EBI set to expand thanks to funding from UK agencies

The European Bioinformatics Institute has received a big boost from The Wellcome Trust, the Medical Research Council and the Biotechnology and Biological Sciences Research Council, which have given funds to expand the EBI site in Hinxton, Cambridgeshire, UK. The new development will provide 1,500 square meters of space which, together with the existing 3,000-square-meter building, will house over 400 staff.

Iain Mattaj takes over the helm of EMBL

On May 1, Iain Mattaj assumed leadership of EMBL, taking over from Fotis C. Kafatos. Iain has been at EMBL for over 20 years and has been deeply involved in scientific planning at the Lab since becoming Scientific Director in 1999. In an introductory address, he outlines his plans for formulating the next Scientific Programme, gives some perspectives on the transition to a new Director General, and discusses the evolution of the Laboratory over the next few years.

Charity begins at home

Postdoctoral fellow Emmanuel Reynaud is one of many EMBL scientists and staff who invest some of their time in helping those in need. He has been actively participating in humanitarian projects in Africa to improve the quality of life there. He and fellow enthusiasts have now formalized these efforts by establishing a new charity called Adéquation Germany. Their activities include collecting used lab equipment for research groups in countries where there is a need, and raising funds for health campaigns. They’ve also launched a new website featuring news and information on the organization’s initiatives. Check it out at http://adequationgermany.embl.de

Taking time out for reflection

Sometimes it’s necessary to get some distance from the Lab – even if you don’t go very far. In April, faculty from all five EMBL sites gathered at a conference center in Heidelberg to discuss new ideas and the future of the Lab. A week later, 107 young scientists withdrew to a monastery in France for the first-ever postdoc retreat. The purpose of the retreat was to encourage scientific exchange, address career-related issues and establish a committee to give this community a voice.

Charity begins at home

It’s that time of year again! The annual Summer Party, jointly sponsored by EMBL and the Staff Association, will take place at EMBL-Heidelberg on Saturday, July 2. The day begins at 13.30 with activities for kids (including pony rides and a bouncy castle). A sumptuous barbecue gets underway at 17.30; other highlights include the Freddy Wonder Combo, a midnight chili con carne, and a return of the tombola, with proceeds going to the Waldpiraten camp. Tombola tickets will soon be on sale in front of the canteen, at EMBL or EMBO receptions and during the party.

Charity begins at home

News from the EMBL Alumni Association

ELLS team visits Ukraine for LearningLAB

Awards, newcomers and more
Shaping the future of EMBL: Retreat kicks off discussion of next Scientific Programme

It was one of the most hectic weeks in recent EMBL history. On the morning of April 14, a hundred EMBL faculty members met at the Villa Toscana conference facilities, down the hill from the Heidelberg Lab, to look into the future and exchange ideas about the directions EMBL research should take. Iain Mattaj led the meeting, one of the first steps in formulating the Laboratory’s next Scientific Programme. In the late afternoon, everyone had to rush back to the Lab to take part in a farewell celebration for departing Director General Fotis C. Kafatos. (And if that wasn’t enough, a group of former colleagues had gathered for a meeting of the Alumni Association – see facing page). When everyone had recovered from that day, the faculty retreat continued the next morning with meetings and reports from working groups.

A sense of the strong trend towards interdisciplinary throughout the life sciences pervaded the retreat. One focus was the continuing development of “EMBL Centres,” thematic platforms to promote interactions between groups from across the Lab. There is a need, for example, to provide dedicated support for people who are working on the computational side of biology in many different groups. The list of Centres goes on to include Disease Mechanisms, High-Throughput Functional Genomics, and Molecular and Cellular Imaging. Each of these areas represents themes which are fundamental to how molecular biology is developing. Discussions took on the questions of how EMBL Centres can promote interdisciplinary activities, find funding for interesting new projects and develop new areas of focus for possible inclusion in the next Scientific Programme. One point was the wide recognition that novel technologies will be necessary: for example, X-ray tomography, simulation and modeling techniques, chemical biology, and new types of imaging to bridge important gaps between molecules, cells and the entire organism.

Everyone wanted to attend more of the working groups than time permitted, and the meetings attracted scientists whose work doesn’t normally bring them into contact. A lot of new projects were proposed, giving some great new ideas as the process of formulating the next Scientific Programme gets underway. The result will be a five-year scientific and budgetary plan for the Laboratory to be proposed to Council and to take effect in 2007. The current programme had been fixed for the period of 2001-2005, and was extended an extra year to give the new Director General time to complete this very important task. The ideas raised in the retreat were next discussed at the annual Scientific Advisory Committee (SAC) meeting in May. SAC’s input into this strategic document is very important, and the members of SAC and the EMBL Council have been invited to attend the next faculty retreat on September 19-21 in Hinxton. A goal of that meeting will be to discuss the first draft of the scientific programme. In the meantime, staff are invited to continue to give input on planning for the Laboratory; one mechanism is a questionnaire about the core facilities, which will be online in July.

EMBL postdoc community finds a voice at first-ever retreat in Alsace, France

On April 22, 107 postdocs from all across EMBL gathered at the beautiful Mont Saint Odile monastery in Alsace for the first-ever EMBL postdoc retreat. This was a unique event. Like many laboratories, EMBL offers various types of support to predocs and other young scientists, but postdoctoral fellows typically have fewer opportunities for career development and often have difficulty finding their place in the community. In response to encouragement from Iain Mattaj and Pernille Rørth, a group of enthusiastic postdoc volunteers put forward a proposal for a retreat. The Laboratory provided funding, and the volunteers set out to put together an exciting programme which would encourage scientific exchange, address career-related issues and establish a postdoc committee to give the community a voice.

The first evening featured Martin Raff (University College London) as the keynote speaker. Giving a retrospective of his career, he identified key events that shaped his scientific life, involving enthusiasm, generosity and a little bit of luck. A career development session on the second day included personal perspectives from an ex-EMBL postdoc who recently set up his own group, a postdoc-turned-industrial-executive and a scientific journalist. Oliver Gruss (ZMBH, Heidelberg) outlined the "Do’s and Don’ts" of setting up a lab of one’s own. Anna Migliazza (Nerviano Medical Sciences Srl) talked about her adventures on moving into industry while Paul Smaglik (Nature), in a wild account involving nuns and automobiles, gave an overview of many “alternative” career options available to postdocs.

The remainder of the retreat was dedicated to short scientific talks and informal sessions, interspersed with plenty of time for chats over drinks and walks in the picturesque surroundings. Talks focused primarily on techniques and ideas rather than results. To mix things up a bit (scientifically), participants were seated in random groups over lunch and, armed with pencils and paper, were encouraged to discuss their projects. Finally, the important business of setting up a postdoc committee was addressed. The discussion raised many issues of which most of the participants had not been aware. It highlighted the need for formal representation, a forum to discuss postdoc issues and further events that facilitate networking and bring the community together. A voluntary committee has since been established with the hopes of achieving these goals.

Overall, the retreat was a big success. A short survey revealed that many of the attendees found it “important, useful and fun,” and a good opportunity to find potential collaborators. One attendee remarked: “I think the retreat provided an excellent environment to discuss science in a broader perspective. The variety of points of view, communicated in understandable language, made it very productive.” The consensus was that the event should definitely be repeated regularly.

The retreat demonstrated that postdocs have common issues as a group which need to be addressed, and that by working together they can improve things. The new committee is already at work on a new webpage (www.embl.org/staffonly/generalinfo/postdocs) and future events. Anyone who would like to participate should send an email to postdoc.association@embl.de

– Atlanta Cook and Lucia Sironi

Photo by Maj Britt Hansen
News from the EMBL Alumni Association: elections, local chapter projects and more...

Membership nears 1,000!
The EMBL Alumni Association embodies an impressive group of people who have an enormous potential to make a difference in science, particularly in Europe. Since the Association was officially founded in 1999, more than 950 of you from 35 countries have joined. But there are many more of you out there who haven’t yet joined and taken advantage of what the Association has to offer. Please spread the word and encourage your former EMBL colleagues to join. You can also check the “list of the lost” in the “members only” section of the Association’s webpages and forward us contact information for the alumni we haven’t been able to find. EMBL will offer a special prize to the lucky 1,000th alumnus/a to register.

Board elections to be held this fall
The next general elections for the Alumni Association board will be held in September, 2005. We are now actively seeking candidates for five open seats on the board. If you are an alumnus/a who would like to take an active role in shaping the Association’s activities and events, or would like to nominate someone who you think would make an ideal candidate, please send an email to alumni@embl.de.

We aim to form a board that will be as representative as possible in terms of nationality, as well as fairly reflecting the different categories of EMBL alumni, including representatives from the Outstations, different fields within molecular biology, researchers at different stages in their career, non-scientific staff, and alumni working in industry as well as in academia. Members will be elected for a 4-year term, and are expected to help with the management and organization of the alumni association and to attend the twice yearly meetings.

Proposals invited for local alumni projects
Have you got an idea for an event or activity that you think would be useful for EMBL alumni? The EMBL Alumni Association is now considering providing funding towards events judged to be of value and relevance to promoting alumni interactions at the local level. If you have an idea, please get in touch with your local chapter head (list available on the Alumni Association webpages, www.embl.org/aboutus/alumni) and put together a proposal. Proposals should:

• clearly describe the nature of the event (one A4 page)
• explain the relevance of the proposal to the EMBL Alumni Association
• include an estimate of the cost involved
• include the names of three registered members of the Alumni Association who will be involved in the organization of the activity.

Forms are available on the Association webpages and should be returned to alumni@embl.de by October 14, 2005.

Iberian local chapter meeting
Juan Valcárcel is organizing a meeting of EMBL alumni living and working in Spain and Portugal on October 7, 2005, at the CRG in Barcelona. Plans include talks by EMBL alumni Angus Lamond and Peter Becker, as well as a working session to discuss issues related to the association, the local chapter and what alumni can do to help one another and to improve their research environment. This will be followed by a Science and Society event and dinner at a nearby restaurant.

If you are interested in attending, contact Juan at juan.valcarcel@crg.es

PhD students from EMBL-Monterotondo and University of Rome host symposium

In May, PhD students from 26 countries met for the 6th EMBL International PhD Student Symposium, “Animal Models: Tips and Tricks from Nature.” The conference was organized for the first time outside Heidelberg and was the result of a close collaboration between EMBL-Monterotondo students and colleagues from the University of Rome “Tor Vergata.”

Planning for the symposium began a year ago when Monterotondo predocs accepted an invitation from their peers in Heidelberg to contribute to the organization of a series of five events funded by an EU Marie Curie grant for Conference and Training Courses. Divided into four sessions, the symposium highlighted the role of animal models in contemporary research, and challenged misconceptions about the impact that basic sciences such as ethology and physiology have on cutting edge technology.

Session 1: Observing nature
Vincent Fourcassié (CNRS, Toulouse) introduced his in vivo assay which uses a model of immunodeficient neonatal mice to study human blood formation and immunoreactions. Cathrin Brisken (Swiss Institute for Experimental Cancer Research, Epalinges) reviewed the state of the art of animal models for breast tumorigenesis, and Andras Nagy (Mount Sinai Hospital, Toronto) explained how it is possible to use mutant embryonic stem cells to develop embryos and strains of model organisms.

Session 2: Mimicking nature
Medical doctor and researcher Markus Manz (Institute for Biomedicine, Bellinzona) introduced his in vivo assay which uses a model of immunodeficient neonatal mice to study human blood formation and immunoreactions. Cathrin Brisken (Swiss Institute for Experimental Cancer Research, Epalinges) reviewed the state of the art of animal models for breast tumorigenesis, and Andras Nagy (Mount Sinai Hospital, Toronto) explained how it is possible to use mutant embryonic stem cells to develop embryos and strains of model organisms.

Session 3: Correcting and improving nature
After a talk on fetal gene therapy by Charles Rodeck (University College, London) and Olivier Danos (Genethon III-CNRS, Evry), the session turned to the hot issue of stem cell research; Robert Lanza (Advanced Cell Technology Inc.) showed how nuclear transfer could be used to save endangered and even extinct species. Next, a fundamental alimentary problem was tackled by Jin Kang (Harvard Medical School, Boston) who has generated transgenic mammals that express a C. elegans gene which enables them to convert unhealthy fatty acids to beneficial omega-3 forms.

Session 4: Stealing ideas from nature
This session presented some of the most spectacular studies of nature, and was linked with a general panel discussion on animal model research. Michael Dickinson (California Institute of Technology) amazed the audience by showing how the aerial abilities of flies, studied by means of high-speed video, virtual simulators, wind tunnels, and electrophysiology techniques, can be exploited to create flying micro-robots. John Bush (MIT, Cambridge) showed how the strategies adopted by walking-on-water animals (from snails to tail-walking dolphins) can be modeled and used to the construct machines that travel in water-air interfaces. Finally, Miguel Nicolelis (Duke University Medical Center, Durham) showed how a robotic arm can be controlled by the brain activity of a monkey. His futuristic work is now aimed at discovering other devices that can be assimilated as body structures and controlled by neuronal representations in our brains.

Post-lecture activities included a football match and a guided tour of Baroque Rome by night, culminating with a party in the city center.

The 7th International PhD Student Symposium, “Biology at work,” will take place at EMBL-Heidelberg in December 2005. For more, see http://symposium.predocs.org
EBI to expand with help from The Wellcome Trust and UK Research Councils

The EBI has received a big boost from The Wellcome Trust, the Medical Research Council and the Biotechnology and Biological Sciences Research Council, who have given funds to expand the EMBL EBI site in Hinxton. The new development will provide 1,500 square metres of space which, together with the existing building, will accommodate over 400 staff.

The expansion of the EBI will help EMBL realize goals in three important areas: bioinformatics services, research and training. Since opening in 1995, with just 70 staff and two major databases, the EBI has met the changing needs of biologists by enhancing its existing resources and developing new ones. The EBI web site now averages 1.3 million hits a day, as researchers access information on many aspects of biology, from single genes to entire genomes, or an individual metabolite to every component in a pathway.

Dr. Mark Walport, director of The Wellcome Trust, says: “The EBI is a global resource, providing completely open access to vast quantities of crucial biological data. It provides an essential toolkit for biological research. Our support is a step in the right direction and we hope it will encourage others to commit to the long-term sustainability of Europe’s leading provider of bioinformatics expertise.” The next challenge for the EBI will be to secure further funding for the staff and equipment necessary to realize its goals.

-- Cath Brooksbank

EBI celebrated progress and diversity in research

Staff at the EBI gathered on 10 May to celebrate Research Day. Launched in 2003, this biennial event provides an important opportunity to exchange ideas and identify synergies through oral presentations, posters and discussion.

New ways of finding meaningful information in a sea of data are at the core of bioinformatics research. Harald Kirsch, a member of Dietrich Rebbholz-Schuhmann’s text-mining group, has developed software for fast text filtering. It can match all the protein names from UniProt to papers that cite them in the EBI’s installation of Medline in a few minutes. Aurora Torrente, a PhD student in Alvìs Brazma’s group, has developed a method for comparing results from microarray-based experiments that have been analyzed using different clustering techniques.

Two approaches to gene identification were presented. Irmitraud Meyer from Nick Goldmann’s group is developing new methods to find RNA-encoding genes, based on the premise that RNAs fold as they are produced; the folds are caused by base-pairing, forming hairpins in the emerging single-stranded RNA molecule. Sequences capable of forming structures that compete (by allowing incorrect base pairs to form) with the emerging folded structure are suppressed, whereas transient structures that aid folding are not. Irmitraud plans to use this information to predict RNA secondary structures and to improve RNA-gene prediction. Another method, based on looking for base pairing among the third positions of codons (which can often change without altering the amino acid encoded), is being used to look for RNA-coding regions in the protein-coding parts of viral genomes. Wolfgang Huber, collaborating with Lars Steinmetz (EMBL-Heidelberg), has identified hundreds of new yeast transcripts and performed the first ever systematic analysis of 3’ and 5’ untranslated regions, using data from a tiling microarray in which every 8 base pairs on both strands of the yeast genome are represented by a unique probe. This required the development of new software tools to process and validate the data.

Other “omic” approaches include the use of genome and pathway databases by Christos Ouzounis’ group to explore patterns of evolution, including the evolutionary source of protein families and the reconstruction of ancestral states for protein families. Irilenia Nobeli described five years of metabolomic research in Janet Thornton’s group. Compared with other types of biological data, the cell’s complement of small molecules received scant attention until recently, and Irilenia likened her plight to the equivalent of trying to do bioinformatics without Blast. Using the Escherichia coli metabolome, she has built a library of the most common fragments in metabolites and has used it to map the proteome onto its cognate ligands. She has also docked ligands in silico onto proteins whose structures have been solved, with the aim of making informed guesses as to the biochemical functions of new structures emerging from the structural genomics initiatives.

And finally, two contrasting approaches to systems biology: Eric Fernandez, a postdoc in Nicolas Le Novère’s group, has homed in on an individual protein: he is using quantitative modeling and simulation to understand the role of DARPP-32, a protein phosphatase inhibitor that integrates dopaminergic and glutamatergic signals in the basal ganglia of the brain. His model challenges assumptions about how certain phosphorylation events control responses downstream of DARPP-32. At the other end of the scale, Nick Luscombe, the EBI’s newest group leader, is planning to apply the rich history of research on social interactions to his own topic of study – the transcriptional regulatory network in yeast.

Needless to say, we had to test some of Nick’s hypotheses by doing a bit of social networking ourselves after the talks, aided by one of the yeast metabolome’s most well-characterized products.

BioModels: A new way to share models of biological systems

April saw the launch of BioModels, the world’s first database of annotated biological models. BioModels is the result of a collaboration led by the EBI and the SBML Team, an international group that develops open-source standards to describe biological systems. Other contributors include the Keck Graduate Institute (USA), the Systems Biology Institute (Japan) and Stellenbosch University (South Africa).

Even the simplest living organisms perform a mind-boggling array of different processes, which are interconnected in complex ways to ensure that the organism responds appropriately to its environment. One of the best ways of ensuring that we really understand how these processes fit together is to build computer models of them. If a computer model behaves differently from the real organism, we know that we’ve neglected an important component of the system. Quantitative models can also reveal previously unappreciated properties of complex systems, paving the way towards new drug treatments. This approach, known as “computational systems biology,” is becoming increasingly popular now that scientists are accumulating detailed parts lists for many organisms, thanks to genome sequencing projects and other efforts to comprehensively document the components of living entities.

“Until now, computer modelers had no defined way to exchange descriptions of biological systems, and there was no accepted place to deposit and share newly developed models,” explains Nicolas Le Novère (EBI). “The BioModels database aims to address these issues.” BioModels builds on the Systems Biology Markup Language (SBML), an open-source computer language developed by the SBML Team, which is now widely accepted and is supported by over 75 different software systems worldwide.

BioModels is already gaining support from science publishers: Nature has pledged to encourage authors of papers containing suitable models to contribute them to BioModels, and the Nature journals and the new Molecular Systems Biology (EMBO) support submissions involving SBML.

The BioModels database is freely available at www.ebi.ac.uk/biomodels

– CB
This is my first written address to the EMBL community since taking over from Foteis Kafatos. Being Director General is a new role for me, and certainly a challenging one, but I am fortunate in starting with a thorough knowledge of EMBL’s structure and history, and of how the Lab functions. I also have a genuine pride in our past achievements. I know that most of the people who work at EMBL are happy to be here and are committed to doing their best in their specific area. The motivation of the staff throughout the Lab is critical to its success and also makes EMBL a very pleasant place to work. However, the fact that I come from inside EMBL and see the organization very positively does not mean that I think everything works perfectly or that nothing will change. EMBL continues to increase in size and this, together with our distribution over five separate sites, generates problems of coordination and communication that we all need to try very hard to solve. The fact that we are located in four different host countries also introduces some local differences.

EMBL has a substantial reputation as one of the leading biological research institutes in the world. We need to build on this strength, which relies on a commitment to scientific excellence and on the way we are organized. Our turnover system enables our young scientists to choose their field of research and build themselves a reputation before moving on, most likely to a position in one of the member states. Through this turnover system and the collaborative, open and international way science is done at EMBL, we provide a valuable addition to research activities in the member states. I want to emphasize that this constant movement of highly trained scientists, administrators and support staff from EMBL is probably the single most valuable contribution that we make to the member states and is a major reason why they fund us. I am therefore fully committed to maintaining the turnover system.

What are my first tasks as DG? EMBL operates on a five-year plan that is approved by Council on behalf of the 18 member states. The current plan was extended by one year to give the new DG more time to develop the next one, which will be prepared this year and next and come into effect in 2007. The plan has two parts: the Scientific Programme, which describes research, services, training and outreach activities; and the Indicative Scheme, which is the budget for EMBL, that is based on the cost of the activities in the Scientific Programme that EMBL Council approves.

The development of the Scientific Programme is a process that involves the entire Laboratory. Since the beginning of this year, I have started to gather input from the EMBL faculty and scientific staff and have met most of them in person. We organized a faculty retreat in April to collect and discuss new ideas, and I am planning to meet with members of the administration and general services over the next weeks and months to discuss their plans for the future. I encourage everybody to approach me directly at any time with suggestions and ideas, either in person or via the DG Office. I am looking for constructive criticism of the way we do things at EMBL and suggestions for improvement. We are in a unique position to reshape the laboratory and to make meaningful changes over the next one or two years, and your input is essential to make this a success. Now I want to go into some aspects of the laboratory in more detail.

Research

Research in molecular biology continues to change at a very rapid pace. The structure of EMBL, with Scientific Units composed of small to medium-sized independent groups with young group leaders, is key to our success and will not be changed. This format, however, must be supplemented with structures that allow us both to promote further the development of ambitious, interdisciplinary collaborative efforts among our groups and to apply the new high-throughput technologies for the acquisition of large amounts of data. We will expand the activities of EMBL Centres to foster integration of research activities across the EMBL sites and to help raise funds for technology development and for larger interdisciplinary projects. Systems biology will be increasingly important, and Computational biology should become an integral part of all research activities at EMBL. As a result of the discussions at the recent faculty retreat, I will be asking Council to provide funds to extend our activities in Chemical biology to complement our existing efforts in this area. Molecular biology research is becoming ever closer to medicine and EMBL needs to participate in this development. Many groups at EMBL already work on topics that are relevant to understanding disease and in particular our youngest Outstation, the Mouse Biology Unit in Monterotondo, has developed very well and will be a central part of this initiative.

Training

The EMBL International PhD Programme is incredibly successful and has made EMBL one of the leading training centres for young scientists in molecular biology.

Based on the successful PhD Programme we will develop an integrated training centre that is to be called the EMBL International Centre for Advanced Training (EICAT). This will include a postdoctoral training programme, a programme for sabbatical visitors, training for teachers and involvement in organizing courses, conferences and workshops for scientists at all levels. I intend to deepen our collaboration with EMBO in these latter areas.

The German government has agreed to fund a multi-purpose building in Heidelberg to host some of the training activities and we are very grateful for this support. But advanced training will continue to be organized and offered at all EMBL sites. The idea is not to centralize decision-making on training but rather to provide a structure that can help the people throughout EMBL who put time and effort into our training programmes.

In addition to these formal training programmes, we have begun discussions on how to offer more vocational training to EMBL staff including, but not restricted to, young group leaders and postdocs. We are currently collecting information on what types of training are needed and will develop a plan taking the specific requirements of different staff members and sites into account. Again, I ask that if you have any suggestions on this that you send them either to me, to Christine Pollig in personnel, or to any of the people responsible for the training programmes in your part of EMBL.

Services

EMBL is recognized for providing outstanding
services to the scientific community in Bioinformatics, mainly through the EBI, in Structural Biology via the Outstations in Hamburg and Grenoble, and to a more limited extent through the various Core Facilities that serve not only EMBL scientists but also, if capacity allows, external users.

The flow of experimental information into the various data resources provided by the EBI continues to increase exponentially, making it essential that the staff and facilities of the data resources continue to increase. The EBI has recently received notification that their request to various UK funding bodies for the construction of an extension building in Hinxton has been granted. We are very happy that the MRC, the BBSRC and The Wellcome Trust have come together to supplement the support provided by the member states and to sponsor the building extension. The next major task for EMBL as a whole is to ensure that funding for the EBI’s service efforts is put on a stable footing. This will certainly be very difficult, but I am determined to make the effort required and I will need support not only from the EBI but from the whole of EMBL if I am to succeed.

The Structural Biology Outstations in Hamburg and Grenoble are both engaged in extending their capacities. The Grenoble Outstation is mainly doing this through involvement in the Partnership for Structural Biology while the Hamburg Outstation will soon begin designing and building new beamlines for Structural Biology at the PETRA synchrotron. The two structural biology outstations are very complementary and will be working increasingly closely together in the future.

Technology Transfer

One of the areas that changed most under Fotis Kafatos was technology transfer. I have been a member of the advisory board of our technology transfer company, EMBLEM, since it was founded and I am of the opinion that it has been very successful in several respects. First, people who are interested in technology transfer or in a career in biotechnology or related branches can obtain the information they need from EMBLEM. Second, EMBLEM helps ensure that discoveries and inventions made at EMBL are turned into products that are useful for our funders, the taxpayers in our member states. While basic research is and will remain EMBL’s primary mission it is very valuable for us to do what we can to underline the message that excellent basic research is the best motor of innovation.

EMBL Administration

When I first came to the Lab, EMBL was small, and so was its administration. At least in Heidelberg the fact that everyone knew everybody else meant that most problems were quickly and unbureaucratically solved. The purpose of the administration was well understood, to support the scientists so that they could fully concentrate on research. In spite of the existence of some problems even then, particularly in communication with the two existing Outstations, the relationship between the administration and the rest of the staff was good, but it has unfortunately deteriorated over much of the twenty years that I have been here.

I think this was mainly due to the expansion of the Lab in the absence of adequate numbers of administrative staff and structures to deal with the increased size and complexity of EMBL. But there was also an ever-increasing lack of communication between the administrative and scientific sides of the laboratory. I, however, detect a real desire in the current administrative leadership to reverse this trend. I am very pleased to see this development and will do what I can to help it flourish. We need to continue to improve the workflow and communication between the scientists and the administrative staff and to integrate the Outstations, which have minimal local administrative support, as much as we can. Everyone at EMBL, be they part of the administration, the scientific staff or the support staff, needs to contribute to making this work. I will support the Administrative Director in continuing what I believe has been a positive start taken under his leadership. Again, Bernd-Uwe Jahn and I would like to hear about any problems you can identify in this area and any suggestions you have for improvements.

Gene Expression

We are still engaged in the search for an external replacement Coordinator for Gene Expression. In the meantime, however, it is not appropriate that the DG should occupy this position. After discussion with the Heads of Units committee and within Gene Expression, my intention is to appoint an interim Coordinator for the Unit until such time as a permanent Coordinator is appointed.

Directorate

It is clear that an operation of the size and complexity of EMBL can no longer be run by the Director General and the Administrative Director alone. I therefore intend to introduce a Directorate which will provide additional support in the areas of training, services and international relations. The position of the Scientific Director, which I previously held, will not be maintained. Rather the responsibility for scientific policy and strategy will be taken on by the Heads of Units. The new structure and the changes involved will be described in more detail and officially announced after I meet and discuss with EMBL Council in July.

Finally, I expect from you, as members of EMBL, excellence in everything that you do, not only in research and training, but also in the services and support that you provide. EMBL and EMBO are fantastic examples of European organizations that work extremely well, and we can all take pride in that fact and try our best to improve things even further in our own domains. As I have repeatedly said, I rely on your input to improve the way EMBL operates and develops. New ideas and your creativity are needed to identify problems and suggest solutions. But I also need to ask you to be patient. Change will take time and careful planning. In addition, funding for new activities will only become available after approval of the next Indicative Scheme by Council at the beginning of 2007. Given the difficult economic situation in most of our member states, I will need very convincing arguments to persuade them to support our plans and I rely on you to help provide them.

– Iain Mattaj

Administration takes a look at improving coordination across the Lab

One step in improving coordination between the Heidelberg Lab and the Outstations is for the administrative staff to hold regular meetings. This is now happening twice a year and the most recent meeting was April 27, in Heidelberg. Topics that were covered included:

- implementation and training on the SAP/Finance system, which is now being introduced in all the Outstations
- a preliminary assessment of requirements for training of administrative staff
- tax advice for employees; every staff member will be offered two sessions of free tax advice during their employment at EMBL. Each EMBL site will have its own tax advisor.
- long-term health insurance (see article on page 8).
- a new safety policy for EMBL-Heidelberg. Plans include the development of a safety policy for all of EMBL, but local regulations must be taken into consideration.

At the end of the meeting, a number of administrative areas that could be improved were identified. The group gave the highest priority to travel, grants and communication. Working groups were formed on each topic to assess the current situation and make proposals for improvements.

“With the growing size of EMBL, we all recognize the importance of improving coordination between the sites,” says Bernd-Uwe Jahn.

“Having this meeting on a regular basis will be an important mechanism for this.”

The next meeting will take place on October, 13-14 at EMBL-Heidelberg.
ELLs takes a steppe: off to Ukraine

In May, ELLs visited the Ukraine for a LearningLAB called “Exploring the Molecules of Life,” in collaboration with Bogdan Khmelnitsky Cherkasy National University. Sixteen Ukrainian high-school teachers came for the course in Cherkasy, a city to the south of Kiev, where an EMBL Teachers Workshop had taken place in April 2004.

Tanya Klymenko, a Ukrainian PhD student in Jürg Müller’s group, has been extremely active in science education and outreach activities at both EMBL and EMBO. Through Tanya’s connections with the Ukrainian education and scientific communities, ELLs arranged for Ukrainian high school teachers to come to an ELLs LearningLAB in Heidelberg. On their return home, the teachers shared their experience at ELLs with colleagues, disseminating classroom materials to others and through their journal for biology teachers.

The next step was to organize a LearningLAB in Cherkasy. ELLs Education Officers Julia Willingale-Theune and Alexandra Manaia, Tanya and Maxim Nekrasov, a fellow PhD student from Russia, traveled from Heidelberg to help teach the course.

The course included practical sessions on developmental biology using the chick model, the use of classroom kits from the National Centre for Biotechnology, The University of Reading, UK, and a bacterial transformation activity from Cherkasy University. Also on the programme were the ELLs “Virtual Micro-array” and a Science and Society activity.

ELLs had already shipped 80 kilograms of materials including Petri dishes, dissection equipment and micropipettes to Cherkasy. Meanwhile, the Ukrainian delegation, Professor Sergij Derij and his collaborators, Vydym Sokolenko, Maxim Gavrilyk, Iurii Dziuban, Halyna Yagenska and Konstantyn Zadorozznyy, translated the LearningLAB handbook and took care of all the logistics (except for some very special passengers, zebrafish embryos provided by the Neumann group, which came along later.) The local organizers were the most motivated, hard working and efficient that ELLs have ever worked with.

“We were impressed and touched by the Ukrainian people, the genuine beauty of their country and their fantastic hospitality,” says Julia.

The Cherkasy LearningLAB was very well received by the Ministry of Education and Science of Ukraine who have agreed to support four follow-up initiatives starting in October 2005.

ELLS takes a steppe: off to Ukraine

Promoting scientific exchange and collaboration

EMBO has a long history of scientific training in Europe. The organisation has been funding courses and workshops on a vast range of molecular biology topics since its founding years in the 1960s. These meetings have accompanied generations of scientists throughout their careers, touching over one hundred thousand researchers.

A small measure of the long-term impact of EMBO courses and workshops was reflected recently in recollections by EMBO members, published in a commemorative book for EMBO’s 40th anniversary. From tales of learning new techniques from the “greats” in molecular biology to stories of enduring friendships and collaborations, these personal accounts emphasized the importance of this level of scientific interaction as a catalyst in the development of molecular biology.

One of the great advantages of EMBO practical courses, workshops and conferences is the fact that they tend to lead to long-term collaboration and follow-up meetings. Recognizing the importance of this kind of continuity, EMBO recently launched a new initiative called the EMBO Conference Series, which offers funding for not one, but three biennial European conferences.

The EMBO Conference Series will give greater focus and continuity to topics of major importance to the European scientific community. By providing a more permanent foundation for the development of these topics, EMBO aims to raise the profile of individual communities within Europe and pave the way for greater collaboration with parallel communities in other parts of the world.

Still on the theme of scientific exchange, EMBO and the European Science Foundation (ESF) have joined forces to co-sponsor an annual series of meetings called ESF-EMBO Symposia. Covering topics at the forefront of research, these meetings will have an interdisciplinary focus showing biology at the interface with other related disciplines.

EMBO promotes an international perspective in its training efforts and continues to make inroads into scientific communities outside Europe. The organisation sponsors courses and workshops worldwide, many of which take place in developing countries or those developing their science bases. These meetings act as a catalyst for international collaboration and help strengthen scientific communities throughout the world.

EMBO also offers scientific workshops for educators and communication workshops for scientists as part of its Science & Society Programme. The annual EMBO Media Workshop teaches scientists skills for communicating with the media and the general public. The programme’s education activities support a network of over one thousand teachers and centre on a yearly practical workshop for secondary school biology teachers.

This unique event draws teachers into the research world to learn about the latest in modern biology. Scientific talks, hands-on experiments and interaction with other teachers provide participants with a range of resources and ideas for use in the classroom. The 2005 workshop took place in Heidelberg on May 13-14, bringing together over 100 teachers from 24 countries in Europe and the world.

**ELLs courses, workshops, conference series**

**Deadline for proposals for 2007 meetings:**

- **ESF-EMBO Symposium**
  - Deadline for proposals: August 1, 2005

- **EMBO courses, workshops, conference series**
  - Deadline for proposals for 2007 meetings: October 1, 2005

**ELLS education activities**


— Mary Gannon, Andrew Moore

**Lab Day Celebrations**

Scientists from across the EMBL Units gathered in Heidelberg on June 7 to celebrate Lab Day. The shock-a-block schedule included a seminar by EMBL-Grenoble head Stephen Cusack and postdoc talks presenting interesting science from many of EMBL’s Units. Julis Brennecke, Maiven Caudron, Christian Tischer, Aidan Budd and Veronika Neubrand received their PhD diplomas as part of the Lab’s International PhD Programme’s graduation ceremonies.

As always, lively poster sessions allowed researchers from across the EMBL labs to present their work. The Brunner, Bastians and Bork Labs were the deserving winners of this year’s poster prizes.

Plenty of food, drink and entertainment kept spirits high well into the night. The music@EMBL group performed a classical concert, and the Lab’s own jazz band, 8’ strand, rocked the house down as partygoers grooved to the beat.
Long-term health care insurance for EMBL staff?

Recently, EMBL has begun considering supplementing its social security schemes with a long-term health care package. This type of insurance is important when a person requires frequent or substantial help with normal, day-to-day activities on a long-term basis. The most common need for this kind of support comes with health problems related to advanced age, so it’s not on the top of everyone’s mind at EMBL (where the average age is 36). Still, it can also be necessary in the wake of an accident, or in the case of a long-term serious illness. Germany and several other European countries have introduced it as part of the national social security systems, and EMBL also decided to investigate the possibility of providing it to staff.

A working group was appointed to determine if an insurance policy could be found that would take into account EMBL’s internationality and policy of fixed-term contracts. A company has now been found; it will offer worldwide coverage, as well as the possibilities of voluntarily insuring family members and continuing coverage on a private basis after the staff member has left EMBL.

Frieda Glöckner, who is a member of the working group and has visited several EMBL Outstations to inform staff about this type of insurance, says: “This is an essential insurance for everybody. The proposed scheme offers very favorable conditions. For example, it is not necessary to undergo a health check prior to joining, which is usually mandatory if you are getting private insurance. Also, there would be no waiting period for drawing benefits, which is a drawback of some national schemes.”

This issue is still under debate, partly because of the different ways that national systems have of dealing with long-term insurance. The UK, for example, already offers something similar under their national social security scheme. Paul Brown from the EBI Staff Association says, "Most of our staff are sceptical about paying compulsory contributions towards a private insurance policy. The overwhelming majority of our staff are on fixed-term contracts and most, especially female staff, would face large increases in premium payments on leaving EMBL. There are also concerns that the proposed insurance will be inadequate, unnecessary or simply not good value for many among our multinational staff, and as a result of these uncertainties, most will be unwilling to continue the private insurance. We maintain that any insurance implemented must take into account EMBL’s unique employment model.”

Before a decision is made, EMBL administration and the Staff Association would like to gather input from all those who are interested.

Further information on the proposed long-term health care insurance is available at the EMBL personnel web pages, www.embl.org/staffonly/personnel/faqs.html

Adéquation Germany

For many years postdoctoral fellow Emmanuel Reynaud has been involved in humanitarian actions in Africa aiming to improve the quality of life there by working in coordination with local organizations and authorities (see EMBLèctera issue 14, April 2003).

Emmanuel is one of many EMBL scientists and staff who invest some of their time in helping those in need. Now, he and fellow enthusiasts have formalized their efforts through the formation of a new charity, called Adéquation Germany. "We thought we could make a bigger impact by establishing the organization as a charity. For example, we can now raise funds to help us achieve our goals.”

Activities are aimed at making better use of existing resources, and include collecting unused lab equipment (from EMBL groups and external suppliers) and scientific books and journals and sending them to struggling labs in Eastern Europe and Africa. Adéquation Germany hopes to encourage the recycling of old equipment from labs of EMBO members to places in the world where it is urgently needed. Last year, universities in Albania and Ukraine received shipments of scientific equipment and literature. This is already a common practice in the US, through initiatives such as the Sustainable Sciences Institute (SSI).

Registered in January, the organization is now authorized to receive donations and issue tax receipts, which will help in achieving its aims. More recently, members of Adéquation Germany’s Board met with representatives from EMBL and EMBO to establish a co-operative partnership between the organizations.

In addition to collection efforts, several Adéquation Germany teams will participate in the Heidelbergman Triathlon on August 7. The sporty volunteers are collecting pledges. All funds raised will go to a Health Prevention Campaign in Diagully (Mauritania) aimed at the prevention of malaria, AIDS and infectious diseases. Some funds will also go to support the School for Women, a local initiative in Lagny (Mali) that helps uneducated women.

A website has also been launched to help provide information about Adéquation Germany’s initiatives, http://adequationgermany.embl.de.

If you’re interested in getting involved, please contact one of the members of the Board: Alessandra Bendiscioli, Richard Carmouche, David Ibberson or Emmanuel Reynaud.

Design your own DG office

The most obvious sign of EMBL’s transition to a new Director General was the sight of a completely empty office on the second floor – with all of Fotis’ belongings boxed and moved out, Iain’s yet to move in. What would the new office look like? What interior design would best facilitate the multiple, complex tasks involved in directing the Laboratory? After some intensive thought and a few “man-on-the-street” interviews, we have some modest proposals which Iain is invited to use, modify, or reject out of hand.

DESIGN 1. The bridge of the USS Enterprise – Favorable points: A swivel chair with lots of buttons; excellent video conferencing capabilities on the Main Screen; a transporter for instant beaming to the EMBL Outstations. Most favorable point: The weapons console, which can be used to stun politicians as the next scientific programme is debated. Drawbacks: Occasional loss of gravity, which is bad for most filing systems, and it would be difficult to build in the feature that jettisons the entire bridge in emergencies.

DESIGN 2. The Hall of Mirrors at Versailles – Favorable points: Gives the illusion of lots of space, and the French would like it. Most favorable point: Allows VIP visitors to watch themselves in the mirror without seeming to. Drawbacks: May not fit the personal tastes of the occupant.

DESIGN 3. The Zen garden – Favorable points: Induces a tranquil atmosphere for discussions about things like the EMBL budget. Drawbacks: Visitors get sand in their toes.
Inside the Staff Association: meet your representatives

April elections saw the addition of some new faces to the Staff Association committee. This group plays a vital role in the life of EMBL. It’s important to know who these people are, because they are your representatives on issues ranging from terms and conditions of employment to obtaining Sumo wrestling costumes for the summer party. From time to time EMBL&cetera will present profiles of your friendly local Staff Association rep.

Andrea D’Ercole (Heidelberg)

Andrea is a new representative to the Staff Association. The native Roman is a typical EMBL case: love brought him to the Lab. Andrea had planned to work in Germany for only six months and found a job at the Forschungszentrum in Karlsruhe. But soon, a young German woman enticed him to look for something long-term. Andrea had also worked at the EMMA facility in Monterotondo and was familiar with EMBL; he came to the main Lab as a technician in April 2002. He married his temptress in September 2004. Andrea describes himself as someone who cannot sit still. He likes to swim, travel, read and eat. Fortunately, he also likes to cook. He likes living in Germany, especially the food and wine, but says the weather is too capricious for something.

Mary Jane Villot (Grenoble)

Mary Jane has been around the Staff Association a bit longer than Andrea, having “hired on” as Grenoble’s alternate representative in 2004. The native of Potsdam (New York, not Germany) has lived in France for 28 years. After a 22-year professional career teaching English to French adults, she has branched out at Grenoble to fill a typical EMBL-type position: the educated Girl Friday. She oversees the library, makes all travel arrangements, organizes an annual EMBO course as well as seminars and helps with special events, such as senior scientist meetings.

She remembers organizing a scientific review after having worked at EMBL for only a few months. She says that three miracles occurred the first day: 1) not being familiar with the Lab’s minivan, she managed to find the “off” button of the radio, which was blaring Elvis’ “You ain’t nothing but a hound dog”; just as EMBL Top Dog Fotis Kafatos opened the door; 2) she instinctively found the correct button to flip back the rear car seat, which an established scientist had not been able to activate; and, most impressively, 3) she found a parking place right in front of the hotel.

In reality, Mary Jane dislikes cars and prefers to ride her bike. One of her goals in joining the Staff Association was to provide staff with alternatives to driving to work. She also thought that her bilingual abilities would be useful in general and is most interested in dealing with the local issues, for example the French family allowances and Intermédec issues. Outside EMBL, Mary Jane enjoys sailing on the Atlantic, raising her three children, sewing and cooking.

The Staff Association will have to ask Andrea and Mary Jane to do the culinary honors at its first annual retreat later this year!

Shimura Awards: EMBL staff who are planning to visit Japan may want to take advantage of a unique opportunity. The National Institute for Basic Biology (NIBB) is offering Shimura awards – travel grants for scientists to visit and give seminars. Named after the well-known Japanese scientist and current president of the National Institutes of Natural Sciences, Yoshiro Shimura, the awards cover travel expenses from any city in Japan and hotel accommodation. A small number of larger grants will be awarded to encourage young EMBL researchers to visit Japan and attend international meetings there. Recipients of the award will visit NIBB before or after the meeting. Economy class round-trip airfare and hotels and transportation from any EMBL site to Okazaki are included.

If you’d like a preview of what’s happening at the NIBB, a delegation of scientists from the institute will visit EMBL-Heidelberg for a mini-symposium on developmental and cellular biology (July 1-2). They will also participate in a minisymposium on imaging on July 4.

For more information, contact Silke Schumacher (schumach@embl.de)
Rupert Lück is the new Head of IT Services (formerly called the Computer and Networking Group) at EMBL-Heidelberg. He will manage the IT infrastructure and service operations in Heidelberg and contribute to an evolving IT platform for advanced cross-site collaboration within EMBL. Rupert joined the lab in April after more than seven years at LION bioscience in several leading IT positions. As Head of Global IT Systems he was responsible for building LION’s IT infrastructure, including the high-performance computing centers at the headquarters in Heidelberg and the integration of the company’s seven international sites. In 2004 he became General Manager for LION’s Professional Services organization taking over development and business responsibility for a novel collaboration platform for drug development in the pharmaceutical industry. Prior to joining LION, he was an IT consultant for companies such as Lufthansa Systems. Rupert received a degree in Biology in 1993 and his PhD in 1997, both from the University of Düsseldorf. Since then he has been fascinated by biocomputing and the enormously evolving potential it offers to modern life sciences.

Laura Minnich joined EMBL’s Personnel Section in June as a new Recruitment Officer. Originally from Finland, Laura studied law in London and Heidelberg and completed her studies with a Masters in Education in 2001. Laura worked as a Graduate Student Recruiter, developed education programs and most recently gained experience as a recruiter in the US. At EMBL she will focus on all aspects of Recruitment and Personnel Management for the EBI and Hamburg as well as Structural and Computational Biology and LAR in Heidelberg.

Mayka Sanchez, a postdoc in Matthias Hentze’s group, has been awarded the Antoni Caparros Prize by the Social Council of the University of Barcelona. The €2,500 prize is given in recognition of thesis work that makes a significant contribution to the transfer of knowledge to society. Mayka received the award for her work entitled “Screening of C282Y and H63D mutations of the hemochromatosis gene (HFE) in 5,370 blood donors from the Spanish population,” which was published in the Journal of Hepatology in 2003.

Obituary

When I started the lab at the end of 1998, Sandra Scianimanico was the first to join as a Research Technician. She had just come back from Canada where she had obtained a Master’s degree at the University of Montreal working with Michel Desjardins. She was full of enthusiasm and ready to organize the new lab. Very quickly she became our most reliable fixture, always extremely helpful and eager to advise students and new postdocs. Sandra knew what it took to bring a project to a successful end and she contributed greatly to several structural projects in the lab. Like in life, she was the last person to give up; there was always something else she wanted to try.

Although she lost the battle in the end, she lived throughout the difficult times with grace and dignity. Sandra died on April 17 at the age of 37. She leaves behind her husband and her two beloved sons, Thomas and Robin. We will miss her generous personality, her big smile and her uniqueness as a colleague and friend.

Sandra Scianimanico (1967-2005) – Winfried Weissenhorn

who’s new

Chaitanya Athale (Karsenti), Katherine Bellenie (EBI Administration), Christelle Buon (Cusack), Richard Cote (ENSB Database), David Dickson (Stelzer Group), Stephen Fullerton (Tucker), Blanco García (Bork), Susana Garcia Silva (Nerlov), Georgios Hatzopoulos (Müller-Dieckmann), Ville Hietakangas (Cohen), Sarah Hunter (EBI Sequence Database), Katrien Janssens (Rother), Virginie Lecaudey (Gilmour), Ernesto Lowy (ENSEMBL), Sabrina Marion (Griffiths), Romao Maryse (Antony), Jennifer McCarthy (Weissenhorn), Michael Müller (EBI Sequence Database), Bert Overduin (ENSEMBL), Minna Poukkula (Rother), Jeroen Raes (Bork), Anan Ragab (Akhtar), Kumiko Siozawa (Wilmanns), Himanshu Sinha (Steinmetz), Franck Valentín (EBI External Services), Mark Van Breugel (Schultz), Michael Wahlers (IT Services), Barbara Zambelli (Tucker), Andreas Zanzoni (Macromolecular Structural Database)

events@EMBL

1-2 July, 2005
EMBL-Heidelberg
NIBB Minisymposium on Developmental and Cell Biology

2 July, 2005
EMBL-Heidelberg
EMBL/Staff Association Annual Summer Party

4 July, 2005
EMBL-Heidelberg
NIBB Minisymposium on Imaging

4-7 July, 2005
EMBL-Heidelberg
Summer Council Meeting

11 July, 2005
EMBL-Heidelberg
Distinguished Visitor Lecture
Michael G. Rosenfeld, HHMI, San Diego

7 October, 2005
Center for Genomic Regulation, Barcelona
EMBL Alumni Association’s Iberian local chapter meeting. (For more, see page 3.)

Art in Science in Art

Friday, July 15 at EMBL-Heidelberg.

Check out the full programme at www.embl.org/aboutus/sciencesociety/meetings.html