

EMBL *etcetera*

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Strengthening links with industry

21 January saw the members of the EMBL ATC Corporate Partnership come together for their first official event and the beginning of the next phase of the programme. Representatives from all fifteen companies gathered in the Advanced Training Centre for aperitifs, a series of scientific presentations and dinner.

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Fay's fabulous findings



PhD student finishes up with a flourish [More on page 5](#)

Looking north to explore biomedicine

The new year began with a meeting with the new scientists of the Nordic EMBL Partnership for Molecular Medicine in Heidelberg.

Established in 2007, the partnership includes the universities of Oslo, Umeå and Helsinki, which have established 'nodes' at the Centre for Molecular Medicine Norway, the Laboratory for Molecular Infection Medicine Sweden and the Institute for Molecular Medicine Finland. They combine complementary strengths and collaborate with EMBL to tackle problems in biomedicine.

While the new scientists involved were presenting their research to each other, the administrators from each node met to discuss joint communications activities to promote the partnership and to discuss the first joint recruitment of group leaders which was planned for the following week in Copenhagen. [More on page 2.](#)



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ChEMBLdb – open for business

Burning down the house

Burns Night this year was a celebration of firsts, middles and lasts. It was the first time EMBL Heidelberg's longest-running party was held in the new canteen, and the first time, too, that the ATC's 'party space' was used for the post-dinner disco. Live band Stage Diva got birthday boy Matthias Hentze onto the floor – not literally, of course – alongside the dozens of others who'd made it up to EMBL despite a badly-timed blizzard. While Matthias was celebrating his half-century with friends and colleagues, Christine Panagiotidis' table mates were holding back the tears; EMBL's photographer, who has valiantly supplied EMBL-*&cetera* with so many great pictures, is off to a new life in Barcelona in February.

Right: Stage Diva in the ATC; far right, Master of Ceremonies George Reid. Photos: Christine Panagiotidis



Above: photographer Christine in action for EMBL&cetera for the last time. Photo: Wolfgang Hübner



Looking north to explore biomedicine

The new year began with a meeting with the new scientists of the Nordic EMBL Partnership for Molecular Medicine in Heidelberg on 14-15 January.

Established in 2007, the partnership includes the universities of Oslo, Umeå and Helsinki, all of which have established 'nodes' at the Centre for Molecular Medicine Norway (NCMM), the Laboratory for Molecular Infection Medicine Sweden (MIMS) and the Institute for Molecular Medicine Finland (FIMM). They combine complementary strengths and collaborate closely with EMBL to tackle challenging problems in biomedicine.

Since the launch of the partnership, the nodes have been able to hire 25 group

leaders, and the meeting was the first opportunity for them to get to know each other, visit EMBL Heidelberg and meet EMBL faculty. The second day started with a keynote lecture by Finland Distinguished Professor Jonathan Knowles, who recently retired from his position at Roche; he gave a stimulating insight into what's needed to change the way we look at medicine today.

"We all got a great overview of the scope and breadth of the research at EMBL from some fantastic talks by the staff," commented Kjetil Taskén, director of the NCMM. "With the new groups and their vibrant new research programmes, it is clear that we can expect some huge discoveries in neurobiology, medical genetics, infection medicine and cancer."



Photo: Marietta Schupp

Joining forces

Registration is now open for the first in a brand-new series of symposia organised jointly by EMBL and EMBO.

'Human Variation: Cause and Consequence' will take place on 20-23 June at the EMBL Advanced Training Centre in Heidelberg and will explore human genetic and phenotypic variability in the light of recent developments in genomics, genetics and molecular medicine. Speakers include Svante Pääbo from Leipzig's Max Planck Institute for Evolutionary Anthropology, Kári Stefánsson, CEO of deCODE Genetics, and Michael Stratton, Deputy Director of the Wellcome Trust Sanger Institute

The new series of EMBO/EMBL Symposia aims to provide a platform to exchange ideas on forward-looking topics and new life sciences developments. Complementary to the courses and conference programmes or both EMBO and EMBL, the symposia, of which there will be up to six annually, will also promote scientific communication and collaboration across Europe.

Registration at www.embo-embl-symposia.org will close on 28 March 2010. A limited number of fellowships is available; visit the website at the address above for further details.

Strengthening links with industry

21 January saw the members of the EMBL ATC Corporate Partnership come together for their first official event and the beginning of the next phase of the programme.

Managing directors, vice presidents and other top representatives from all fifteen companies gathered for aperitifs in the ATC Foyer followed by scientific talks and a dinner in EMBL Heidelberg's new canteen. Beforehand, representatives of the four 'founder' partners – GE Healthcare, Leica Microsystems, Life Technologies and Olympus – had taken part in the first annual

round table discussion with DG Iain Mat-taj, Associate Director Matthias Hentze and other EMBL scientists. "The visitors were all really impressed by the ATC, and very much enjoyed the evening," says Senior Manager of Resource Development Jörg Fleckenstein.

The Corporate Partnership Programme was launched in 2008 to enable companies to support activities at the ATC and to help EMBL in its mission to provide the best training to scientists from all over the world. The partners, who have an interest in life sciences, will support the increased number of courses and conferences organised every year, allowing EMBL to continue its programme of top events in a world-class conference centre. The money will also be used to

The EMBL ATC Corporate Partnership:

| | |
|----------------------------|----------------------------|
| <i>Founder partners:</i> | Qiagen |
| GE Healthcare | Sigma Aldrich |
| Leica Microsystems | |
| Life Technologies | <i>Associate partners:</i> |
| Olympus | Eppendorf |
| | Illumina |
| <i>Corporate partners:</i> | Merck Serono |
| Becton Dickinson | Novartis |
| Boehringer Ingelheim | Sanofi Aventis |
| PerkinElmer | Thermo Fisher Scientific |

set up fellowships worth €100,000 per year to help attendees who would not otherwise be able to afford to take part. "In addition, it will allow us to organise events that wouldn't be financed otherwise, such as those in developing or unusual fields," adds Matthias Haurly, Coordinating Manager of EICAT.

In return for their investments, the partners enjoy benefits such as the annual round table discussions. "During negotiations it had become clear that there was a desire on both sides to jointly develop and run some additional training courses in areas such as targeted genome editing," says Jörg. "As a result EMBL, along with a number of the partners, will establish a supplementary series to complement the existing courses."

Genecore head Vladimir Benes chats to John Gerace and Simone Guenther of Life Technologies



Photos: Marietta Schupp



New technology to boost EM opportunities

EMBL's cryo-EM research possibilities are set to expand with the purchase of a state-of-the-art piece of kit.

The next generation Titan Krios™ transmission electron microscope, made by FEI, will be delivered to EMBL Heidelberg in the autumn. The high-end instrument, of which there are only a few very newly-installed ones available to the scientific community as a whole, will allow several of EMBL's groups to enjoy more stability and higher throughput in their EM work.

"This is significant step which will allow us to do what we do better, faster and more efficiently," says Structural and

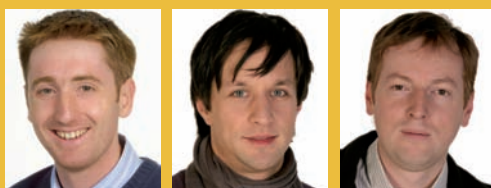
Computational Biology Unit group leader John Briggs (below, far left), whose lab uses cryo-electron microscopy and tomography to understand protein assemblies and membrane shape. "The Titan Krios opens up novel opportunities for automated work to study the structural diversity of viral and eukaryotic coat proteins at the membrane." Unlike its predecessors, the Titan Krios is completely remotely controlled, and it also allows users to load large amounts of samples from different experiments at the same time.

Refurbishments of the former NMR area are already underway to house the new

microscope. The area formerly used by the Frangakis and Antony labs will be transformed into a microscope room, operational booths and lab space. "We expect building to begin in March, but with as little disruption as possible," says Sabine Oertel, Building Maintenance's Architectural Engineer. "The new area will have a little atrium to let in the light, and the NMR people will at last have a corridor so they don't have to walk outside."



Who'll be using the microscope?



As well as John Briggs' established lab, two groups very new to EMBL will benefit from the microscope. Carsten Sachse's group will be using it to obtain insights into the molecular mechanisms of autophagy. "With the Titan Krios' automated data collection, state-of-the-art electron optics and improvements in image processing, we'll be able to obtain very precise snapshots of the protein complexes that are involved in the membrane trafficking events of autophagy at previously unknown detail," says Carsten (middle). Martin Beck's new group will use it to study the structure and function of large macromolecular assemblies. "We'll be able to catch biologically rare events of the nuclear pore complex machinery previously unamenable to ultrastructural imaging," explains Martin (near left).



A new model army?

eukaryotes. In addition, as in eukaryotes, those proteins interact with the membranes found inside the cells.

“The discovery of membrane-coat proteins in these particular prokaryotes has fundamental implications for eukaryotic evolution,” says Damien, who led the study. “It also means that, as relatively simple cells, PVC bacteria could be used as model organisms to study how the endomembrane system of more complex cells works.”

The endomembrane system is a network of membrane-bound compartments – which include organelles such as the endoplasmic reticulum and the Golgi complex – that stores and transports material in the cell. Once thought to be unique to eukaryotic cells, the membrane-bound compartments – although not yet the associated proteins – were discovered in prokaryotes in 1991.

PVC bacteria – and no, they’re not something you might find at a fetish party – could offer insights into the evolutionary history of eukaryotic cells, according to EMBL Heidelberg scientists.

Mattaj group research technician Rachel Santarella-Mellwig, Complex Analyst Damien Devos (both pictured above) and members of other EMBL groups found proteins that shape the endomembrane system in Planctomycetes-Verrucomicrobia-Chlamydiae (PVC) bacteria – proteins that had previously been thought to exist only in

EMBO Fellows pension plan takes off

“Most scientists looking for an interesting postdoctoral position don’t worry about their pension – until it’s too late,” wrote former Director of EMBO Frank Gannon in *EMBO reports* in 2007. Now EMBO has become the first science organisation to offer a pension plan for its fellows.

The internationally portable plan aimed at the more than 400 recipients of EMBO Long-Term Fellowships was launched in January this year – and within two weeks, more than half of the newly elected EMBO Fellows – including some at EMBL – had signed up. “In academia, you rarely know what the future might bring,” says one, Megumi Onishi-Seebacher, a postdoc in the Korb group. “A lot of my friends from the US who work in industry started saving for their retirement some time ago. I think it’s wise to get started early.” Sebastian Maurer, a postdoc from the Surrey group, was also inspired by his peers. “I was disap-

pointed when I found out that scientists in academia are not offered the same opportunities as PhD holders working in the private sector,” he says. “The EMBO pension seems very flexible, and I expect we won’t have to pay for excessive bureaucracy.”

Many of the EMBO Fellows who enrolled for the pension plan – managed by the financial services company MLP – have already had their first experience abroad and might change their jobs again in the future. The portable EMBO plan scheme secures their savings and prevents them from losing their contributions. Almost all have decided to pay the full amount of €100 per month, at which level their contribution is matched by EMBO to the tune of an additional €100.

For more information about applying for an EMBO Fellowship, visit www.embo.org/programmes/fellowships.html.



I kid ye not

Kidney biology was the name of the game on 25 January, when EMBL-EBI hosted an international meeting for bioinformaticians and biomedical experts to agree additions and improvements to the Gene Ontology (GO) vocabulary to describe the role of proteins in kidney development.

Organised by the Renal Gene Ontology Annotation (GOA) Initiative, led by the EBI’s Rolf Apweiler and Peter Scambler of the Institute of Child Health in London, the Kidney Development Ontology Content Meeting saw researchers approve nearly 80 new GO terms. “We lacked a comprehensive, controlled vocabulary for kidney biology,” says Rolf. “Scientists will be able to use this vocabulary to annotate experiments, providing a standardised way to describe their work and assist interpretation of results, and ultimately improving understanding of kidney development, function and disease.”

The new GO terms can be applied to various scientifically important species including fruit fly, zebrafish, mouse and humans. The ultimate goal of the Renal GOA Initiative, a three-year project funded by Kidney Research UK, is to develop a unique public data resource for kidney research using the popular GO vocabulary. For more information about the Renal GOA Initiative, visit www.geneontology.org/GO.renal.shtml.

Money for ELIXIR

The European Life Science Infrastructure for Biological Information (ELIXIR) has received investments of €3.5m from Denmark and €1.85 from Finland.

An initiative involving 32 partners from 13 countries, ELIXIR will establish a sustainable infrastructure for biological information, supporting research and its applications in medicine, the environment and society. “We’re delighted that these countries have taken a strong lead in investing in ELIXIR,” says EMBL-EBI Director and ELIXIR coordinator Janet Thornton. “Europe must work together to reap the benefits of the flood of biological data.” The money comes from the Danish Agency for Science, Technology and Innovation, the Academy of Finland and a Finnish consortium of institutes.

John Kendrew Award winner 2010

Jens Preben Morth, a PhD student in Paul Tucker's group at EMBL Hamburg from 2001 to 2005, is the winner of this year's John Kendrew Young Scientist Award.

The selection committee was again faced with an exceptionally difficult decision based on the outstanding quality of applications, but after a long discussion at their meeting on 14 December, Preben emerged as the clear winner.

"Our decision was based on his outstanding contribution, especially since leaving EMBL, to the structural biology of membrane proteins," says EMBL Alumni Association chair Giulio Superti-Furga. "He has also been a real inspiration to school students with his enthusiastic involvement in science education."

Preben, who's the first outstation scientist to win the award, is now an associate professor at Aarhus University in his native Denmark. "I am incredibly proud to have received it," he says. "John Kendrew was one of the founding fathers of protein crystallography, and to have received an award that carries his name will always stand out as an absolute highlight of my career."

Preben deserves particular recognition for solving the structure of sodium potassium ATPase, or sodium pump for short, an enzyme found in the plasma membrane of all animals. "Nobel laureate Jens Christian Skou – another Dane – discovered the sodium pump more than 50 years ago," he says. "During my postdoc I pushed my project from initial crystals to the complete determination of the structure. The work taught me to keep going even when success seemed unachievable. The foundation for my interest and for structural biology was laid at EMBL Hamburg, studying bacterial two-components systems."

The John Kendrew Young Scientist Award was launched in 2007 and is open to scientists who left EMBL in the last 2-5 years, were EMBL postdoctoral fellows or members of the EMBL International PhD Programme and are regis-

tered members of the Alumni Association. The award, which is named after the first Director General of EMBL, Sir John Kendrew, consists of a cash prize of €1,000 plus a further €1,000 towards the cost of travel and accommodation, as the winner presents a lecture at EMBL lab day in Heidelberg. The prize was generously sponsored by the EMBL Pensioners' Association for an initial period of three years, and funding for a

further three has been secured thanks to generous donations from alumni (see www.embl.org/donations/thankyou).

The selection committee would like to thank all applicants and wish them every success for the future. Thanks also to EMBL faculty members for the nominations, and Halldór Stefánsson and Kai Simons for their advice.

"John Kendrew was one of the founding fathers of protein crystallography, and to have received an award that carries his name stands out as a highlight of my career"

– Jens Preben Morth

Preben and the atomic structure of the hetero trimeric sodium pump



Current and forthcoming alumni events:

- **24 February:** The first Alumni Local Chapter meeting to be held in Ireland will take place in the Science Gallery, Trinity College Dublin from 11:00 to 13:00. This will be followed by a scientific event entitled 'Bringing the Excellence of EMBL to Ireland', with speakers from the Science Foundation Ireland, EMBL and the University Colleges of

Dublin and Cork.

- **8 March:** Staff-Alumni Reunion 2010. See over for more details.

We want to hear from you! Tell us about your personal or scientific achievements, an interesting event in which you are involved or give us feedback on alumni matters at alumni@embl.org.

A day to remember

Whatever you do, make sure you're in Heidelberg on 8 March! It'll be a packed day starting with the EMBL Staff-Alumni Reunion, the ATC Open House in the early evening and the official farewell dinner for Bernd-Uwe Jahn, followed by music throughout the night.

The daytime reunion will be divided into four sessions of talks covering EMBL, EMBO and the Alumni Association, science and society, the life sciences and the future of science. Speakers will include EMBL celebrities past and present, from current DG Iain Mattaj to EMBL's first woman group leader, Sara Courtneidge. The talks will take place in the new ATC, where the poster area of helix B – the yellow one – will feature a display of alumni science from the member states.

At 17:30 the second part of the day – ATC Open House – will begin, with

guided tours of the ATC, the unveiling of the Matti Saraste Courtyard in front of the building, and light refreshments. Attendees will also get a sneak preview of the exhibition of scientific achievements at EMBL which will be on display in preparation for the Official ATC Opening Ceremony on 9 March.

Dinner from 19:00 will be a chance for staff and alumni alike to say goodbye to Bernd-Uwe Jahn, EMBL's Administrative Director from 2001 to 2009. Live music and then a disco will round off the day's events.

All EMBL and EMBO staff, alumni, EMBO members, Council delegates and SAC members are invited. Registration is required for all alumni; staff are requested to register for the daytime programme only. See www.embl.org/alumni/reunion.

*EMBL Reunion:
What's cooking in the EMBL community?*

*8th March
EMBL Advanced Training Centre*

9:00 Reception and continental breakfast

*10:00 Antipasto (Iain Mattaj, Maria Leptin,
Colin McCallum, Giulio Superti-Furga)*

Morning coffee

*12:00 Primo Piatto (Giuseppe Testa, Freddy
Frischknecht, Giovanni Frazzetto)*

Lunch

*14:00 Secondo Piatto (Sara Courtneidge, Luis
Serrano, Liliana Minichiello, Scott Fraser)*

Afternoon tea

*16:00 Dolce e Caffè (Fotis Kafatos, Eric
Karsenti, Marja Makarow, Riccardo Cortese)*

...and more!

Albert: 'a cherished colleague and friend'

On 10 December last year Albert Stegmüller, who worked at EMBL for 34 years, passed away at the age of 78. Here, Konrad Müller, Head of Personnel from 1975 until 1995, remembers him

"I first met Albert in 1975, when he had just begun establishing an accountancy system for EMBL – which, at the time, was still being established itself. All nine administration members were working from makeshift offices on the ground floor of DKFZ. EMBL's status as an inter-governmental organisation, with its peculiarities and privileges, was a complete novelty to anyone on the outside – including banks. Albert had to convince them that EMBL was legal before he could even begin his regular day-to-day responsibilities!

Within a very short time, however, he'd succeeded in developing a system tailored to the needs of our organisation. It ran flawlessly and was always highly acclaimed by auditors.

Albert was an accountant as you would imagine and hope one to be: responsible and accurate, cordial but co-operative, reliable and willing to help. When we had

moved into the newly erected EMBL building, he, on top of 'his' accounting, very successfully assumed responsibility for the entire EMBL and EMBO budget accountancy, as well as for tax reimbursement procedures with national finance authorities. But it was the more personal aspects of our collaboration that we in Administration appreciated and loved. Albert, friendly and helpful, was simply always there when you needed his advice or help. Once or twice a month during the initial years of EMBL, Finance and Personnel staff members would work weekends on the payroll accounting which, in those days, had to be done entirely by hand. On those weekends, Albert would invariably bring in the most delicious cakes, homemade by his wife Elfriede. For days ahead, we would be eagerly anticipating the next.

When he retired in 1996, Albert immediately accepted the post of treasurer of



the Alumni Association, which he handed over to his former colleague Oscar Martín-Almendral in 2007. When the EMBL pensioners formed an association, Albert was elected onto the board as treasurer.

When I visited Albert a few weeks before his death, he expressed a wish to visit EMBL one last time and see the new ATC building. His youngest son and I promised him that he would; yet, only a few days later, Albert deteriorated. We were unable to grant him his wish. We have lost a cherished colleague and friend who rendered outstanding service to EMBL."

A bigger picture of animal evolution

A major *Nature* paper and an inroad into the understanding of animal evolution gives the Arendt group – and first author Fay Christodoulou in particular – good reason to celebrate the beginning of 2010.

Using Detlev Arendt's favourite 'living fossil', *Platynereis dumerilii*, the group studied the oldest known animal microRNAs, miR-100, miR-125 and let-7, and found that their specificity, conserved over hundreds of millions of years, in certain tissues and cell types was the same in other animals such as sea anemones, worms and humans.

"It was really rewarding to be able to bridge the previously unconnected areas of small RNAs and evo-devo"

– Fay Christodoulou

"This hints at the early origin of these tissues in animal evolution," says Fay, who just finished her PhD in Detlev's lab and is returning to Greece as a postdoc in March. "If an ancient microRNA is found in a specific part of the brain in one species – *Platynereis* – and in a similar location in another species – humans – then this brain part probably already existed in the last common ancestor of both."

That ancestor – which lived around 600 million years ago – may already have had a sophisticated brain that released hormones into the blood and was connected to various sensory organs. "By looking at where in the body different microRNAs evolved, we can build a picture of ancestors for which we have no fossils, and uncover traits that fos-

sils simply cannot show us," says Detlev, who headed the study while Fay carried out most of the experimental work. The findings, published at the end of January, offer not just a glimpse into the past but also open new avenues for studying the current functions of specific microRNAs.

"It was really rewarding to be able to bridge the previously unconnected areas of small RNAs and evo-devo," says Fay. "I'm looking forward to reading about the follow-up work which will be continued by the lab."

Fay (pre-haircut) and *Platynereis*



Photo: Marietta Schupp

ChEMBLdb – live and open for business

The EBI's vast online database of information on the properties and activities of drugs and drug-like small molecules and their targets was made freely available to all on 18 January.

ChEMBLdb, which boasts information on an additional 100,000 compounds since its transfer from biotech firm Galapagos NV in July 2008, is a unique resource because of its focus on drug discovery and its size: the number of small molecules is over 520,000, and it contains over 2.4 million records of their effects on biological systems.

The data – which include information about how small molecules bind to their targets, how these compounds affect cells and whole organisms, and information on the molecules' absorption, distribution, metabolism, excretion and toxicity – could be a critical bridge to help translate information from the human genome into innovative drug therapies.

"There has already been big demand for ChEMBLdb data, not only from large pharmaceutical companies but also from academic institutions and smaller companies who particularly benefit from the free access," says John Overington, leader of the ChEMBL team at EMBL-EBI.

www.ebi.ac.uk/chembl

Check out EMBL's chemistry web pages at www.embl.de/research/chemistry/index.html

Charting the growth of chemistry at EMBL

The proposed new EMBL Centre for Chemical Biology, several new methods and techniques, and the increased interest in chemistry and chemical biology among PhD applicants were just some of the topics under discussion at the second EMBL Chemical Biology retreat at the ISG hotel on 10-11 January.

Some of EMBL's newest group leaders – among them Christoph Merten, Alexander Aulehla and Rob Meijers – took the opportunity to introduce their expertise to the group leaders working in the field, many of whom were attending for the second time. In addition, two specialists from the Chemical Biology Core facility were invited, Candide Hounzou and Vineet Pande; Vineet

presented his work in computational drug design, a new expertise for the facility.

The scientific part of the meeting included presentations by Anne-Claude Gavin and Claude Antony, while new Genomics Biology unit group leader Christoph Merten introduced the audience to microfluidics, and Edward Lemke showed new routes to prepare fluorescently-labelled proteins for single molecule FRET measurements. Victor Lamzin introduced his new database, ATOLL, which catalogues the annotated 3D structures of protein ligands for virtual drug screening; Christoph Steinbeck and Rolf Apweiler gave a rundown of the EBI databases relevant to chemistry; and organiser Carsten Schultz gave an introduction to new meth-

ods for manipulating intracellular signalling events. Finally, Paul Heppenstall presented the many unknowns of the somato-sensory system in the skin and his goal to image rare neuronal fibres in the mouse.

"It becomes very clear that the large potential in methods and approaches already present at EMBL needs constant communication to cope with the ever-changing scientific community and the rapid development in the field," says Carsten. "There is large potential for collaborations, and what cannot be provided in house should be added through co-operations with experts outside the institute."

The success of the 2010 retreat guarantees a follow-up meeting in 2011.

A spring festival: Art @ EMBL

Are your scientific images gorgeous enough to be put on public display? If so, EMBL's Science and Society programme would like to include them in an exhibition planned for an 'Art @ EMBL' event at EMBL Heidelberg on 30 April.

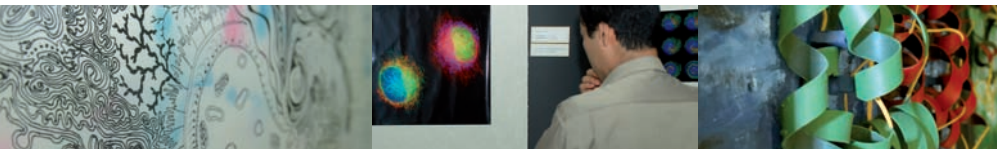
Five years after the last science and art special event in July 2005, the Science and Society committee members are putting together an exciting programme for the day, which will be split into two parts. From 14:00 to 17:00 there will be a symposium, 'Science and Art' in the new ATC auditorium. The keynote lecture, 'Splashing around: some structural intuitions in art and science' by the University of Oxford's Martin Kemp will be followed by a panel discussion, with participation from Nadia Rosenthal, Aslihan Sanal, Giovanni Frazzetto and Diva Tommei.

The second part of the programme will consist of various forms of art 'happenings' by talented members of the community: music, a theatre performance and of course the exhibition, 'Beauty in Science'.

"We're looking for striking, pleasing, aesthetic images – videos as well as still pictures – that demonstrate the inherent beauty in science," explains Science and Society programme manager Halldór Stefánsson. "From the pool of images that we hope will be submitted we intend to select 20 for presentation on panels in the ATC, where a big beer session will provide a fitting end to the Friday afternoon."

If you've got a great image to submit, visit www.embl.de/aboutus/science_society/symposia/symp_30apr10/index.html.

Below: in 2005, the Science and Art event invited EMBL's multi-talented staff to produce original artworks. This year, it's looking for the 'beauty in science'



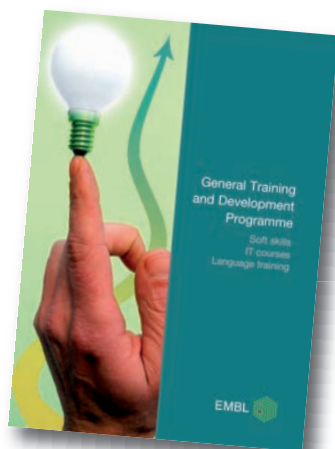
Brush up your skills

It's never too late to make some new year's resolutions, so why not build on your skill set and improve future employment prospects by signing up for some of the General Training and Development Programme's soft skills, IT and language courses?

As well as offering some brand new courses for 2010, the programme has also developed suggested 'career development paths' to give some guidance about what kind of training might be relevant at different career stages. For example, the development path for junior staff suggests that a PhD student might brush up on Scientific Writing or Presentation Skills at the beginning of their stay at EMBL, Time Management and Dealing with Pressure while they're writing their thesis, and then Becoming a Successful Interviewee towards the end.

"The programme offers courses at all EMBL sites to make it possible for scientists and non-scientists alike to fit training into a busy work schedule," says Head of Personnel Ulla Böhme. "We're also open to suggestions for courses that are not currently included."

New courses this year include Speed-read-



ing, Preparing for the Academic Job Market, Interviewing, Successful Fellowship Writing, Successful Grant Writing, Fundamentals of Scientific Presentations and four Wiki courses.

Look out for the new brochure (above) in your pigeonhole or at any of the EMBL sites. Courses are subsidised, so the only expense incurred by attendees is travel and subsistence for courses held at a different duty station.

http://intranet.embl.de/general_training

Eau no!

Research from EMBL Grenoble could open up new approaches to increasing the resistance of crops to water shortages.

In a paper published in *Nature* at the end of 2009, team leader José Márquez and his collaborators at the Consejo Superior de Investigaciones Científicas in Valencia revealed how the plant hormone abscisic acid (ABA) governs responses to stressful situations such as drought. The groups discovered that the protein PYR1 interacts with ABA, which under normal, non-drought conditions is inhibited by PP2C proteins. "We used X-ray crystallography to find that the structure of PYR1 is like a hand which closes over the hormone and inhibits PP2Cs activating the pathway," explains José. "If you treat plants with ABA before a drought, they take all their water-saving measures and are more likely to survive the shortage."

The story was also covered in major national newspapers, including *El País*. "What we'll be doing now is using our knowledge about what ABA interacts with and how to find other molecules with the same effect, as ABA is difficult and expensive to produce," says José.

Open doors to all

The moving in has already begun, but on 8 March all EMBL staff – including those remaining in the main lab – will have a first chance to look around the entire EMBL Advanced Training Centre at the ATC Open House event, which starts at 17:00.

After everyone has explored the double helix arrangement and figured out the way to colleagues' new offices, there'll be a farewell dinner buffet in honour of EMBL's former Administrative Director, Bernd-Uwe Jahn, who is retiring. The party will continue into the wee small hours of the morning with a live band and disco.



Registration is now open for the following **EBI hands-on bioinformatics training course** to help you get to grips with your data: 'Plant bioinformatics', 29-31 March (registration deadline 1 March). See www.ebi.ac.uk/training/hands-on to register and for full programme details.

Upcoming courses in the **General Training and Development Programme** include:

| EMBL Heidelberg | |
|-----------------|--|
| 10 March | Wikis for Beginners |
| 11 March | Principles of the social web/Wikis for Beginners |
| 17 March | PowerPoint Advanced |
| 26 March | Effective Writing II |
| EMBL-EBI | |
| 9 April | Effective Writing Part 1 |
| EMBL Grenoble | |
| 23 & 24 March | Presentation Skills |
| 25 & 26 March | Presentation Skills |

Please see http://intranet.embl.de/personnel/training_development/index.html for more information.

A delegation from **Malta's Council for Science and Technology** visited EMBL Heidelberg on 4 February to learn as much as they could in one day

about the lab's units, core facilities and PhD programme. The visit was in preparation for the possible future addition of Malta to EMBL's list of member states.

Registration is now open for two **Science and Society events**: the EMBL-EBI Science and Society Symposium, 'Who Owns Science? Promises and Pitfalls of the Public-Private Partnerships' on 19 March in Cambridge, and the 11th EMBL/EMBO Science and Society Conference 'The Difference between the Sexes' on 5-6 November. See www.embl.de/aboutus/science_society/index.html for details.

EMBL Heidelberg had a visit from the European Commission on 11 January when **Ruxandra Draghia-Akli**, Director in Directorate F: Health in the DG Research department, came for a day. In between an introduction to EMBL and a tour of the core facilities, Ms. Draghia-Akli gave a presentation on new initiatives in health.

Are you interested in art? EMBL is looking for staff members to join the new **ATC Art Committee**, chaired by Matthias Hentze, which will consider applications from interested artists in displaying their work in the EMBL Advanced Training Centre. Visitors to

the ATC would be able to view the original artworks, which will be displayed for a limited time period per artist, and purchase pieces if desired. If you're interested, please contact Michael Thompson at dg-office@embl.org by 12 March.

EMBL-EBI's **Annual Scientific Report**, which is produced every year with the help of EMBL Heidelberg's Office of Information and Public Affairs, is now available to download at www.ebi.ac.uk/Groups/reports/current/AnnualScientificReportComplete.pdf. This 194-page book covers the past year's work of all EMBL-EBI's services, research and support groups.

Look out, too, for the new **Research at a Glance**. With a page per group, it's a useful overview of EMBL's research. www.embl.de/aboutus/communication_outreach/publications/index.html.



Get into the groove

Work from Daniel Panne at EMBL Grenoble has pointed to a new possibility for DNA sequence recognition by transcription factors.

In a *Structure* paper in May last year, he and his group presented the structure of a transcriptional repressor, MogR, bound to DNA – and found that, unlike most transcription factors we know, its binding specificity seems to rely on the shape of DNA rather than its sequence.

The conventional view is that transcription factors literally read out the four-letter code by binding to bases directly. The arrangement of atoms in a DNA molecule creates two grooves – major and minor – that wind along its length, carving out the double helix shape. Many transcription factors bind in the larger major groove as it gives better access to the bases to read their sequence.

"What's special about MogR is that it binds to a DNA sequence composed exclu-

sively of 'A's and 'T's," explains Daniel. "These 'A-tracts' cause the DNA to bend, narrowing the minor groove and concentrating its negative charge." In other words, MogR recognises its target not so much by the literal sequence of bases, but by the shape and electrostatic pull of the minor groove that this sequence creates.

Since Daniel's discovery, another group at the Howard Hughes Medical Institute at Columbia University trawled the protein structure databases using MogR as a prime example. Their findings suggest that shape-dependent readout could actually be a universal method of sequence recognition. "It seems that a whole number of structures exhibit this feature and that this is a general phenomenon in protein-DNA recognition," Daniel says. "MogR illustrates these principles beautifully."

– Lucy Patterson

obituary

Frank Schmitz

It is with regret that we announce the death at the beginning of January of our colleague Frank Schmitz.

Frank started as head of the computer group in EMBL Hamburg in 2000, when he was recruited from the IT department in EMBL Heidelberg. During his time in Hamburg, he bought stability and structure to the computer network and developed the IT infrastructure to meet modern standards, as well as overseeing the growth and development of the computer group. He was also a Staff Association representative for EMBL Hamburg.

As a colleague he was very approachable and reliable, and was a greatly valued member of staff. He will be dearly missed.

– Rosemary Wilson

events@EMBL

3-5 March EMBL Heidelberg
EMBO Workshop: Visualizing Biological Data (VizBi)

8 March EMBL Heidelberg
Bernd-Uwe Jahn's Official Farewell & ATC Open House

8-12 March EMBL Heidelberg
Course: Advanced Microscopy

9 March EMBL Heidelberg
Official ATC Opening Ceremony

12 March EMBL Heidelberg
Science and Society: A Dream Comes True: the TARA project. Eric Karsenti

18-20 March EMBL Heidelberg
Conference: The Complex Life of mRNA: From Synthesis to Decay

18-20 March EMBL-EBI
Course: Plant Bioinformatics

26 March EMBL Heidelberg
Staff Association General Assembly & Clubs Fair

7-8 April EMBL Hamburg
Heads of Units/Senior Scientists Meeting

10-13 April EMBL-EBI
Course: *In silico* systems biology: network reconstruction, analysis and network-based modelling

10-16 April EMBL Monterotondo
EMBO Practical Course: MicroRNA profiling: From *in situ* hybridisation to new gen sequencing

14-15 April EMBL Heidelberg
Course: Microinjection into adherent cells – theory and practical exercises

20-21 April EMBL Heidelberg
Course: Techniques for the generation of transgenic mice

3-4 May Herxheim, Pfalz
DKFZ/EMBL retreat

3-4 May EMBL Heidelberg
Course: Next Generation Sequencing Data Analysis

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

people@EMBL

Christoph Merten is the newest group leader in EMBL Heidelberg's Genome Biology Unit. He got his PhD at Frankfurt University and then went to Cambridge to do postdoctoral research at the Medical Research Council's Laboratory of Molecular Biology. Prior to coming to EMBL Christoph was a junior group leader at the Institut de Science et d'Ingénierie Supramoléculaire in Strasbourg. His group will focus on novel, droplet-based microfluidic approaches with applications in biology and chemistry.



Two Junior Conference Officers have joined the team in the Course and Conferences Office. **Ruth Hazlewood** (left) is from near Oxford, UK and read German studies at Manchester University. Before EMBL she worked at Marks and Spencers and Leeds University in training and conference coordination. **Anja Maria Kroeffges** (right) is from Bad Honnef, Germany, and studied event management. EMBL is her first job after apprenticeships in tourism and festival organisation in Kassel. While Ruth wants to improve her German at EMBL, Anja's looking forward to working in an English-speaking environment.



Bernd Pulverer, formerly editor-in-chief of *Nature Cell Biology*, is the new Head of Scientific Publications at EMBO and will take care of the business development and management of *The EMBO Journal*, *EMBO reports*, *Molecular Systems Biology* and *EMBO Molecular Medicine*. Bernd, who gained a biology PhD at the Ludwig Institute for Cancer Research at University College London and pursued an academic career in Canada, the US and Austria before entering scientific publishing, replaces Les Grivell who retired in November 2009.

Kirsi Heerde, Personal Assistant to Administrative Director Ralph Martens, is from Finland and has lived in Germany for nearly 10 years. Previously she worked as PA to the MD at a company in Nuremberg and at Linklater's in Frankfurt. Kirsi is the first point of contact for Ralph and can be e-mailed at dg-office@embl.org.



Let it snow!

Well, the weather outside is frightful...it was for most of January, anyway. But while EMBL's adults were cussing and blinding as they dug their cars out of the snow for the tenth morning running, for the kids it was another story. "For some of the children it was the first snow they'd seen in their lives," says EMBL Heidelberg Kinderhaus helper Dominik Neuer. "We fetched the sledges from the cellar, and the weather proved to be the highlight of the new year."



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