



New unit heads confirmed at summer Council meeting

It was an eventful summer Council meeting on 2-3 July this year. As well as Jan Ellenberg taking over Eric Karsenti's role as head of the Cell Biology and Biophysics unit from 2010, it was confirmed that Lars Steinmetz and Eileen Furlong will be joint heads of Gene Expression from the beginning of 2009. Council also confirmed the promotion of Carsten Schultz to senior scientist, approved the salary adjustments as of July and heard a presentation about Australia, its institutes, research infrastructure and funding bodies from Australian delegates Jessie Borthwick and Edwina Cornish. [page 2](#)

Unravelling the mystery of cot death

EMBL researchers have come a step closer to understanding Sudden Infant Death Syndrome (SIDS), a condition that unexpectedly takes the lives of babies aged between a month and a year. Cornelius Gross and his group at EMBL Monterotondo developed a mouse model of SIDS by overexpressing the serotonin 1A autoreceptor in the brainstem, where SIDS victims show alterations in neurons containing serotonin. This proved sufficient to cause sudden death in the mice, and the group now hopes that ultimately it will give new ideas to doctors about how to diagnose babies at risk of SIDS. [page 5](#)



A passage to India

Discussions are underway about a proposal for a consortium of EMBL, the European Synchrotron Radiation Facility (ESRF) and the Indian government to take over the running of the BM14 beamline at the ESRF in Grenoble. The bending magnet beamline is currently owned by UK MRC and is run in partnership with EMBL, but that contract is due to end soon. At the March meeting EMBL, ESRF and the Indian Department of Biotechnology (DBT) made a preliminary agreement to take over and run the MX experimental station from 1 January 2010 for five years. [page 3](#)

From ESOF to the Kinderhaus: communication's big!

You're never too young – or too old – to learn about science. While the Kinderhaus embarks on a hunt to find a scientific mentor to help the children with a series of fun experiments (left), EMBL staff and scientists have been getting involved in a science communication venture aimed at all ages – the third European Science Open Forum (ESOF) meeting in Barcelona. Attracting thousands of scientists, teachers, politicians, media and



outreach people from all over Europe, the biennial meeting makes the latest hot topics accessible to all with seminars, discussion forums and hands-on activities (right). [page 4](#)



How to guarantee sunshine

Once again, the Staff Association Summer Party at EMBL Heidelberg fell on one of the hottest, sweatiest days of the year. But that didn't deter the crowds, who this year bought enough tombola tickets to raise a whopping €5,000 for the local Waldpiraten camp. More cute pictures on [page 5](#)



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New unit heads confirmed by Council

There was important news about the organisation of EMBL from this year's summer Council meeting on 2-3 July in Heidelberg.

Cell Biology and Biophysics unit head Eric Karsenti's departure was announced earlier this year, but it was confirmed that Jan Ellenberg will take over Eric's role as from 2010. In 2009, they will act as joint heads.

With Jan vacating the role of head of unit of Gene Expression, Lars Steinmetz and Eileen Furlong will be appointed joint heads from the beginning of 2009. "Lars and Eileen have spearheaded both the organisation and experimental use of high-throughput functional genomic methodologies at EMBL, and this decision not only recognises their excellent scientific performance, but also my conviction that this scientific direction is one that EMBL should pursue vigorously," said EMBL DG Iain Mattaj.

Council also approved the promotion of Carsten Schultz to senior scientist to reflect EMBL's increase in chemical biology activities: it now has a small molecule screening core facility, two chemistry groups in Gene Expression – one with a strong focus on chemistry in Structural and Computational Biology – and rapidly increasing activities at the EBI on small molecule–macromolecule interactions.

Other points covered at the Council meeting:

- Matthias Hentze reported that the ATC building is proceeding according to plan and within budget. The topping-out ceremony for the builders will be 25 September

this year, and the official opening ceremony will be 15 October 2009.

- Australian delegates Jessie Borthwick from the Australian government and Edwina Cornish from Monash University gave a presentation about the country, its major institutes, research infrastructure and funding bodies.
- For the first time, an observer from the European Commission, Manuel Hallen, Director of Health at DG Research, was in attendance at the meeting, on the invitation of Council.
- EBI Director and ELIXIR project leader Janet Thornton gave an introduction to ELIXIR, which will develop a strategy for a pan-European infrastructure for biological information. Nigel Watts, chair of EMBL Council's ELIXIR working group and also the UK delegate, gave a summary of the first two working group meetings and outlined some possible legal and organisational structures for ELIXIR.
- The salary adjustment as of July 2008 will be 1.6% in Heidelberg and Hamburg; 1.0% in Grenoble; 1.5% in Monterotondo and 1.1% at the EBI (see box, below).
- The chair of the working group on terms and conditions of employment, the Dutch delegate Jeanette Ridder-Numan, provided an interim report of

their work comparing specific aspects of the employment conditions at EMBL with other organisations to ensure that the employment conditions at EMBL are comparable. The working group will present its final report to Council in November.

- The EMBL budget was approved for 2009.
- Favourable SAC reviews of Monterotondo and the Gene Expression unit were presented by the chair of SAC, Paul Nurse, who will stand down at the end of the year. Werner Kühlbrandt will be the chair in 2009.
- Council delegates Jean-Claude Pernollet (France), Marianne Sommarin and Brita Beije (Sweden) are stepping down, and they were thanked for all their work.



Jan Ellenberg (top left) will take over from Eric Karsenti (top right) as head of CBB; Lars Steinmetz and Eileen Furlong (middle) will be joint heads of GE; Carsten Schultz (right) is now a senior scientist.



- **New heads for Cell Biology & Biophysics and Gene Expression**
- **Paul Nurse to stand down as SAC chair at end of year**
- **Australian delegates and EC observer present for first time**

Salary adjustments explained

July is everyone's favourite month at EMBL, because our salary slips show the increase that has been granted by the member states at the summer Council meeting.

EMBL's salary increase consists of two parts: the annual step increase and the salary adjustment. The automatic step increase, which is very unusual in publicly-funded organisations, represents a salary increase of roughly 2.25% per year.

The salary adjustment (the percentages circulated after the summer Council meeting) is calculated based on a combination of factors:

- a) the weighted average of the pay rise for civil servants in Europe's strongest economies;
- b) The annual change in the consumer price index – a measure of the average price of consumer goods purchased – for the individual country;
- c) A correction for imbalances in Purchasing Power Parities – what your salary is worth – between the host countries. This factor is calculated using OECD figures.

All of these factors reflect the economic

situation in the different member states over the period of the year preceding the time of calculation.

When seen over multiple years, the combination of mechanisms keeps salary levels considerably above inflation, even if there can occasionally be a year or two when inflation is higher than the combined salary increase.

EMBL Council makes every attempt to use external evaluations in order to treat all EMBL employees, at all five sites, as fairly as possible.

A passage to India

Discussions are underway about a proposal for a consortium of EMBL, the European Synchrotron Radiation Facility (ESRF) and the Indian government to take over the running of the BM14 beamline at the ESRF in Grenoble.

An Indian delegation of governmental advisers and top researchers from institutes in New Delhi, Mumbai and the International Centre for Genetic Engineering and Biotechnology (ICGEB) visited EMBL Grenoble on 25-26 March, and at the summer council meeting in July, EMBL Council was informed that discussions in India and at ESRF are ongoing in the hope that a positive decision about the proposal will be made by the end of the year.

The bending magnet beamline at ESRF is currently owned by UK MRC and is run in

partnership with EMBL, which contributes staff and expertise in exchange for 20% of the beamtime, but that contract is due to end soon. At the March meeting EMBL, ESRF and the Indian Department of Biotechnology (DBT) made a preliminary agreement to take over and run the macromolecular crystallography (MX) experimental station from 1 January 2010 for five years.

The agreement has several advantages: as well as securing the continuation of this state-of-the-art, specialised Multiple Anomalous Diffraction (MAD) beamline, it will also strengthen links with the Indian MX community, which is one of the most important and active in the emerging nations. As India hasn't got a modern synchrotron, the consortium will

provide access to the facility to structural biologists from the country, and boost research on health-related issues prevailing there. In addition, the ICGEB, an international organisation based in New Delhi which conducts research in life sciences for the benefit of developing countries, will also be part of the consortium. Most of its member state MX scientists only have indirect access to synchrotrons via collaborations.

EMBL Grenoble beamline scientist Hassan Belrhali, who played a major role in initiating the project, said: "There are very good scientific reasons to keep BM14 operational. It's also a great opportunity to promote scientific exchange between Europe and that part of the world."

Got a question? Ask the rest of EMBL!

The new interactive EMBL PhD students portal, <http://predocs.embl.org>, is up and running and waiting for your content!

Set up and maintained by Heidelberg PhD students Evangelia Petsalaki, Claudia Chica, Beat Rupp and Marco Faini, it was created with incoming predocs in mind. The original idea of providing newcomers' information for each EMBL location has expanded to include interactive forums on topics relevant not only to predocs but to other staff members at all EMBL sites. Designed and developed by web architect Francesco Sottile, the wiki site allows registered users to provide content and keep it up-to-date themselves.

So register now (it's free, of course) and start sharing your ideas, worries and second-hand ski gear with everyone else. It's also a great way of keeping in touch with predocs and other staff at other EMBL locations.

Here are some ideas about to make the most of the site:

- Start a Forum topic about anything that's on your mind. Worried about your TAC? Want to know how to apply for funding? Scared of your group leader? Get it off your chest!
- Start a blog! You could meet some like-minded people and form a collaboration or discussion group.
- Finishing your thesis and leaving EMBL is a stressful enough time for a predoc, but having to get rid of your flat and car as well makes it even more of a hassle. Pass on your worldly goods smoothly and easily to an incoming PhD student with the accommodation and shop forums.
- Anyone from any EMBL site can register, and it's not just for predocs. Other staff just won't be able to access some predoc areas.

Users can post questions and answers in the Forum section. Topics that have already been set up include predoc-specific information, careers after EMBL, accommodation and the shop.

The Books section includes static information, such as hints and tips for newcomers.

As a registered user you can create a blog or start a Forum discussion yourself.

The screenshot shows the EMBL PREDOCs website interface. At the top, there is a search bar and the EMBL logo. Below that, a navigation menu includes 'Home', 'Forums', 'Accommodation', and 'Person looking for a room to rent in July'. The main content area displays a forum post titled 'Person looking for a room to rent in July' by Claudia Chica, dated Mon, 06/16/2008 - 14:55. The post text describes a colleague flying over from Naples for a co-operation with the genomics core facility at EMBL, needing a place to stay for a month (1/07/08 - 31/07/08). The post includes a comment form with 'Add new comment' and 'Accommodation' buttons. On the right side, there is a user menu with options: 'My blog', 'Books', 'Create content', 'My account', 'Forums', and 'Log out'. A green arrow points from the 'Forum' menu item to the forum post, and another green arrow points from the 'Books' menu item to the 'Books' option in the user menu.

Smelling a...mouse?

Liliana Minichiello's team at EMBL Monterotondo has discovered that mouse mothers-to-be have a remarkable way to protect their unborn pups.

The researchers discovered how pregnant mice, who are in danger of miscarriage when exposed to the scent of a strange male's urine, prevent this by blocking their smell. A surge of the chemical signal dopamine in the main olfactory bulb creates a barrier to male odours.

The male urine scent affects early pregnancy in mice by inhibiting the release of the pregnancy hormone prolactin, a phenomenon that's often called the Bruce effect and creates a mating opportunity for the alien male. Liliana and her team have now revealed the molecular mechanism that underpins the change in sensitivity to male odours – which starts 3 days after conception in mice, when losing the embryos would become dangerous – in the 20 July issue of *Nature Neuroscience*. Treating pregnant mice with chemicals that block the dopamine receptor D2 abolished the barrier effect, restored odour sensing and allowed miscarriage.

While human mothers-to-be often report unusual reactions to smells, human pregnancy is not thought to be affected by strange male odours. These results, however, could offer a step towards understanding why some women in early pregnancy find themselves running for cover when they catch a whiff of usually delicious aromas such as coffee. "It could give clues as to why many pregnant women report changes in smell sensitivity," says first author Che Serguera.

Starting them young: could you be a mentor?

The Kinderhaus at EMBL Heidelberg is looking for a scientific 'mentor' to help the kids with life sciences projects.

The Kinderhaus has recently signed up to the nationwide "Haus der Kleinen Forscher" ("Tiny Tots Science Corner") initiative, which is sponsored by Helmholtz-Gemeinschaft, Siemens AG, the Dietmar Hopp Stiftung and McKinsey & Company, and aims to get three- to six-year-olds in day-care facilities excited about the natural sciences with experiments and workshops.

The initiative offers free training programmes to the teachers to help them take ideas back to the classroom, but participat-

ing day-care centres are also encouraged to find a willing mentor with a background in science. He or she would advise the teachers, answer their questions, visit the Kinderhaus to talk about his or her work, provide new ideas for additional experiments or do the experiments with the children themselves.

The mentor would be needed to take part just once a month, and Kinderhaus head Florence Beye would welcome volunteers from EMBL, whether at the predoc stage or beyond. "The person wouldn't have to prepare spectacular experiments every time – he or she could also do other things like simply showing the children a laboratory or some scientific instruments," she says.

The children have already been involved in one scientific session. On 3 June, the initiative's 'Action Day', the younger children made delicious orange and apple ice lollies using salt and ice instead of a freezer, and the older children put ink and water in test tubes and froze them to demonstrate that water expands when it's ice.

If you'd like to volunteer your services as a scientific mentor, you can get in touch with Florence at beye@embl.de.

Left: Aarush Sinha gets to grips with the ink experiment



Above: ESOF was held in Barcelona this year

ESOF: Science for all

Die Zeit journalist Martin Spiewak spent a day at the main lab on 20 June to research his entertaining portrait of EMBL, 'Zauberberg der Wissenschaft', for the newspaper's special supplement on European research on 24 July.

The edition tied in with the third European Science Open Forum (ESOF) meeting on 18-22 July in Barcelona, at which EMBL had lots of visibility. Staff members hosted sessions on science communication and education, and DG Iain Mattaj chaired a discussion on research infrastructures. EMBL was also represented in the exhibition area as a partner organisation of EIROforum, who welcomed countless interested questions at their large stand.

The biggest gathering of scientists, politicians, media and outreach people in Europe, ESOF attracted more than 4,000 participants this year, who heard about global warming, human nutrition, the human mind, body engineering and many more hot topics in science. As well as scientific sessions and hands-on exhibitions, there were entertaining and informative outreach events too, which even included drama and dance productions.

"ESOF is a very valuable meeting in many ways. You meet familiar faces, you get to know interesting new ones and you learn a lot about other scientific areas, not just the life sciences," said one visitor. "It's very inspiring and it gave me plenty of new ideas for my work."

You can download 'Zauberberg der Wissenschaft' at www.embl.org/aboutus/news/EMBLinpress/index.html, or find out more about ESOF at www.esof2008.org.

ESOF's participants often present their science in creative ways: 'There's plenty of room at the bottom: a nanoscience theatre play' (below) by the Government of Galicia



Creating a new resource

EMBL Monterotondo and the EBI are joining forces to start a "zoo" of Cre mouse resources (see box, right).

A new FP7 coordinated action, 'Coordination of resources for conditional expression of mutated mouse alleles' (CREATE) involves other institutes from Europe, Australia and Japan as well as the two EMBL units.

Coordinated by Nadia Rosenthal at EMBL Monterotondo, CREATE will disseminate information on Cre mouse resources via an international database, CreZOO. This will capture existing knowledge about different types of conditional knockout mice, including their genetic construction, background, expression patterns and activity according to a single set of standards.

Ewan Birney at the EBI will be responsible for the database, and the institute

will also host a new web portal, Cre8, through which methods and technologies for improving Cre-mediated recombination *in vivo* can be accessed.

Another major goal of CREATE is to define the needs of the mouse research community via a forum, CreExpress.

What's that? A Cre mouse is genetically engineered to express the CRE enzyme only in a specific organ or tissue (conditional expression). When a Cre mouse is crossed with another mouse that has a critical sequence in the target gene flanked by so-called loxP sites (small stretches of bacterial DNA not present in the mouse genome), the CRE enzyme in the offspring will recognise the loxP site present in the same cells, loop out the intervening DNA and rejoin the two loxP sites. Deleting the targeted sequence inactivates the gene in specific cell types and creates a conditional knockout mouse.

Unravelling the mystery of cot death

It's every parent's nightmare – but now EMBL researchers have come a step closer to understanding Sudden Infant Death Syndrome (SIDS), otherwise known as cot or crib death.

Cornelius Gross and his group at EMBL Monterotondo have developed a mouse model of SIDS, a condition that unexpectedly takes the lives of seemingly healthy babies aged between a month and a year.

The group concentrated on the brainstem, the lower part of the brain that forms the link to the spinal cord, where victims of SIDS show alterations in neurons containing the signalling molecule serotonin. In the mice, they modified the serotonin system there by overexpressing serotonin 1A autoreceptor. Their findings, published in the 4 July issue of *Science*, show that this imbalance of serotonin in the brainstem, which coordinates many fundamental functions including control over cardiovascular and respiratory systems, is sufficient to cause sudden death in the mice.

"At first the mice seemed normal. But then they suffered sporadic and unpredictable drops in heart rate and body temperature, with more

than half dying during a restricted period of early life," says Cornelius. This strongly supported the idea that a congenital serotonin defect could play a critical role in SIDS. As serotonin neurons in the brainstem communicate with the spinal cord to innervate the heart and organs involved in temperature regulation, the mice with defective signalling couldn't produce heat when placed into a cold chamber. This inability to activate fundamental body systems under certain conditions is likely to explain why they succumbed to sudden death.

"We hope the mouse model will help identify risk factors for SIDS, which remains the leading cause of death during the first year of life in developed countries," says Enrica Audero, who carried out the research in Cornelius' lab. "One remaining question is whether the animals die during sleep, like in SIDS, and whether we can identify which mice will die by looking at their heart rate or body temperature before the crisis.

"Ultimately, we hope it will give new ideas to doctors about how to diagnose babies at risk of SIDS."



Valeria and Kiki

- Cornelius' group had some extra help over the summer in the form of Kristyn Maiorca, a sophomore from MIT in Cambridge, USA.

Kristyn, or Kiki to her friends, got the chance to spend two months with the Gross group as part of MIT's MISTI programme, which helps their students find internships around the world.

Working alongside postdoc Valeria Carola, Kiki studied mice behavioural analysis, particularly maternal environments, and learned several new techniques. "I hadn't worked with mice before, and it's really interesting to work in a big lab. It's a beautiful environment, too," she says. When she finishes at MIT, Kiki plans to do a Masters degree and would like to return to Europe to study or work.

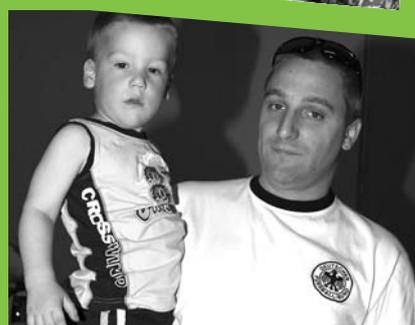
MISTI has representatives in Germany, France and Italy, so if you'd like to host an MIT student in your lab, visit <http://web.mit.edu/misti/what.html>.

The EMBL Summer Party: a celebration of fatherhood

EMBL men: they're handsome, they're strong, they're good at E-science – and they're not bad at fathering, either, if this year's summer party is anything to go by. So here, for the delight of the ladies, is a montage of EMBL chaps showing off their parenting skills...



Photos: Martina Schupp



science&society

Malaria: chasing a ghost

Former EMBL Director General Fotis C. Kafatos never misses an opportunity to stop by in Heidelberg, and at the last EMBL Science and Society Heidelberg Forum on 26 May, he spoke about the fight against malaria. After what was probably the best-attended Heidelberg Forum event ever, he expanded on some of the still open questions in malaria research.

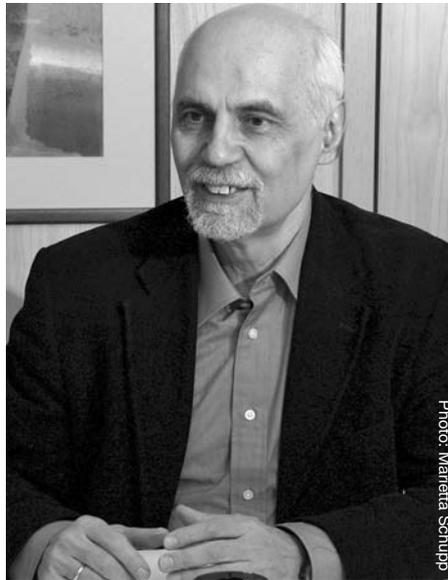
Scientists have managed to eradicate world-wide diseases like measles. Why is it so difficult to combat malaria?

Measles is caused by a virus with very few proteins which can be used directly to develop an immune response, while malaria is much more complex. Its agent is a parasite called plasmodium, which has two life cycles: one in the mosquito and another in the human. The human organism is practically powerless against the parasite. This is an exceptionally malicious intruder that hides in the human liver first and then gets into the circulation, where it destroys red blood cells one by one.

What makes the parasite so hard to capture?

It multiplies very fast. It's very hard to spot the plasmodium while it's in the liver, and when it gets into the circulation it practically explodes. Thousands of parasites evolve from a single one within a very short time, and the immune system isn't very active in the liver, so it can't produce the antibodies fast enough.

The most incredible part, though, is that the parasite's genome is programmed in such a way that the proteins on its surface keep changing. After a certain period it shuts down certain genes and turns on new ones. That continuous changing of the parasite's surface makes it very difficult to the immune system to react – it's



“It's only a matter of time before malaria is history in Africa, South Asia and South America”

– Fotis C. Kafatos

like chasing a ghost.

What is the focus of your research?

In my group at Imperial College London we concentrate on the part of the cycle which takes place in the vector – the Anopheles mosquito. This is the most vulnerable phase for the parasite because its population is at the minimum here. After the mosquito infects itself, which happens when it bites an ill human, its immune

system is perfectly capable of destroying a large numbers of the parasites. We try to unravel the mechanism the mosquito uses to defend itself against the plasmodium. If we manage to eliminate the agent in the vector, we could succeed in stopping the disease altogether.

Some of the funding bodies in malaria research are very generous. The Bill and Melinda Gates Foundation, for instance, spends millions of dollars to support labs working on the development of medicines.

Why is there no vaccine on the market yet?

Many research groups are working on it at a full blast. For instance, Hermann Bujard, EMBO's Executive Director, is pursuing very interesting methods in developing vaccines. Also, some of the already existing medicines are quite successful, although not sufficiently strong to completely destroy the parasite. We need to attack the parasite in both phases of its development – the human body and the mosquito. Otherwise the plasmodium that survives in the mosquito can reinstate the infection. Our enemy is extremely clever.

Do you believe in a malaria-free world?

Absolutely. Malaria used to be a prevalent disease in southern Europe and we managed to eliminate it by using anti-insecticides like DDT. Many people do not realise that malaria has been around for thousands of years; even the ancient Greeks and Romans knew of it. The optimal way to get rid of the disease is a combination of nets, medicines and vaccines, as well as new methods to stop the transmission of the agent by the mosquito. For me, it's only a matter of time before malaria is history in Africa, South Asia and South America as well.

– Yvonne Kaul

EMBO sets out for the southern hemisphere

South African scientists to access European research

The Nobel Prize for Literature in 2003, the first film Oscar ever in 2006 and the contract for the 2010 FIFA World Cup – South Africa's politics and culture have recently enjoyed an unprecedented boom. The country is on its way to join the global elite as it becomes more and more visible on the international stage.

A new cooperation agreement with the European Molecular Biology Conference (EMBC) – the intergovernmental funding body for EMBO – will give South African scientists a boost and link its researchers with col-

leagues around the world. EMBO will set out to discover this *terra incognita* – in scientific terms, at least – and forge paths of exchange.

The agreement, signed in June, gives South African scientists access to some core EMBO activities: the organization will, for example, annually sponsor one practical course or workshop and one plenary lecture, to be held in South Africa. Up to three South African scientists will have the opportunity to network with young European group leaders at EMBO Young Investigator meetings, and researchers from South Africa may apply for EMBO

Fellowships. “EMBO is delighted to welcome South African scientists to join our networks that foster collaboration and information exchange,” says EMBO Executive Director Hermann Bujard.

So from now on, the EMBO community should get used to some of the typical South African phrases like *Howzit?*, meaning simply “how are things going?”

– Yvonne Kaul

More information on the South African agreement can be found at www.embo.org/about_embo/press/south_africa.html

It's not all bad: Unpleasant side effects can be put to good use...

Did you know that Viagra was originally developed to treat angina, and that it was an unexpected 'side effect' which led to its being marketed very differently?

Many drugs have side effects – most much less desirable than that of Viagra – but now researchers have discovered how to use these to their advantage. Researchers in Peer Bork's group at EMBL Heidelberg have developed a computational method, published in *Science* on 11 July, that looks at a drug's side effects in order to predict new uses for it.

As similar drugs often share target proteins, modes of action and unpleasant side effects, this means that drugs evoking similar side effects are

likely to act on the same molecular targets.

"Such a correlation not only reveals the molecular basis of many side effects, but also hints at new uses of marketed drugs in the treatment of diseases they were not specifically developed for," says Peer.

The new approach could prove particularly useful for chemically dissimilar drugs used in different therapeutic areas that nevertheless have an overlapping but so far unknown protein target profile. Applying the method to 746 marketed drugs, the scientists found 261 dissimilar drugs that, in addition to their known action, are also likely to bind to unexpected molecular targets. 20 of these were then tested

and 13 showed binding to the targets that were predicted by side effect similarity. On testing nine of these drugs further in cellular assays, all showed activity and thus a desired effect on the cell through their interaction with the newly discovered target proteins. The brain enhancer Donepezil, for example, proved to share a target with the anti-depressant Venlafaxine, meaning that Donepezil might also be used to treat depression.

The big advantage of existing drugs is that they have already been tested and approved for use in patients. "Our method means new drugs could be checked routinely for hidden targets and potential use in other areas," says Peer.

... and new EBI database boosts access to drug data

Improved prediction of drug side effects, among other things, will be a potential result of the recent transfer of a large-scale drug discovery database from Netherlands-based company Galapagos NV to the EBI.

Enabled by a grant of £4.7m (€5.8m) from the Wellcome Trust, the transfer of the database, which contains information on the properties and activities of drugs and a large set of drug-like small molecules, to the public domain will allow researchers worldwide to make free use of knowledge essential for drug discovery.

The database will be incorporated into the EBI's collection of open-access data resources for biomedical research and will be maintained by a team led by new group leader Christoph Steinbeck.

The free access will have greatest impact on researchers in academia and in small companies on limited budgets. "This speaks to the importance of this information for translational research that the Wellcome Trust has chosen to support this with sufficient long-term funding," says EBI Director Janet Thornton.

FEBS goes to Athens



EMBL's well-travelled exhibition stand found itself in Athens at the end of June for the 33rd FEBS Congress, 'Biochemistry of Cell Regulation'.

The Federation of European Biochemical Societies (FEBS) is one of the largest organisations in European life sciences and seeks to promote, encourage and support biochemistry, molecular cell biology and molecular biophysics in a variety of ways. The annual congress attracts more than 2,500 attendees and is one of the largest in Europe.

"90% of visitors to the stand were either PhD students or postdocs, and we encouraged people to apply to our new EIPOD programme," says Lena Raditsch. "Everyone had heard of EMBL already and some had very detailed questions about working conditions or certain programmes."

Together with EMBO, FEBS is also inviting nominations for next year's FEBS/EMBO Women in Science Award, which aims to highlight the major contributions made by women to life sciences research. The first award was presented this year in Athens to Naama Barkai of the Weizman Institute of Science in Rehovot, Israel, who received €10,000 and gave a special plenary lecture. For more details see www.febs.org.

from the Staff Association



Photo: Marietta Schupp

- Thanks to everyone's overwhelming generosity in buying **tombola tickets** for the draw at this year's summer party, the Staff Association were pleased to be able to hand over a mighty cheque for €5,000 for the local Waldpiraten camp for children with cancer.
- Heidelberg's Volkshochschule is offering children of EMBL staff a special **one-week programme** from 1-5 September. The programme is for 8-11 year olds and costs €210 per child. There are places for 12 on a first-come, first-served basis. For more details, see www.embl-heidelberg.de/~staff/news/vhs_ferien.htm. For other activities for children in the Heidelberg area this summer, see www.embl-heidelberg.de/~staff/news/summer_kids.htm.
- Make a note in your diaries of the **Oktoberfest** (11 October).
- Reduce your travel costs! Do something for the environment! Get to know new people! Check out the new **Car Pooling** website at www.embl-heidelberg.de/~staff/car_pool.htm and contact the Staff Association office (staff@embl.de) if you would like to offer or find a lift to or from work or for a weekend away.
- The Staff Association covers all categories of staff and has representatives at all outstations. Keep up-to-date at www.embl-heidelberg.de/~staff/ and www.embl-heidelberg.de/~staff/pensioners/. – Catherine Floyd

News from the Alumni Association www.embl.org/aboutus/alumni

It's time to vote! Board elections coming up

The EMBL Alumni Association Board is having its regular reshuffle – an event that only happens once every three years – and alumni are invited to vote to elect up to five new representatives.

The board, which is made up of EMBL alumni, works hard to organise activities and initiatives to help support the network of more than 1,300 registered members. It tries to be representative of gender, nationality, different EMBL units and career stages.

The board meets twice a year, suggests

ideas for alumni activities and events and helps organise them, takes an active role in promoting alumni activities and networks, and decides on policies and actions. In this way, it plays a vital role in promoting scientific exchange and collaborations across Europe.

With these elections, treasurer Albert Stegmüller and board members Tony Hyman, Fotis C. Kafatos, Daniel Louvard, Richard Morris, Konrad Müller, Renata Stripecke and Juan Valcarcel will be stepping down. Remaining board members include

Angus Lamond (Chair), who will step down in 2009, Colin Dingwall, Annalisa Pastore, Oddmund Bakke, Freddy Frischknecht, Bernard Hoflack, Claudia Koch-Brandt, Giovanni Paoletta and Niovi Santama.

All full members of the Alumni Association are invited to cast their votes (one for one board member and one for the treasurer) online between 15 August and 30 September at www.embl.org/alumni/board/elections2008. Please note that you will need your password to access the ballot form. Associate members are not eligible to vote.

The candidates for new board member are...

María del Mar Vivanco



THEN: PhD student, Gene Expression, 1987-1991.

NOW: group leader, CIC bioGUNE, Cell Biology & Stem Cells Unit, Derio, Spain.

Andreas Jenny



THEN: Postdoc, Developmental Biology, 1996-2000.

NOW: Assistant Professor, Dept. of Developmental & Molecular Biology, Albert Einstein College of Medicine, Bronx, NY.

Anastasia Politou



THEN: Postdoc, Structural and Computational Biology, 1991-1995.

NOW: Assistant Professor, Laboratory of Biological Chemistry, Medical School, University of Ioannina, Greece.

Anastasios Koutsos



THEN: PhD student, Directors' Research, 2002-2006.

NOW: Assistant Editor at BioMed Central (BMC series), London, UK.

Giulio Superti-Furga



THEN: Postdoc, staff scientist and team leader, Developmental Biology, 1991-2004.

NOW: Scientific Director & CEO of the CeMM Center for Molecular Medicine of the Austrian Academy of Sciences, Vienna

Cedric Notredame



THEN: PhD student, EBI, 1994-1997.

NOW: group leader in Bioinformatics & Genomics Programme, Centre de Regulacio Genomica, Barcelona, Spain.

Patricia Rodriguez-Tomé



THEN: Team Leader, EBI, 1994-2000.

NOW: Head of Service & Development Line, Bioinformatics Program, CRS4 in Sardinia, Pula, Italy.

The candidate for treasurer is...

Oscar Martín-Almendral



THEN: General Service Officer then Finance Officer, 1995-2005.

NOW: Administrative Officer, Kirchhoff-Institut für Physik, Heidelberg University

Mark your diaries with the following alumni events and opportunities:

- There's still time to apply! The deadline for the 2008 John Kendrew Young Scientist Award is **12 September**. All former EMBL pre- and postdocs who left within the past five years are invited to apply for the €1,000 prize. Visit www.embl.org/kendrew_award.html.

- The EMBL/Alumni event 'EMBL – a jump start to an international career in molecular biology' will be held on **19 September** at the Royal Swedish Academy of Sciences in Stockholm. The event – funded by the Swedish Research Council – is aimed at Scandinavian students, pre- and postdocs and EMBL alumni. Registration opens on 25

August, and the preliminary schedule can be found at www.embl.org/aboutus/alumni/index.html.

- Don't forget to check out the EMBL Wiki website at <http://alumniwiki.embl.org>. All EMBL staff and alumni are invited to contribute. Please send items as word documents to Manu at alumni@embl.org.

newsinbrief

Registration is now open for the following hands-on bioinformatics training courses at the EBI. The first ENFIN advanced course on methods for protein function prediction takes place from 1-3 September and the 'two-day dip into the EBI's data resources' on 6-8 October provides an opportunity to become acquainted with the range and use of the data resources at the EBI. The first course on Programmatic access in Perl: webservices & work flows will be held on 8-10 September followed by a Java-based course from 24-27 November. Visit www.ebi.ac.uk/training/handson for more details and to register.

Everyone is welcome to attend a presentation about the Advanced Training Centre by the architects, Bernhardt + Partner, in the Operon at EMBL Heidelberg at 10am on 25 September. This will precede the traditional 'Richtfest', or topping-out ceremony, which is open to the builders and invited VIPs.

An Israeli delegation from Rehovot, one of Heidelberg's twin towns, and the Weizmann Institute there visited EMBL Heidelberg on 17 July as part of a bigger tour of the city. The group of more than 20 visitors, who included the mayors and other dignitaries from the two cities and the president of the Weizmann Institute, enjoyed lunch and a tour of the core facilities at EMBL.

In May, ELLS Monterotondo Education Officer Rossana De Lorenzi was invited by the Liceo Danilo Dolci in Palermo, Sicily, to organize an 'Informal didactics in biology' workshop for science teachers within the framework of the Italian National Work



Programme 2007-2013, a EU-funded initiative that promotes science teaching in less developed areas of the country. Rossana introduced commonly-used molecular biology techniques with practical sessions and educational games (pictured above) such as the Virtual Microarray.

EMBL Kinderhaus will be celebrating its 20th anniversary with a summer party for parents on 26 September. A pictorial history of the Kinderhaus, which opened in 1988 with just eight children and now offers 98 places, will be on display.

PerkinElmer, the US-based global technology provider in health sciences and photonics, has become the first company to join the EMBL ATC Corporate Partnership Programme. "PerkinElmer and EMBL have a long history together. Its support for EMBL's advanced training activities at the ATC sets an example from which conference participants will greatly benefit," says Jörg Fleckenstein from EMBL's Office of Resource Development. More partners are expected to join the Corporate Partnership Programme soon.

Upcoming free courses in the EMBL Non-Scientific Training and Development Programme include:

Course	Site	Date
Interviewee Skills	EBI	18.09
Pilot Presentation Skills	HD	29.01
Illustrator Basic	HD	23-24.09
Effective Team Leader 1	HD	07-08.10
Effective Team Leader 2	HD	10.10
Managing your career after EMBL	HD	09.10
How to boost your chances of getting a job (follow-up to 'How to have a career after EMBL')	HD	10.10
How to deal with pressure and stress	EBI	17.10

Start dates for the English, French and German language classes at Heidelberg in the autumn:

Course	Start date
English Intermediate and Advanced	17.09
German Complete Beginners	11.09
German Beginners	11.09
German Intermediate	08.09
German Advanced	09.09
French	18.09

E-mail td@embl.de or visit www.embl.org/staffonly/personnel/training_dev/index.html for more details.

GOing for gold

The Gene Ontology Annotation (GOA) database at the EBI now contains more than 30 million annotations to over 4 million proteins – that's an increase of 20 million more annotations in less than two years.

GOA (www.ebi.ac.uk/GOA) connects the Gene Ontology, a detailed and highly structured 'dictionary' of biological functions and cellular locations, with the gene products that perform these activities. The data supplied by GOA has proved useful to biologists working on a diversity of species who employ genomic or proteomic investigation strategies.

"The major contribution of annotations to our dataset is the large-scale assignment of GO terms to proteins by electronic methods," explains Rachael Huntley, Scientific Database Curator at GOA. "But people don't always realise that there are human beings involved

in the process, and that a lot of time is spent by expert curators on manual curation that provides high-quality, detailed annotations." GOA has recently added BHF-UCL, who specialise in curating cardiovascular-related proteins, and Reactome, the biological pathway database, to their list of external curator groups.

GO annotations can now be viewed via the browser www.ebi.ac.uk/quickgo, which has just undergone a complete re-design and offers users greatly improved searching capabilities. "It displays, filters and downloads subsets of annotations, which is particularly useful for biologists who have difficulties parsing large sets of data," explains Rachael. "For a small database we have a huge base of users throughout the world, many of which are at EMBL, who find our annotations extremely useful."

Get your groove back

If you sit at a computer or a bench all day, you may find you benefit from EMBL Heidelberg's weekly Rückenschule (back school). Taught by qualified practitioner Ivonne Bergmann (pictured), the classes help you gently improve your posture and flexibility. "I wouldn't be able to touch my toes without it," says one satisfied customer.

The classes are subsidised by the Staff Association, so membership is only €15 for two months. Newcomers are always welcome at the classes, which take place in EMBO's conference room from 4.30-5.30pm on Mondays.

The SA would also subsidise classes at the outstations if local teachers can be found. Please visit www.embl-heidelberg.de/~staff/commouts.htm to contact your rep.



Photo: Marietta Schupp



Berthold Koch is the new head of Internal Audit and is based at EMBL Heidelberg. He studied for a diploma in macroeconomics at the Freie Universität Berlin and then worked in different functions in auditing, control and finance in mechanical engineering firm KSB AG in Frankenthal and in Rouen, France. Before coming to EMBL in July 2008 he was head of Internal Audit and Risk Management at Paul Hartmann AG, a medical products firm in Heidenheim, Germany. Berthold lives with his wife and three children in Frankenthal and likes to play squash in his spare time.

24-31 August EMBL Heidelberg
Course: EMBO practical course on cryo-electron microscopy and 3D image analysis

26-27 August EMBL-EBI Hinxton
Course: Interactions and pathways

31 August-5 September EMBL Heidelberg
Course: Joint EMBL/Exiqon practical course on high-throughput microRNA profilin

1-9 September EMBL Hamburg
Course: EMBO practical course on protein expression, purification and crystallisation (PEPC6)

4-5 September EMBL Hamburg
Course: INSTRUCT workshop

7-11 September EMBL Grenoble
Conference: International conference on aminoacyl-tRNA synthetases: From basic mechanisms to systems biology

12-16 September EMBL Heidelberg
Conference: 1st EMBO conference on centrosomes and spindle pole bodies

16-17 September EMBL Heidelberg
Heads of Units Meeting/Senior Scientists Meeting

17-18 September Land & Golf Hotel Stromberg
Faculty Retreat

26 September EMBL Heidelberg
Course: Using virtual organization to reduce pharma research costs

29-30 September Hotel Krone, Herxheim-Hayna
DKFZ-ZMBH Alliance – EMBL Retreat

1-5 October EMBL Heidelberg
Conference: EMBO workshop on evolutionary and environmental genomics of yeasts

6-10 October EMBL Heidelberg
Course: EMBO practical course on differential proteomics: From 2-D gel electrophoresis to mass spectrometry

8-11 October EMBL Heidelberg
Conference: EMBL Conference on chemical biology

For more details about these events and more, visit www.embl.org/events.

The Courses and Conferences Office is taking **bookings for the Advanced Training Centre** for 2009 and 2010. If you'd like to book the auditorium for a conference or workshop, the computer, wet- or multi-purpose lab for a course or the roof terrace lounge for a corporate or private event, please contact Sally Davison at davison@embl.de.

Grant success for EIPOD programme

The Interdisciplinary Postdocs (EIPOD) programme has been awarded an FP7 COFUND grant of €3.6m over the next four years.

Starting from the current selection round, for which the deadline is 31 August, the programme will be able to take on a grand total of 20 postdocs annually. 40% of the total fellowship costs will be funded by the new grant.

The EIPOD programme was launched in 2007 to support postdocs to work on shared projects across different labs or units, promoting interdisciplinary research and the

exchange of ideas between fields that are usually separate. The first round of selection was a resounding success, with 124 applicants. EIPOD postdocs may suggest a project themselves or choose a predefined project proposed by the participating group leaders.

“Thanks to this additional support, the EIPOD initiative will become an even more important aspect of scientific life at EMBL,” says Detlev Arendt, EMBL’s academic mentor for postdoctoral training.

www.embl.org/training/postdocs/eipod

awards&honours

Inigo Martincorena, a visiting student to Nick Luscombe’s group at the EBI who’ll become a PhD student from October, has received a prestigious Fundación Caja Madrid scholarship in Spain. Prizes are awarded each year to students from various fields who are enrolled in a postgraduate programme abroad. Inigo received his certificate from Prince Felipe and Princess Letizia at a ceremony at the Real Academia de Bellas Artes de San Fernando in Madrid in May.

Gene Expression group leader **Asifa Akhtar** is the 2008 winner of the ELSO Early Career Award, which is awarded once a year to someone who has made a significant contribution during their initial career as an independent scientist in Europe. Asifa will receive her award at the ELSO meeting in Nice on 1 September, where she will also present her work in a plenary lecture. Previous EMBL winners were Elisa Izaurralde (2000), Jan Ellenberg (2004) and Elena Conti (2005).

Kids from the Englisches Institut primary school in Heidelberg enjoyed an afternoon with the microscopes at EMBL thanks to their scientist parents. On 17 July the eight children, aged between 7 and 9, started their visit with a walk through the woods, picking up leaves and insects. They then brought their booty to EMBL to examine it more closely under the dissecting microscopes. EMBL parents Steffi Kandels-Lewis, Rolf Thermann, Sally-Anne Watson and Lena Reunis not only took care of the children on the day but also volunteered EMBL as a venue for the school’s ‘Forschen und Experimentieren’ science week in the first place.



Photo: Marietta Schupp

Ramin Rahmian examines his woodland haul