



sequencing the medaka genome ...page 2

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Medaka genome to be completed

Teams of researchers from EMBL's Developmental Biology Programme and institutes in Tokyo, Mishima and Kyoto, Japan have announced plans to complete the sequence and assembly of the medaka genome later this year, to be published early in 2004. The large-scale international project will add to the growing list of organisms for which full genomic sequences are currently available. EMBL's Jochen Wittbrodt says that this new sequence data, together with that of other fish closely related to medaka, will put researchers in a unique position to study nearly 200 million years of vertebrate evolution.

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EBI launches Genome Knowledge Base

Ewan Birney (EBI) has teamed up with Lincoln Stein of Cold Spring Harbor to launch the Genome Knowledge Base, a view of genes in the context of cellular processes. The resource has just gone online at www.genomeknowledge.org. The information is directly linked to Ensembl and currently covers four major processes in human cells. A second release is planned for March and the scientists invite researchers to participate in building up the database.

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EMBL to hold Open House in June

On Sunday, June 29, neighbourhood science enthusiasts will descend on the main laboratory in Heidelberg to take part in EMBL's Open Day, organized as part of celebrations marking the 25th anniversary of the opening of the laboratory in Heidelberg. Activities will include tours of the lab, hands-on activities, a science café, games and much more. To find out how you can help in the preparations, see [page 3](#).

Microscopists organize course in Japan

In November, EMBL's Philippe Bastiaens and Rainer Pepperkok, together with a team from the Advanced Light Microscopy Facility, travelled to Kobe, Japan to participate in the EMBO World Programme's "Fluorescence microscopy of living cells" course. Jointly organized with the Asia-Pacific International Molecular Biology Network, the workshop brought scientists from both sides of the globe together for an intensive hands-on week of experiments with the latest cutting-edge technology in microscopy.

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Alumni Association to elect board

In April the EMBL Alumni Association will hold elections to establish an official Alumni Association board, a small group of former EMBL staff and researchers, who will take an active role in shaping the future events and activities of the association. Information on candidates, issues and voting procedures is now available at www.embl.de/alumni.

Would you like to serve on the board? Do you know someone who ought to be? Send your nominations to alumni@embl.de

...and don't forget to register!

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EMBL researchers to help crack the medaka genetic code

First the worm genome, then the fly, human, mouse, mosquito... and now medaka. A Japanese consortium has teamed up with EMBL's Jochen Wittbrodt to complete the sequencing and assembly of the medaka fish genome by the end of this year.



Medaka research goes back to the 19th century. It is the first organism in which Mendelian laws were proven to be applicable to vertebrates. The sequenced genome will provide important information for evolutionary and comparative functional genomics studies.

The medaka genome sequence comes hot on the heels of that of *Fugu* and *Tetraodon*, fish

closely related to medaka but with much smaller genomes. "With the expected release of the medaka and zebrafish sequences next year, almost 200 million years of evolution will be experimentally available in these fully-developed model systems, says Jochen. "It puts us in a really unique position in vertebrate genomic analysis."

The sequencing effort will combine different approaches. The Japanese effort, a large-scale government funded initiative, will focus on a whole genome shotgun approach; EMBL researchers, together with groups in Germany and Japan, will concentrate on providing the scaffolding upon



which to build the smaller sequences. "These complementary approaches will allow the sequencing work and assembly to get done very quickly," says Jochen.

As a publicly-funded project, the medaka sequence will be available through a public database. To be useful, however, the genome must be annotated. "This is where we hope that ENSEMBL will play a critical role," says Jochen. "ENSEMBL can provide important information by tracing links across genomes. By putting the data into ENSEMBL, not only will the medaka genome add to the wealth of information available on mammalian genomes, but it will also provide access to an organism remote enough to study evolutionary trends."

Ensembl team tours genome databases with EMBL researchers

Ensembl's Ewan Birney, Esther Schmidt and Emmanuel Mongin travelled to the Laboratory in Heidelberg on January 30 and 31 to introduce staff there to the automatically-annotated database for genome sequences. The workshops were a sold-out affair, with participants from all corners of the laboratory looking to make use of the database to help them in their own research.

The half-day courses included a general orientation to the databases and website, plus practical hands-on exercises. "The EBI databases are developing so rapidly that even scientists don't know some of the great things that our major bioinformatics resources can do," says Toby Gibson. "We asked Ewan and his team to come and show us what they've been up to."

"I've heard a lot about Ensembl, but haven't had to use it myself... until now," says Daniel Forler, a PhD student in EMBL's Biochemical Instrumentation Programme. "I'm studying *Drosophila* at the moment and need to find some proteins with similar functions in mosquitoes. The database is really a useful tool for those of us who are hunting for useful links between different organisms."

"We have given similar courses to researchers at the Wellcome Trust campus in Hinxton, not only from the EBI, but also from the Sanger Institute, which co-develops the database," says Esther Schmidt. "We've also visited academic institutions across the UK, and are getting more and more requests from our industry partners to help them effi-

ciently navigate the database. It's a sign of how useful a tool the database is becoming."

As for the future of Ensembl? "We plan to add more genomes to our repertoire," says Emmanuel Mongin, course instructor and mosquito genome expert. "We'll improve the automatic annotation procedures and related technology, as well as the website and data downloading systems."

Hints for beginners? Use the handy help button in top-right corner of each window. There's also an extensive glossary and a friendly help-desk assistant just an e-mail away. Take the introductory tour at www.ensembl.org.

EMBL and EMBO to play host to next generation of researchers

From March 16 to 19, EMBL and EMBO will play host to nearly 200 high school students and teachers from the European Union and the US Department of Defense-dependent school systems. The students are finalists in the "European Junior Science and Humanities Symposium" (JSHS).

While they are here, the students will present science and humanities projects in talks and poster sessions. Their work will be evaluated by a panel of judges that includes EMBL scientists. A first-place winner for the "European" region will be selected; he or she will receive a \$4,000 scholarship for undergraduate studies and then go on to a nation-

al symposium that will be held in the spring in Colorado Springs. Runner-up winners will attend the national event as well. The symposium will also include presentations about EMBL and EMBO and talks from our scientists.

EMBL was selected as the location for this year's JSHS because of close ties between the Laboratory and the international school in Karlsruhe. Children of some of EMBL's staff attend the school. The idea of hosting the event sprang out of conversations between science teacher Walter Henderson, Anne Ephrussi, and school director Ken DeVault.

The programme aims to promote scientific research in high schools, to highlight the importance of humane and ethical principles in the application of research results, to search out talented youth and their teachers and encourage their continued interest in the sciences, and to expose research-oriented students to career opportunities in science.

These goals neatly overlap with EMBL's and EMBO's growing activities in the area of education, and we hope that this is the beginning of a beautiful relationship.

Help us organize the Open House

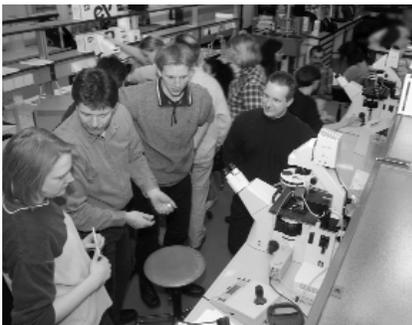
On June 29 this year, EMBL will hold an open house as a part of the twenty-fifth anniversary of our moving into the Heidelberg Laboratory. We expect hundreds of people to attend. The Office of Information and Public Affairs is starting to organize the day's events and we need good ideas and heavy participation from the Heidelberg staff to make the day interesting and exciting for our visitors.

The public will "park and ride" to the Lab, catching buses from a convenient place in Heidelberg. A new group will be brought up every ninety minutes; each visit will last about two-and-a-half hours.

Upon arrival, visitors will come through the Operon foyer past a display called "*The EMBL World*" which presents the Laboratory and the Outstations. Their first stop will be the Large Operon, where they will get a short overview of the Lab and be introduced to some of the high points of modern molecular biology.

After that, the audience will be divided into smaller groups for guided tours called "Meet the experts." They'll stop at various points

along the way to hear about topics such as genomics, proteomics, molecular medicine, microscopy, modeling biological processes in the computer, etc. We'll set up stations in rooms all over the Lab, which will be manned by volunteers who will give "short, brilliant, exciting presentations" about their work. You're all welcome to come up with ideas and participate.



Visitors get a hands-on look at life in the lab.

photo: Maj Britt Hansen

We also need help thinking up and carrying out the next part of the visits, called "*Discover and Explore*." These will be more hands-on activities for people to participate in. Some ideas that have been tossed around

are: finding stuff and making samples for your microscope; comparing human and mice genes on the computer; sorting flies; feeding cells, and a Quiz contest. We'd also like to build several small discussion groups on science and society themes.

The last stop on the visit will be the "*Science Café*," for refreshments. Tables will be set up in front of posters that advertise specific themes, such as careers in science, education, and bioethics. Each poster should be manned by a person able to talk about the theme. Hopefully the science and society discussions will spill out (and spill over) into the café.

The day will be divided into morning visits for everybody and afternoon sessions with a special focus on families. We hope the Staff Association and Kindergarten will jump in with some of their great activities from the summer festival.

Please send any ideas you might have to info@embl.de. This is our first open house in over ten years, and we want it to set the stage for much stronger ties to our neighbors in the Heidelberg area.

Linking the levels of life: EBI launches Genome Knowledge Base

The best place to learn about a small town you plan to visit would be a travel brochure or a history book. If none exists, you might have to comb libraries and archives for information before your trip. A similar problem confronts scientists when they search genome databases for information about genes. "What they want to know may be there," says the EBI's Ewan Birney, "but figuring out what it means, and whether it's important, may require days in the library."

Birney has teamed up with Lincoln Stein of Cold Spring Harbor Laboratory to launch the "Genome Knowledge Base" (GKB), a sort of "travelogue" of the human genome. The resource went online in February (www.genomeknowledge.org), and is directly linked to *Ensembl*, the public database of human, mice, and other genomes run by Birney's team and the Sanger Institute.

Scientists are rapidly learning how individual genes participate in processes like cell division, cell differentiation, or cancer. In *Ensembl* and other databases, these discoveries appear as a sort of exhaustive series of footnotes. This often makes it hard to see the forest for the trees. The Genome Knowledge Base aims to simplify things.

"When scientists talk about cells," Birney says, "they say things like, 'Once this molecule recruits its partner kinase, the resulting complex switches on a number of other target genes.' It is a process view, in contrast to the gene-centric or protein-centric view of most databases." Representing biological processes in a database is regarded as one of the biggest challenges for bioinformatics.

In the past, discoveries came at a slower pace, so researchers had the time to spend a day or two in the library. And the current system works fine, Birney says, if a scientist is working on a specific process and comes to a database for information about a gene.

But new types of experiments have changed this. For example, work at EMBL Heidelberg has recently turned up over 200 genes that might be involved in malaria transmission. Looking them all up would be a huge task that the GKB aims to make easier.

"You might find that twenty of those genes are part of a very common biological process," Birney says. "But if you can't spot that easily in the database, you might overlook them as unconnected single genes."

While this is not the first effort to tackle the problem, three things make the resource special. First, it will be entirely in the public domain, and Birney and Stein invite scientists everywhere to use it, link into it, and add to it. Secondly, researchers can move smoothly back and forth between the GKB and *Ensembl*, which many scientists regard as the world's best public version of human and other genomes.

Finally, the researchers are taking painstaking steps to ensure a very high quality of information. "Everything in the Knowledge Base points back to original experimental sources," Birney says. "Some of what we know about basic processes like metabolism goes back fifty years, and you have to crack old textbooks to find it. New or old, all the information is reviewed by a top expert, and we invite help from scientists in each field."

The initial version of the GKB presents four major processes in human cells. Several more will be covered in a second release planned for March. With active support from the research community, the resource should quickly grow by leaps and bounds.

— Russ Hodge

EMBL-Bank announces Third Party Annotation Dataset (TPA)

The EMBL nucleotide sequence database (EMBL-Bank) is now accepting third party annotation (TPA) entries of existing sequence data.

EMBL-Bank collects and distributes primary nucleotide sequence and annotation data from all over the world. Until recently, laboratories would submit only sequences that they have generated themselves; the EMBL-Bank curation team at the EBI would then help submitters with the annotation of their database entries.

There is a growing body of sequence information available (almost 28 billion nucleotides at the time of the last release) and ever more advanced computational and experimental techniques for analysing the data. This has led to more demand for the data to be re-assessed by researchers who did not submit the initial entries (third party annotation).

The types of data that will make up the TPA dataset include: reannotations of existing entries; combinations of new sequences and existing primary entries; and annotation of sequences from the Ensembl and NCBI trace archives (raw sequence data underlying all of the sequence generated by large-scale genome projects) and also whole-genome shotgun data.

The aim of the project is to gather database entries of the highest quality. It is therefore required that the study be published in a peer reviewed journal before we release the data to the public. Early submissions may well help to clarify the way in which the database will develop and will serve as examples for future submitters. For this reason, we are particularly keen to promote the TPA dataset within EMBL and to draw on home-grown expertise.

We have recently completed modifications to our Web sequence submission tool, *Webin*,

to collect the additional information required for TPA entries. TPA database entries are held alongside those in the existing database and can be retrieved using all EMBL-Bank retrieval methods available. In the same way as primary entries, TPA entries are exchanged with our collaborating databases DDBJ and GenBank. TPA entries can easily be distinguished from primary entries.

For further information, contact Mary Ann Tuli or Guy Cochrane, or visit www.ebi.ac.uk/embl/Documentation/information_for_submitters.html#tpa.

The submission tool, *Webin* is at www.ebi.ac.uk/embl/Submission/webin.html

– Günter Stösser

Editor's note: After 12 years at EMBL and the EBI, Günter will be leaving the Hinxton campus in May to return to his native Germany. We wish him well!

Going wireless with EMBL's Computer and Networking Group

Sitting in EMBL's Operon auditorium, gripping the edge of your seat with excitement as the leading expert in your field reveals his latest results, you suddenly realize you have forgotten to ask the postdoc back in your lab to send off that envelope on your desk by 4 o'clock. What do you do? Panic? Certainly not, Hans Doebbeling and the Computer and Networking Group would tell you. Just open your laptop, and send an email. You don't even have to get out of your seat.

The main laboratory in Heidelberg is now decked out with wireless network points - places where you can access the network without having to be plugged into the wall.

You'll need be in the right place, though, and have one of those funky wireless cards and the appropriate software. Areas covered now include the Operon auditoriums, major conference rooms and the library. The rest of the lab will be equipped this year.

Anyone with a wireless card can access the network in these areas. But what about security? The CNG group has thought of that, too. Visitors to the EMBL can get on to the Internet, but can't access the EMBL internal network. For that they'll need a password and Virtual Private Network (VPN) software. That, of course, you can download

from the EMBL web pages at www.embl.de/LocalInfo/CG/vpn/.

"We're pleased to be able to offer this service," says Erich Schechinger, EMBL's network engineer. "EMBL welcomes visitors on a daily basis, and now we can offer them full communication access. The same technique (VPN) is being used to allow EMBL staff at the Outstations to access resources from remote. It really is the future of accessing EMBL from afar."

For more information, email Hans at hans.doebbeling@embl.de

from the Staff Association

The working group on the Health Insurance Scheme conducted a survey of all staff to gauge the need for long-term care insurance. If there is enough interest in this type of insurance, EMBL will inquire into the feasibility of offering it to staff in the future.

Elections to the Heidelberg Staff Association committee will be held this spring. The following positions will be open for new candidates: 2 group leaders or scientists, 1 technician, 1 (future) pensioner, 1 floating position (may represent any group). Not currently filled and therefore also open for candidates are positions for postdocs and ancillaries.

Please remember that employee contributions to the Intermedex health scheme were raised one percent when the new scheme went into effect on January 1, 2003 to cover the costs of increased coverage and build up the new emergency fund. For those in Intermedex, this should not have reduced the amount of your paycheck much. For those with German health insurance and pension plans, the deductions may have been much higher. Please note that this is a result of *increases in German pension contributions*, however, and not increased EMBL deductions!

– Ann Thüringer

science & society



photo: Udo Ringelsen

On January 21, **Ute Deichmann** from Cologne's Institute for Genetics traveled to Heidelberg to participate in EMBL's Forum on Science and Society. She spoke about the decline in German biological and biochemical research from 1900-1950, and the impact that politics had on that process.

the EMBO corner

Children sometimes ask their parents "Where did I come from?" The same is true of organizations or institutions. To give an answer to some of these questions, EMBO recently organized a meeting of historians and witnesses (scientists) of the period in the 1960's which led to the establishment of EMBO, the EMBC, (the intergovernmental organization that supports much of EMBO's activities) and the EMBL. The unembellished facts are that a group of the leading biologists in Europe met in Ravello in Italy in 1963 and established the European Molecular Biology Organization (EMBO). This followed preparatory meetings in 1962 and 1963 at CERN in Geneva which resulted in a document jointly prepared by John Kendrew and Conrad Waddington suggesting that such an organisation be established

with twin goals. Max Perutz was the first chairman of EMBO and John Kendrew the first Secretary General. EMBO, at that first meeting, established two committees that were to pursue the major goals of the founders of EMBO. The first of these was the Laboratory Committee, chaired by John Kendrew and the second, called at that time, the Federation Committee, was chaired by Adriano Buzzati-Traverso. The aim of the Laboratory Committee is self-explanatory. Its target was the establishment of a central laboratory in Europe and this was clearly the primary motivation of most who were involved in the creation of EMBO. The aim of the Federation Committee was to put together a programme of activities that would accelerate the interactions between a network of different laboratories in Europe. Ultimately those concepts became a motor for the EMBO programme of fellowships, courses and workshops. In 1964, EMBO was incorporated officially as an association under Swiss law and applied for funding from the newly established Volkswagen Foundation to allow its activities to get started. The Volkswagen Foundation was very generous and provided support for the networking activities that EMBO immediately initiated.

The EMBO Council then focussed on trying to convince governments to provide more long-term support for the dual objectives of EMBO. They quickly succeeded in the first phase of the this plan when, in 1970, the European Molecular Biology Conference (EMBC) was established initially with 13 member states (Belgium, Denmark, Germany, France, Greece, Italy, Netherlands, Norway, Austria, Sweden, Switzerland, Spain, and United Kingdom). The EMBC adapted the activities that EMBO had initiated with the Volkswagen funding and these became known as the General Programme of the EMBC. These continue today and have been expanded upon in recent years.

The EMBO Council continued, in parallel, to pursue the goal of establishing a central European laboratory. The proposal from the EMBO Council to establish what had been called at that time the EMBO laboratory, was eventually accepted by the EMBC in 1974. This subset of ten Member States formed a second intergovernmental body (the EMBL) and hence the laboratory came into existence with independent support. And, as they say "The rest is history"!

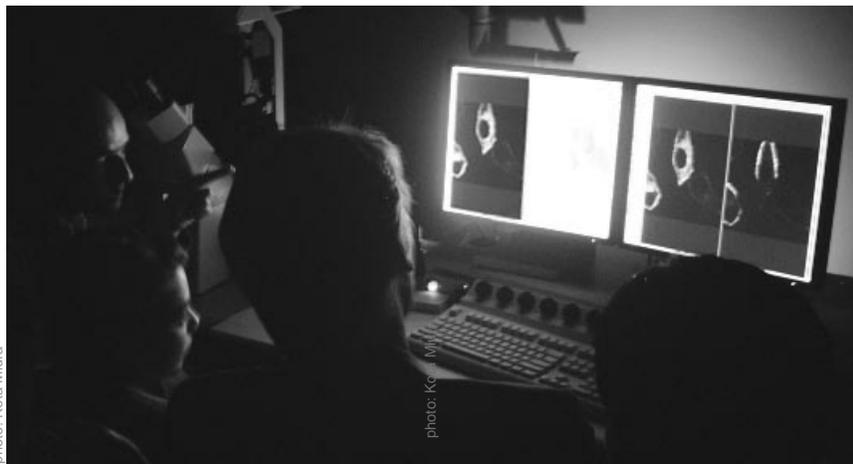
– Frank Gannon

EMBO and EMBL organize hands-on microscopy workshop in Japan

On November 17-23, a team of EMBL researchers travelled to the seaside town of Kobe, Japan to hold a course on "Fluorescence microscopy of living cells." Organized by EMBO's World Programme and the A-IMBN (Asia-Pacific International Molecular Biology Network), the workshop brought scientists from both sides of the globe together for an intensive hands-on week of experiments with the latest cutting-edge technology in microscopy.

The EMBL crew included Philippe Bastiaens, Anthony Squire, Rainer Pepperkok, Timo Zimmermann, Jens Rietdorf, and long-term visitor, Kota Miura. "It was a unique experience" says Pepperkok, head of EMBL's Advanced Light Microscopy Facility, and co-organizer of the course. "We were able to combine the best of both worlds. We had companies working on cutting-edge technology in microscopy providing full systems, and the world's leading scientists providing the know how."

Initiatives such as this one are aimed at bridging the gap between the eastern and western research communities. "In the past, the tendency has been for Asian researchers



Scientists try out the latest technology in microscopy at a practical course in Kobe, Japan.

to look to the US for possibilities to collaborate. The information flow has been in one direction," says Mary Gannon, manager of EMBO's World Programme. "Through initiatives like this, we hope to open a communication gateway between Asia and Europe and allow researchers from both continents to begin fruitful collaborations."

The workshop was so successful that organizers are considering opening up to other topics, such as functional genomics. In the meantime, a second microscopy course has been planned for Brazil in May 2003.

– Sarah Sherwood

The deadline for EMBO's World Programme Fellowship scheme is March 1, 2003.

from the sister sciences

A modest proposal concerning the orbit of the earth

To the editor:

Far be it for me to be regarded as a panic-monger. And certainly the threat of war, terrorism, and space shuttle disasters are enough bad news to fill anyone's newspaper. However, another disaster looms on the horizon, potentially a far greater one, which has been forgotten in the excitement of desert maneuvers and prosecuting people who steal chunks of burnt tile from underneath sagebrush. The earth is overdue for a major asteroid strike from outer space. In my opinion, we should stop worrying about these minor irritations and start working immediately on a plan to save the planet.

At any moment, someone standing on his garage peering through a telescope might discover a huge rock, a comet, or another nuisance heading our way. We may have scant weeks or months to prepare. Various defenses have been proposed, each sounding more ridiculous than the next. It is highly unlikely, given the laws of physics, that we could blow the thing up far enough from the earth to save ourselves. Seven rocks the size of Luxemburg would probably do just as much damage as one the size of Belgium.

I would like to propose a somewhat unorthodox alternative. Instead of trying to alter the course of an oncoming asteroid, we should gently nudge the earth into another orbit. Here I will outline a few methods by which this might be accomplished.

The key to changing the earth's path around the sun is to alter its center of gravity, currently located at the center of our planet. By moving it just a few kilometers either way, we would not only change the gravitational attraction of the earth and the sun, but also that of the moon. The resulting imbalance would certainly suffice to draw our planet out of harm's way, to make an asteroid miss us by a whisker.

How could this be accomplished? Numerous heavy objects on the earth's surface – automobiles, large trucks, train cars, airplanes, aircraft carriers, temporary office containers, etc. – could be quickly clustered on one side of the globe. Additionally, cement could be shipped over and poured in that location. Of course, an extensive transportation infrastructure would be required. (Some colleagues and I have submitted an Expression of Interest to Brussels under the next funding programme; we invite all qualified parties to join our network.)

This spot should be geographically quite focused and well-selected. I propose the Swiss Alps. First, a firm foundation will be essential so that all this weight doesn't punch through the earth's crust and sink: ergo, firm mountains. Secondly, the farther this mass is placed from the center of the earth, the greater its effect on gravity – so it should be put somewhere very high.

If the transport issue cannot be solved, there are alternatives. Some theoreticians believe

that our atmosphere could be used to generate a gyroscopic effect. This would require mounting hundreds of thousands or even millions of wind turbines in a specific location – Holland and Belgium are the most logical candidates – creating an intense friction. Simultaneously the opposite side of the globe could be made very smooth, either through polishing or by coating it in a slippery material. The result would be to get the atmosphere spinning at a different rate than the surface of the earth, and many theoreticians believe that this could alter the earth's period of rotation and orbit.

Perhaps a combination of these methods would be best. In any case, the sooner we get started, the more control we will have in choosing the most desirable orbit for the earth. A few test and control nudges might be necessary – which would mean driving weights up and down mountains, switching on and off wind turbines, alternately polishing and roughing up landscapes. We should also not neglect added benefits that might arise from the project: arid lands might be reclaimed, harsh climates rendered milder.

Caution should be exercised in raising ocean levels. It would not do to submerge the Dutch turbines. They may be needed at a later date.

Humbly, your correspondent in Rome,
Wilford Terris

It's a bug's life at the EMBL Kinderhaus



EMBL kids get a close up view of bugs

photo: EMBL Kinderhaus

with the hundreds of insects buzzing around the stream that day," says Ruth, a kinderhaus teacher. "A few days later another child brought in a dead fly, so we decided to take advantage of this curious interest and have the kids collect all the different insects they could find in the kinderhaus garden and in their yards at home."

The group put their bugs in little boxes, named them, touched them, smelled them and drew them. An old bees nest was brought in from a barn which resulted in a tasting session of different types of honey.

To round off the bugs summer season, the group visited scientists working with insects at the Pädagogische Hochschule in Heidelberg. The insect fever has cooled down a bit over the winter, but our children can't wait for the first flies to appear again soon. Lots more research has to be done...

– Lena Reunis

Whiskey, pipes and highland flinging into the night. Neighbourhood sheep ran for cover on January 25 as EMBL held its annual Burns night celebrations. Scots-for-a-night filled their bellies with haggis, neeps and tatties. Iain Mattaj (below) mastered the ceremonies, delivering a touching rendition of *Holy Wullie's Prayer* (in his nightshirt). As always, thanks go to the organizers (the ones in the skirts) who did a super job.



photo: Erika Grzebisz

Affymetrix technology now available at EMBL

After detailed discussions within the GeneCore Users Committee and successful negotiations with Affymetrix, the GeneCore team are pleased to announce that Affymetrix technology is now available to EMBL users. Arrays in the Affymetrix line include human, mouse, rat, *Drosophila*, nematode, yeast, *E. coli*, *P. aeruginosa* and Arabidopsis. System installation is under-

way and in-house staff will be trained without delay so that we can begin to offer full service by mid-March. For more information about the service contact Vladimir Benes (benes@embl.de); details on the Affymetrix range of DNA chips can be found at www.affymetrix.com/products/arrays/index.affx.

– Vladimir Benes

Finnish PhD students visit EMBL Monterotondo

On 12-13 December 2002, 12 Finnish PhD students accompanied EMBL Council Member Professor Marja Makarow to the Monterotondo mouse biology campus. The Finnish Graduate system allows PhD students from across Finland to visit European campuses as possible places to continue their education.

Nadia Rosenthal, Monterotondo head, introduced students to the campus, and Group Leaders presented their work. Students were then given a tour of the European Mouse Mutant Archive (EMMA), and met with Monterotondo staff one on one. Of par-

ticular interest was the "exchange" of mini-seminars by three Finnish PhD students and two EMBL postdoctoral fellows, Anna Maria Calella and Angelika Paul, which led to exciting discussions.

The visit was capped with a reception hosted by Prof. Makarow at the *Institutum Romanum Finlandiae*, a beautifully constructed 15th century villa atop the Janiculum, one of the seven hills of Rome. Both the guests and the EMBL staff were treated to *antipasti* and *prosecco*, as well as a brief history of the villa and the activities of the Institute.

– Craig Panner

EMBLEM and DKFZ to collaborate on tech transfer



In December 2002, EMBL Enterprise Management Technology Transfer GmbH (EMBLEM) and the German Cancer Research Centre (DKFZ) in Heidelberg signed a technology transfer collaboration agreement. The agreement formalizes the long-standing cooperation between EMBL and DKFZ in securing and commercializing joint Intellectual Property

(IP). The two institutes will work together to co-market IPR, establish spin-out companies as well as organize joint conferences and training events. The collaboration agreement strengthens the market power of both EMBLEM and the DKFZ technology transfer division, creates additional leverage in our commercial endeavours, and opens new avenues to inter-institutional collaborations between the parent institutes.

– Gabor Lamm

FAQs from the personnel section

MY CONTRACT IS ENDING. WHAT HAPPENS NOW?

If you work at Heidelberg we send a departure chart about 6 weeks before the date your contract ends. This is a list of people to visit before you leave to complete the check-out procedure (e.g., we refund your lunch card deposit). Please do not forget to give us a forwarding address.

Your leaving date appears on your last salary statement. If you are a staff member we calculate your end of contract payments after the final salary is paid, and send a note showing the amount that is paid into your bank account, and the internal tax. Please retain a copy as evidence for national tax authorities.

BUT I AM NOT LEAVING!

Your group leader should inform us that your contract will be extended. We need to know the new contract end date and the budget from which you will be paid. Then we can prepare a draft contract for approval by the programme coordinator. The final contract is signed by the Director General and the Scientific or Administrative Director before we send it to you. Please sign and return a copy. Without it we cannot pay your salary.

The deadline for the payroll is the 10th of the month. We try to ensure that contracts are prepared in good time for approval and signature. You can help by giving us early warning.

– Annabel Goulding

If you have questions about this or any other topic, email Annabel at goulding@embl.de.

EMBL ranks among world leaders in citations.

Thomson-ISI has published its rankings of research institutions in Molecular Biology & Genetics, according to total citations for the period 1992-August 2002. EMBL is ranked first in Europe and 14th worldwide, with a total of 81,699 citations for 1,573 papers. That's an average of 52 citations per paper.

Miguel Andrade from EMBL's Structural and Computational Biology Programme recently got together with some bioinformatics friends, took a look at the bioinformatics tools currently available for exploiting genomic, proteomic and structural data and related databases, and came up with a book. It's called "Bioinformatics and Genomes: Current Perspectives" and it's available from www.horizonpress.com.

EMBL uncovered. Have you been wondering what that scaffolding covering the staircase tower above EMBL's main entrance is for? In October Ernst Heinmoeller and the building maintenance crew commissioned a complete overhaul of the aging tower. The renovations are due to be completed this month, and the scaffolding will come down.

Don't panic! It's just a drill. EMBL's Safety Office and Building Maintenance crew put EMBL Heidelberg's panic control procedures to the test in December when they staged a fire drill, complete with building evacuation. Fire wardens were recruited from across the lab to ensure all rooms were vacated. They did a super job – in 8 minutes everyone, including Fotis, was out in the snow! Organizers thanked their orderly crowd afterwards with glühwein and a pretzel in the canteen. The drill indicated where the alarm bell system needed fine-tuning, and new installations are underway. Future drills are planned, but this time organizers won't give you any warning. So be on your toes and ready to walk, not run!

...from Intermedex

Did you know that as an insured Intermedex member you have world wide medical coverage? The EMBL Health Insurance Scheme provides staff members with comprehensive medical coverage no matter where you are. For further information visit www.intermedex.de.

people @EMBL



Cornelius Gross joined EMBL in January as Monterotondo's newest Group Leader. Cornelius received his PhD in 1995 from Yale University, and then did his postdoctoral work at Columbia University in the laboratory of Rene Hen. While at EMBL the Gross group's work will focus on the regulation of anxiety behaviour in mice.

New grants officers. Geneviève Reinke and Kerstin Nyberg have joined the EMBL and EBI, respectively, as grants officers. They will be on the lookout to help EMBL researchers find potential funding sources, keep them up-to-date on open calls for proposals, and assist them in putting together effective grant proposals, as well as submit reports on existing grants. Whew! What a relief.

Faculty appointments: Peter Rice has been appointed Team Leader at the EBI; Anne-Cecille Trillat is a new staff scientist in the Monterotondo Programme; new faculty members at the Grenoble Outstation include Team Leader Darren Hart and staff scientist José Antonio Marquez.

awards, honours & cetera

EMBL alumnus **Christof Niehrs**, now at the DKFZ in Heidelberg, has been awarded the Deutsche Forschungsgemeinschaft's Gottfried Wilhelm Leibniz Prize for 2003. The prestigious 1.55 Million Euro research award is given for outstanding achievements in science, and recognizes Christof's work in identifying and characterizing genes involved in the development of fertilized frogs eggs.

Gail Bartlett, a PhD student in Janet Thornton's group at the EBI, was awarded first prize at the Young Modellers' Forum – an annual event run by the Molecular Graphics and Modelling Society (MGMS) – for her talk on analysis of catalytic residues in enzyme active sites. Gail presented her work at the Royal Institution in London to an audience of MGMS members, students and industrial sponsors. The research that she presented, which has been published in the *Journal of Molecular Biology*, is now being used to locate enzyme catalytic sites in large sets of proteins.

Stefan Hell, former postdoc in the Cell Biology and Biophysics Programme and current group leader at the Max Planck Institute for Biophysical Chemistry, was awarded the Karl Heinz Beckurts Prize in December 2002. The Karl Heinz Beckurts Foundation seeks to promote industry-related scientific research throughout Germany. Stefan received the award in recognition of his major contributions to the development of Light Microscopy Techniques, which have resulted in six patents and potential commercial applications.

Planning a trip to Heidelberg?

Book a room at EMBL's International Seminar and Guesthouse.



www.embl.de/ExternalInfo/guesthouse/
tel: +49 6221 38 610 - isgaembl.de

Did you know that the ISG

- ↳ has a [sauna](#) and a [fitness room](#)? EMBL staff and families can use them for as little as 4 euros per visit. (open Mon-Fri, 10:00-23:00)
- ↳ serves good dosh at its [Bistro and Beergarden](#)? (open Mon-Fri, 16:00-24:00)

Who's new?

Ulrike Bauer (Mattaj), Florence Besse (Ephrussi), Margarethe Bittins (EMBO), Martina Braun (Furlong), Cornelius Gross, David Hava (Cohen), Ferenc Jankovics (Brunner), Lars Jensen (Bork), Connie Lee (EMBO), Juliette Mathieu (Rørth), Flora Meilleur (Myles), Zsuzsanna Mikes (Superti-Furga), Malpomeni Platani (Mattaj), Alexandra Moreno-Borchart (EMBO), Kerstin Nyberg (EBI Grants Office), Katherine Quinlan-Flatter (Doebbeling), Sabine Rehberger (EMBO), Geneviève Reinke (EMBL Grants Office), Vadim Sidorovitch (Scheffzek), Roberta Spadaccini (Sattler), Theodoros Tsetsenis (Gross), Agnes Visser de Matteis (EMBO)

events @EMBL

10-14 March 2003

EMBL International PhD Programme interview week

21 March 2003

EMBL distinguished lecture:
Ron Laskey (MRC Cancer Cell Unit, Cambridge, UK)

17 April 2003

EMBL distinguished lecture:
Alan Bradley (Wellcome Trust Sanger Institute, Hinxton Cambridge)

30 April 2003

Forum on Science & Society: Teaching evolution through development
Scott Gilbert (Swarthmore College, USA)

For a full list of events, see

www.embl.de/ExternalInfo/todayAtEmbl/

The EMBL community was saddened to hear of the death of Annah Gantner on February 13, 2003. Annah worked in the finance section, and will be sadly missed by her friends and colleagues. She is survived by her husband, Bernhard, and children, Ithabi and Lerato.