scientists. She also heads a unit for ribosome research at the Max Planck Institutes in Germany, and has promoted the establishment of similar centers at other institutions in Israel.

from the Staff Association

Revised Health Insurance Scheme approved by Council. The revised Health Insurance Scheme (HIS), negotiated between the Staff Association and the Administration in a working group during 2002, was approved by Council at its winter meeting November 18-21 in Hamburg and will go into effect on January 1, 2003. Two articles must be renegotiated in the working group in 2003, but this will not affect the implementation of the revisions on January 1.

The revised scheme is based on the current in-house health scheme with improvements and additions to coverage, especially for children, chronically ill staff members, and staff at the outstations. An increased reserve fund, continued coverage under certain conditions, a hardship clause and ceilings on yearly expenditures for insured persons are new elements that increase social security under the scheme. Premiums for the staff will be increased by 1 percent in order to build the reserve fund and cover the additions to coverage.

The suggested changes were presented to the Heidelberg staff at an extraordinary General Assembly on October 8, during which details of the new plan were outlined. Videotapes of that assembly were sent to the Outstations (copies available from the Staff Association), which held their own informational meetings. The text of the new scheme is available from the Staff Association or can be downloaded in English, French or German from the EMBL web site at www.embl.de/ExternalInfo/GeneralInfo/StaffRulesAndRegulations/.

The Staff Association is pleased that, in cooperation with the Administration, we were able to avoid major cuts in coverage while gaining some improvements to EMBL's health system. The process of improvement is not completed, however. The working group will continue to monitor the revised system for problems in coverage or financial viability and negotiate further improvements where necessary.

Staff Association reimburses staff donations toward ILO salary case. The Staff Association has begun reimbursing donations staff members made toward the lawyer's fees in the ILO salary case. There were two collections, one in 1995-96 and one in 2000, at 25 DM per grade. It was promised at the time of collection that the donations would be returned if the staff won the case.

If you donated in 2000, please bring or send your receipt to Ann Thüringer in the Staff Association office, Room 330, Heidelberg. You will receive a voucher, which can be cashed in to the Petty Cash office in Room 109. Those of you who are no longer at EMBLare asked to arrange for someone in Heidelberg to pick up your refund. If this is not possible, please contact us.

If you donated in 1995-96, you may not have received a receipt. If this is the case, but you are listed on the original appeal, then you were automatically asked to donate. Please let us know your grade at that time so that we can recalculate your donation.

It is also possible to waive reimbursement and donate your contribution back to the Staff Association or to some other cause.

If you have questions about your refund, please contact us.

– Ann Thüringer

The EMBL Dive Club explores new depths with the Waldpiraten kids

Up behind the Bierhelderhof across the road from the EMBL main laboratory in Heidelberg, construction on the Waldpiraten camp for kids recovering from cancer is progressing. The buildings will be ready in the summer of next year to host their very special guests. In the meantime, some EMBL staff have been busy with projects for the kids. Postdoc Olaf Selchow tells us about one such activity that he and the EMBL Dive Club organized this summer.

EMBLdive instructor Pete Everitt and a Waldpiraten camper prepare to go underwater during the summer diving session. Photos by Gabi Geib.

CAN YOU TELL US ABOUT YOUR SPECIAL PROJECT WITH THE WALDPIRATEN KIDS?

After EMBLhelped so much at the clean-up day up at the camp last year, Gabi Geib from the German Children's Cancer Organization came to the lab to talk about the charity's work. She asked Pete Everitt from EMBL's Dive Club about whether it would be possible to give the kids at the camp the opportunity to dive and so experience what it is like to float weightlessly under water without having to worry about holding their breath. Activities like these, which healthy people are able to do, are not so straightforward for people who have had cancer, she told us. These kids are recovering from a traumatic time in their lives. Gabi wanted to give them a chance to regain confidence in their physical and psychological strength.

We jumped at the chance to help out, not only because we thought it would be great fun to dive with the kids, but also because they have special needs and presented us as dive instructors with new challenges. The only condition was that the kids were fit enough to swim. So during the summer camp session in July, we took a group of 20 teenagers to a local swimming pool for a "try" dive. Five instructors from the Dive Club and a group of helpers came along for two sessions. First we gave the group an introduction to safety and technique. Then we sorted out fins and masks for everyone, paired each instructor up with a child, and then it was into the pool. We managed to get as deep as 4.5 meters.

Exploring new depths together.

The kids absolutely loved it! Apparently they couldn't stop talking about it for weeks. Gabi had lots of phone calls from parents wanting to know what their kids were so excited about. Some of them even wanted to continue and take a proper diving course. It seems like we got some of them hooked...

SO THE CAMP REALLY AIMS TO GET KIDS INVOLVED IN NORMALACTIVITES?

The approach that they take at the camp is based on adventure learning. They teach by letting the kids experience things first hand – something that cancer patients aren't always given the freedom to do. With appropriate supervision, they are doing all sorts of "adventurous" things, like canoeing and climbing.

But as instructors, we had to keep in mind that it isn't always easy for the kids. For example, during one of the sessions, one boy was frightened to do more than stick his head under water and breathe from the aqualung while still standing in waist-deep water. He seemed a bit frustrated with himself afterwards. But the next session he was right back at the poolside asking if we could make an exception and do an extra round for him. This time he made it! He had a huge smile on his face when I met him in the changing rooms afterwards! His lips were blue and he was shivering, but he was laughing loudly, as proud as a 13-year-old man can be!

It was an overwhelming experience for all of us in the Dive Club. We had fun and learned a lot from these kids. They reminded us how important it is to enjoy life, even if sometimes it gives you a rough deal.

HOW DID YOU BECOME INVOLVED IN THIS ACTIVITY?

After Pete discussed the idea with Gabi, he asked me if I could help out. For me, however, it had a special meaning. About three years ago I experienced first hand how difficult it is to suffer and recover from such a terrible disease. After my illness I wasn't sure if I would ever return to diving. It was a big step for me to get back in the boat, and very important to realize what I am still able to do. I think physical experiences are essential for people recovering from major health problems, especially when it comes to children. Helping the Waldpiraten kids to dive is quite emotional for me. It makes me happy to know that I can help the kids share this kind of experience. The smile on their faces afterwards tells you that you have changed their world a little.

The EMBL Dive Club has already organized the Waldpiraten camp dives for two years now, and will continue to do it in the future. We're already looking forward to next year. As for me, I know for sure that these activities will always be part of my life.

– interview by Sarah Sherwood

Olaf would like to thank the Dive Club instructors, the members and helpers, especially Corinna Gorny and Peter Everitt, as well as the EMBL Staff Association for their support. Special thanks go to EMBL administration for the use of the minibus. Hans Drexler and the PhantaSea diveshop in Schwetzingen are gratefully acknowledged for providing free access to the swimming pool.

A visit from the stork at the EMBL guesthouse:

September 29 was a sad day for our group. The Mackenzies were having a leaving party. It was an unusually cold night and we were in one of the new canteen tents (which Mustafa had bought so cheaply for the Staff Association party). Jason Mackenzie had joined us in January as a visiting scientist from Australia (although it should be noted that Jason is very proud of being a New Zealander). I had met Jason at a meeting in Singapore and he had expressed an interest in a sabbatical visit to our group. Rob Parton, who had been a post-doc and later a staff scientist with us, had expressed enormous enthusiasm about Jason, and when I met him I was also not disappointed. He was working on a very fascinating virus with the evocative name Kunjin, a flavi-virus (related to the virus that causes Dengue and yellow fever). As his arrival time approached, I started to think organizing his visit. I e-mailed him about reserving the guest house for him, his wife and what I thought would be one or two children. Imagine my surprise when an e-mail arrived that he had not only five children, but they were all girls! Clearly, this was not going to be a routine sabbatical visit!

A family of seven, coming for only eight months. What could we do? Fortunately, an old friend, Bodil Holle was now in charge of the guest house and she showed tremendous innovation, flexibility and support. Beds were collected and put into the largest appartment of the guest house. When the Mackenzies arrived, all hell broke loose. The guest house was not prepared for this, but nevertheless it seemed to function in the end. Jason was more than fortunate in receiving a grant from the Alexander von Humboldt Foundation, which showed supreme flexibility in helping the Mackenzies. When Jason pointed out to me that the routine allowance for a von Humboldt postdoc was rather problematical for a family of this size to survive, I urged him to e-mail the foundation. They generously responded, increasing his allowance. At a later time they would support the whole family to visit Berlin for three days, all expenses paid. The Mackenzies turned out to be a real gem of a family, six lovely females; Jamie (14), Lulu (11), Molly (9), Ruen-Mae (7), Keahn (4) and Jason's

The Mackenzie girls: (from left to right) Jamie, Keahn, Ellen with Oceania, Lulu in the back, Molly, and Ruen-Mae. Dad Jason is behind the camera.

EMBLEM-EVCP triathlon team raises 5,000 euros for the Waldpiraten kids

Iron athletes (left to right) Martin Raditsch, Birgit Kerber and Stefan Herr in full uniform for the Heidelbergman Triathlon.

On August 4th, 2002 three sporty employees of EMBL Enterprise Management (EMBLEM) and EMBL Venture Capital Partners (EVCP) spent their Sunday speeding through water and racing across terrain. Their participation in the Heidelbergman Triathlon led them 47.7 km through the city center, the surrounding countryside and downstream on the river Neckar. After 1.7 km of swimming, 36 km of cycling and 10 km of running, the team crossed the finish line in 2 hours and 48 minutes, finishing in 91st place.

It was not only a test of endurance for the EMBLEM-EVCP team, but an exercise in good will. Under the motto "We sweat, you pay," the team managed to raise a hefty 5,000 euros from their business partners for the German Children's Cancer Organization's Waldpiraten camp for kids with cancer.

Thanks go out to all the sponsors. They are Dr. Günter Isenbruck, Dresdner Bank AG, RWS Riedel Appel Hornig, Roche Applied Science, Raumausstattung Gaberdiel, Wiesloch, Dr. Hugh Goodfellow, Patentanwälte Weickmann und Weickmann, Rechtsanwälte Gassner Stockmann & Kollegen, Dr. Heike Krämer, Dr. Clemens Doppler, Rechtsanwälte Rittershaus, Sparkasse Heidelberg, febit ag, Cenix BioScience GmbH, Gateway Travel Solutions, Hut & Wenzel, and Schulz Elektrotechnik.

– Gábor Lamm

Stop the presses! More buses up the hill – Summer party date set...

Feeling guilty about parking on the double yellow lines? The city of Heidelberg has announced a new bus schedule for the route up the hill to the lab. As of December 15, 2002, the number 21 bus will run *every hour*. Going up the hill, it will drop you off at the MPI (behind EMBL) at 13 minutes past the hour. Going down, it will pick you up at 44 minutes past the hour. Check out www.mobil2001-heidelberg.de for a full schedule. Thanks, Heidelberg!

Mark your calendars! The 2003 EMBL-Staff Association summer party has been scheduled for Saturday, June 7. EMBL staff, family and alumni are all welcome! Check upcoming issues of EMBL*&cetera* for more details.

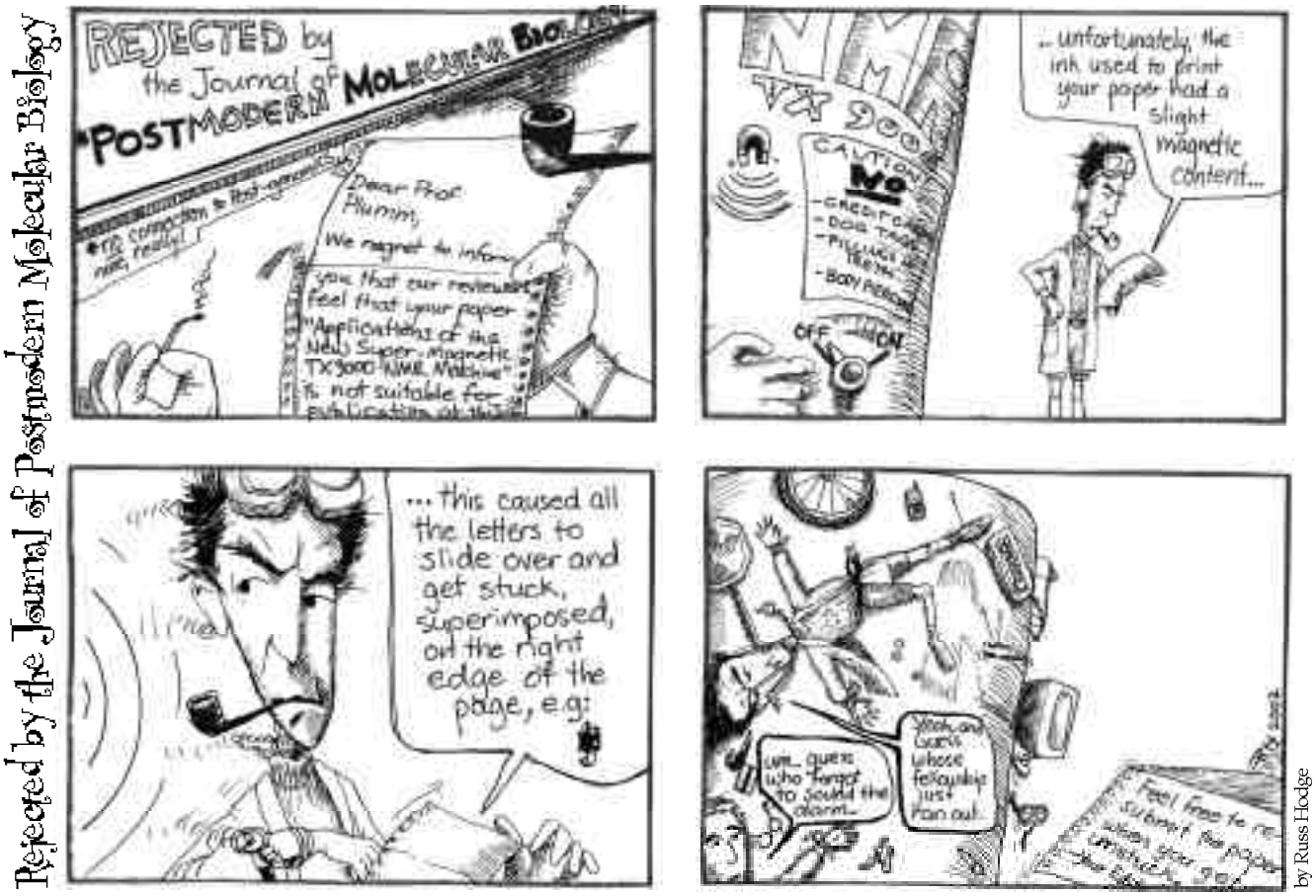
Oceania Mackenzie makes a grand entrance

remarkable wife, Ellen. They were all regular visitors to our group and to the Canteen – no doubt many of you will have noticed them. Jason's daughters turned out to be all remarkable individuals, all quite different from one another and their collective personality infiltrated the soul of our group. Rumours that two of the girls were regular visitors to our group on Friday evenings to use the internet are completely unfounded. In our group we are very stringent that the internet is only used for truly scientific purposes!

When I heard that Ellen was again pregnant, I was, to put it mildly, a little perplexed. My first thought was: Bodil, send us another "small" bed. My second concern was how would young "Fotis" survive in a world with six women and five sisters! However, the reality is that every member of our group felt an enormous thrill when Jason called the lab on July 11 and informed us that the baby had been successfully delivered. Jamie, the eldest, had played the role of midwife very well indeed; her first experience as a midwife! No doctor was involved and no official midwife was needed: Ellen had enough experience in these matters. "Is it a boy?" I asked Jason. Well, imagine my shock (and my disappointment with statistics – with statistics you can show anything!) when he told me "No, it's another girl!" 6 girls – wow! "What's her name" I asked him; well, there was a pause – apparently the Mackenzies believed in statistics as well. They had a long list of boys' names that were debated widely amongst the family. "Iain" was one of the close contenders, but one of the girls (who got more involved in learning the German language more than the others) pointed out that this name was too close to *Ja/Nein* in German. Did they want a Mackenzie who will be labelled "indecisive" for the rest of his life. So they had settled on "Fotis", a name which would allow the boy to settle down well in Melbourne, which has a thriving Greek population. Moreover, this name was well known at the EMBL; they heard it often and it impressed them a lot. In the end, it took quite a while for "Oceania" to get the officially word from her family what would stand on her birth certificate. To the best of my knowledge, Oceania is the very first baby ever to be born in the EMBL guest house. All our group are incredibly proud that we could experience this remarkable event. It was clearly something we will never forget.

Jason and the girls are now back in Australia, and thanks to e-mail, we can keep regular track of all the Mackenzies. There has been a problem with Jason's position at the University in Brisbane and for some time it looked as if he would be out of work. At the moment there is hope that he can get a new position; let's hope so, or we'll be coming round the lab collecting money for a new Mackenzie charity. We hope that we have not seen the last of this remarkable family and , who knows, maybe there will be another application to the Alexander von Humboldt foundation in the near future for nine??, ten?? Mackenzies. If this becomes a reality we'll be ready... but will Bodil still find enough beds?

– Gareth Griffiths



people @EMBL

Eileen Furlong joined EMBL in September as a joint Group Leader in the Developmental Biology and Gene Expression Programmes. Eileen received her PhD in 1996 from the University College Dublin, and then spent five years as a post-doctoral research fellow at Stanford University, California, USA. While at EMBL the Furlong group's work will focus on understanding the genetic cascades required for muscle development using a range of genetic and genomic approaches.

Faculty appointments: Weimin Zhu and Dean Myles have been appointed team leaders at the EBI and the Grenoble Outstation, respectively. Annabel Goulding has joined the Personnel section and will now help staff with matters regarding salaries and benefits.

awards, honours &cetera

Andreas Vogel, a postdoc in Wolfram Meyer-Klaucke's team at the Hamburg Outstation, was awarded a prize for the best oral presentation at the Biocat 2002 conference, an International Congress on Biocatalysis at the Technical University Hamburg-Harburg. The € 1,500 award was given for his presentation on "The metallo-b lactamase family: a pool for hydrolytic enzymes".

Andreas Lingel, a PhD student in Elisa Izaurralde's group, has been awarded the ETH medal by the Swiss Federal Institute of Technology in Zurich for his diploma work on the stability of linear and cyclic proteins. The award – a silver medal and 1,500 CHF – was presented to Andreas at the ETH's annual anniversary ceremony on November 23 in Zurich.

Giuseppe Testa, former EMBL predoc and now postdoc at the MPI for Cell Biology and Genetics in Dresden, was awarded the European Doctorate in Biotechnology from the recently founded European Association for Higher Education in Biotechnology (HEduBT), for his thesis work on "Modeling leukemia in the mouse: novel strategies in genome engineering." HEduBT seeks to promote degrees in Biotechnology at the Masters and Doctoral levels by encouraging students to complete courses in engineering, management, entrepreneurship, computing, economics, international law and biotechnology ethics. Successful candidates should have appropriate second language skills and will have studied in a European laboratory in a country other than their home country. If you are an EMBL PhD student working on a subject with biotechnological relevance, and are interested in applying for this degree, visit the HEduBT website at www.eurodoctor.it for more information.

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Who's new?

In the Biochemical Instrumentation Programme: Adolfo Dominguez (Ansorge); in the Cell Biology and Cell Biophysics Programme: Jovana Drinjakovic (Surrey), Daniel Gerlich (Ellenberg, also Gene Expression), Holger Kress (Stelzer), Vibor Laketa (Pepperkok), Steffen Lindek (Stelzer), Felipe Mora-Bermúdez (Ellenberg, also Gene Expression), Anne-Jacqueline Relova (Nilsson), Thomas Sandmann (Brunner), Antonino Schepis (Griffiths), Arne Seitz (Surrey), Jan Vos (Vernos and Surrey); in the Developmental Biology Programme: Yawen Chen (Cohen), Jean-Baptiste Coutelis (Ephrussi), Ana Dinarina (Nebreda), Ignacio Dolado (Nebreda), Sandra Fehsenfeld (Treier), Eileen Furlong (Group Leader, also Gene Expression), Andres Gaytan de Ayala Alonso (J. Müller, also Gene Expression), Caroline Iquel (Wittbrodt), Janus Jakobsen (Furlong, also Gene Expression), Juan Martinez (Wittbrodt), Bernadett Papp (J. Müller, also Gene Expression), Marlene Rau (Neumann), Marie Sakkou (Treier), Petra Samenfeld (Furlong, also Gene Expression), Hsin-Ho Sung (Rørth), Andrea Vögtlin (Nebreda); in the Gene Expression Programme: Claudia Blumenstock (Hentze), Laura Buffa (Hentze), Kent Duncan (Hentze), Dunja Ferring (Hentze), Herbert Holz (Akhtar), Patrick Hundsdörfer (Hentze), Christiane Jost (Schultz), Christian Klasen (Mattaj), Alen Piljic (Schultz), Masami Yamada (Mattaj); in the Structural and Computational Biology Programme: Hugo Ceulemans (Russell), Dilem Hizlan (Hoenger), Michael Hothorn (Scheffzek), Martin Jinek (Conti), Karina Krmoian, Anna Oddone (Sattler), Teresa Pastor-Hernandez (Serrano), Hannes Simader (Suck); in Additional Research Activities: Elena Kokoza (Kafatos), Anastasios Koutsos (Kafatos), Kristin Michel (Kafatos); in Monterotondo: Olga Ermakova-Cirilli (Nerlov), Maria Ermolaeva (Pasparakis), Cornelius Gross (Group Leader), Che Serguera (Minichiello), Geert van Loo (Pasparakis) (NB: complete lists of newcomers from the Outstations were unavailable at the time of printing. We're working to include this information in future issues); elsewhere at EMBL: Carla Morassutti (Protein Purification and Expression Facility), Alois Werner (Finance); at EMBLEM: Thorsten Schneider; at EMBO: Jeannie Eckert, Valerie Ferrier, Lynne Greinstetter Turnbull