

EMBL *etcetera*

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Prime movers

Two EMBL Heidelberg staff members are moving on this summer. EICAT Coordinating Manager Matthias Haury is heading to Brussels to take up the position of Head of Science Operations at the European Cooperation in Science and Technology, while Publications Officer and editor of *EMBL etcetera* Vienna Leigh will become head of communications at the Institute for Bioengineering of Catalonia (IBEC) in Barcelona.

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Summer Council Meeting



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Digital embryo soars to the next stage

The EMBL team that first captured the development of the zebrafish embryo on film has now filmed the elusive fruit fly embryo using an improved recording technique.

This method also enabled them to observe the development of zebrafish eyes and midbrain. "Non-transparent samples like the fruit fly embryo scatter light, so the microscope picks up a mixture of in-focus and out-of-focus signals – good and bad information, if you like," explains group leader Ernst Stelzer. "Our new technique enables us to discriminate between the two."

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- Salary adjustments from July
- New microscopes for two units

Summer Council meeting 2010: outcomes

Photo: Marietta Schupp



Many delegates were visiting the ATC for the first time at the Summer Council Meeting on 28-30 June, but despite being wowed by their surroundings they still found time to make some decisions.

You may have already noticed the salary adjustments which appeared in the July payslips. They are 2.6% in Heidelberg and Hamburg, 2% in Grenoble, 3% in Monterotondo and 3.3% at the EBI. Council also approved the EMBL budget for 2010, and was presented with a summary of the new EMBL Programme 2012-2016 and the corresponding Indicative Scheme, which allows them to also decide on the budget for the next five-year period. A final outcome will be known by November 2011.

On a practical note, the Cell Biology and

Bio-physics and Developmental Biology Units were granted permission to purchase a new Laser Scanning FCS/FCCS Microscope and a two-photon inverted microscope system respectively. Council approved the decision to rename Personnel to Human Resources, and the Annual Report 2009/2010 was also approved.

The scientific reviews that took place this year of the Core Facilities and IT Services and Structural and Computational Biology (SCB) Unit were also presented. The Scientific Advisory Committee (SAC) commented particularly on the quality and international standing of the SCB Unit and the collaborative attitude of its staff, consid-

ering it an important asset for EMBL and Europe. The Core Facilities and IT Services were praised as one of EMBL's highlights and were deemed to be in a very good state, also making extremely useful contributions at EMBL and Europe-wide.

Finally, in the light of EMBL's growing interdisciplinarity it was decided to increase the size of SAC from 15 to 18 members.

Getting the scoop on EMBL Council

We talked to Council Secretariat Michael Thompson and Hélène Badey for a glimpse behind the scenes at Council meetings

Why do Council meetings rotate?

HB: One takes place in Heidelberg and the other at an outstation to give council members a chance to see how things are developing both at the main lab and at the other EMBL sites. It also gives scientists a chance to present their research to council members. In the fifth year of every cycle, both meetings are in Heidelberg.

How long does it take to organise one?

HB: Two months in Heidelberg, but a year at one of the outstations. We have to arrange accommodation, visas and travel.

Is it true that there are some diplomatic idiosyncrasies that Council observes?

MT: We provide simultaneous translation

in the three official languages. Delegates are seated by country in French alphabetical order, but the country signs are in German. Documents in different languages are delineated by different coloured stripes – blue for German, pink for English and plain for French.

With all these different nationalities, do you ever experience culture clashes?

HB: Yes. The Germans and the Italians have very different ideas about schedules!

What do members do at meetings?

MT: They discuss and vote on the approval of various items such as the annual budget, salary adjustments, changes to staff and financial regulatory documents, and the five-year programmes. They also approve senior appointments and discuss the SAC reviews of the research and service units with the Chair of SAC.

Can I ask Council members a question?

MT: On the first day of the meeting there is a lunch for delegates to meet staff, organised by the Staff Association. The delegates are keen to learn about the research, but staff also have questions about what's happening at home, from the economy to the World Cup. It's also a chance to discuss the employment situation in their countries.

What do you do after the meetings?

HB: We write up the minutes to record all discussions and decisions. We update the staff and procedural rules and organise committees as required to deal with particular issues.

Are you working on any other projects?

MT: We're creating a digital archive of Council documents and papers from 1974 onwards.

Digital embryo soars to the next stage

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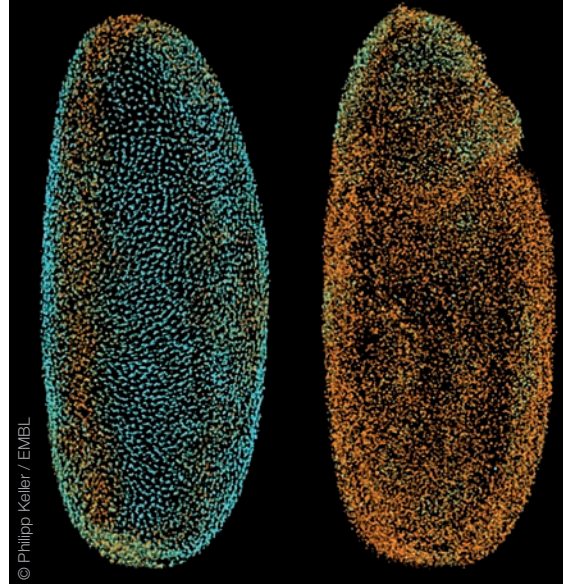
“Non-transparent samples like the fruit fly embryo scatter light, so the microscope picks up a mixture of in-focus and out-of-focus signals – good and bad information, if you like,” explains group leader Ernst Stelzer. “Our new technique enables us to discriminate between that good and bad information.”

Philipp Keller, former PhD student in Ernst’s group and now at the Janelia Farm Research Campus of the Howard Hughes Medical Institute, used patterns of light to generate an image with alternating bright and dark stripes. By taking multiple images of different phases of the pattern and combining them, the scientists could use a computer to filter out the effects of scattered light and generate an accurate image.

This differs from the technique initially used to film the zebrafish embryo, which involved scanning a continuous sheet of light onto it in many different directions to assemble a 3D image.

“Getting such images is nice for the human observer, but it’s particularly crucial for computational analyses, like tracking cell movements and divisions as we do in the digital embryo,” says Philipp. By combining this approach with imaging along different angles, the team was able to film 3D movies of the developing fruit fly embryo, despite its opacity. The scientists also extended their recordings of zebrafish development, generating films in which the formation of the animal’s eyes and midbrain are clearly visible.

Published in July in *Nature Methods*, the updated technique means they will be able to shine a light on processes and organisms, which until now have been poorly studied because they could not be followed under a microscope. The work was done in collaboration with scientists at the Uni-



© Philipp Keller / EMBL

The fruit fly digital embryo, magnified around 250 times, at different developmental stages.

The cell nuclei are coloured according to how fast they were moving (from blue for the slowest to orange for the fastest)

versity Heidelberg and the Sloan-Kettering Institute in New York.

All data, images and videos are available online at www.digital-embryo.org.

– Charlotte Otter

Don’t Leigh-ve me this way

Louisa Wood, project leader, EBI Outreach and Training: “Over the past three years, Vienna has been my editorial touchstone and such a lot of fun to work with. I admire her keen editorial eye combined with a sense of the absurd, and envy her considerable creative flair. I really appreciated her help on the combined projects we have worked on and also for introducing me to the social side of life at EMBL, including experiencing a Christmas party and several enjoyable tours of the bars of Heidelberg! Everyone from the EBI’s Outreach and Training team wishes Vienna the very best and every success for her new (ad)venture.”



Jochen Müller-Dieckmann, team leader, Hamburg: “Vienna and I had the opportunity to represent EMBL at several conferences and she was very good at expressing the EMBL message. I appreciate that she took the time to visit us in Hamburg to ensure that we were an integral part of EMBL. With Vienna, we always felt we had direct contact to OIPA. We showed her around Hamburg and she did the same when we visited Heidelberg. Over the years, it developed into a personal friendship.”



Publications officer and EMBL & cetera editor Vienna Leigh leaves EMBL in August to start a new job as head of communications at Barcelona’s Institute for Bioengineering of Catalonia (IBEC). Since becoming editor five years ago, Vienna has spiced up the newsletter with her combination of bold design and witty writing, as well as singlehandedly producing many of the lab’s written and online marketing materials. Vienna’s friends and colleagues wish her farewell with mixed feelings – on the one hand they’re sad to see her go, but on the other, they’re happy that she’s taking on a great new job in a fabulous city. Heidelberg’s loss is Barcelona’s gain!



Photo: Christina Parajiotidis

– Lena Raditsch



Aidan Budd, computational biologist, EMBL Heidelberg: “It’s strange to imagine EMBL without Vienna! For me, she is and always will be the ultimate party power girl. I stand in awe of her relentless energy, ability to keep smiling and her clever, funny cheekiness.”



Margret Fischer, senior administrative officer, Hamburg: “I liked Vienna’s enthusiasm when she visited us here. She did a fantastic job with EMBL & cetera, but was always very

modest about her achievements. She was good at making people feel at ease, despite the pressures of various deadlines and the fact that scientists are almost always in a rush. Vienna is positive and energetic, kind and helpful, and, on the social side, lots of fun. I consider her a friend and hope to see her in Barcelona.”

Toby Mathieson, Cellzome:

“I’ve known Vienna since England’s knockout during the World Cup 2006 – she said she didn’t really care about the football, but was happy to go out and commiserate anyway. She’s funny, relaxed and virtually never stressed – in fact she always says she doesn’t believe in stress. She’s an excellent journalist who doesn’t take herself too seriously, and a great friend.”



Cath Brooksbank, Head of Outreach and Training, EMBL-EBI: “Working with Vienna has been immense fun – her unique combination of creative energy, professionalism and her outgoing nature always make her a pleasure to work with. The EBI’s Outreach and Training team will miss her enormously and wish her all the best in her new role.”

The Kinderhaus grows up

Photo: Marietta Schupp



The EMBL Kinderhaus hit double digits in May when it opened its tenth group. Consisting of children between the ages of three and six, the group has new rooms on the first floor of the main building. This marks the culmination of two years of expansion, which started with the building of the new Waldhaus in 2008.

The expansion of the Kinderhaus is good news for scientists, says group leader and parent Darren Gilmour. "It's possible for young, good female scientists to come here and have a family at the same time," he says. "They don't have to sacrifice their careers to become parents, or their desire to have children to become scientists. Perhaps the Kinderhaus should be on the tour for newcomers to EMBL, so that the PhD students know it's there!"

Darren and his wife, the group leader Francesca Peri, have a daughter who has been at the Kinderhaus since she was three months old. "She was in a small group, with only a few kids and three teachers. It felt as if we were leaving her with a family member," says Francesca.

Even though the Kinderhaus now has 124 children, that family atmosphere hasn't

been lost. "The kids all know each other, and we've made a lot of friends in the Kinderhaus too, just by dropping her off and collecting her. It's all part of the extended EMBL family," Darren explains.

Another aspect of the Kinderhaus that the parents cherish is the proximity to work. "We can arrive in the morning and leave in the evening together," says Eilish Craddock, assistant to EMBO director Maria Leptin. "I know that she'll have a good nutritious meal during the day, and I'm also satisfied with the activities, and the fact that the staff act on parents' suggestions."

Parents also appreciate that the Kinderhaus staff (above) work long hours to support scientists. Parents can take holidays whenever it suits; they're not limited to the Easter, Christmas or long summer holidays breaks. Francesca appreciates this flexibility. "You'll never find this in any other kindergarten."

Last but certainly not least, Darren and Francesca also enjoy the fact that their daughter is exposed to different languages and cultures. "The Kinderhaus is the only place I know that is even more international than EMBL," laughs Darren.

Mixing with the top brass

EMBL PhD students Uschi Symmons and Christian Stirnimann enjoyed a chance to hobnob with Nobel laureates on a trip to the island of Mainau as part of the prestigious 2010 Lindau Meeting at the beginning of July.

The event, which celebrated the 60th anniversary of the annual meetings, invited 61 Nobel prize winners in physiology, medicine, physics and chemistry. The EMBL PhD students were among 650 young researchers from around the globe who were selected from more than 40,000 to attend the week of talks, discussions and networking opportunities with some of the world's top scientists.

On the lake cruise to Mainau, Lake Constance, EMBL and other southern German institutions, including the University of Heidelberg, presented their activities. "I'm very proud that Uschi and Christian were selected," said Dean of Graduate Studies Helke Hillebrand.



The Chemical Biology Core Facility: Added value

EMBL Heidelberg's Chemical Biology Core Facility (CBCF) has added computational chemistry expertise to its services with the recruitment of Vineet Pande.

"Our new high-throughput *in silico* approaches find small molecules interacting with biological targets such as proteins," explains facility head Joe Lewis. "They're complementary to the wet screening methods for identification of hit compounds."

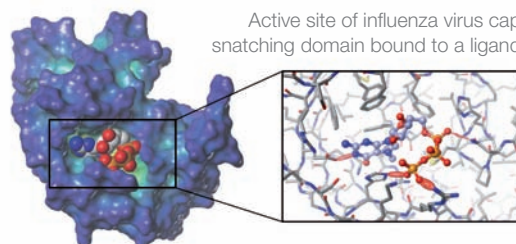
Vineet, who was previously a postdoc at AstraZeneca, has been setting up the computational chemistry infrastructure

since late 2009. "There are several ways computational chemistry and modelling can help EMBL scientists," he says. "We take a step-by-step approach to adapt to individual projects. As well as the *in silico* screening, we can help identify commercially available analogues to build structure-activity relationships for hits emerging from wet screening."

Using the new approach, the facility has already worked with Stephen Cusack's group at EMBL Grenoble to identify inhibitors interacting with influenza virus proteins.

This led to the establishment of Savira Pharmaceuticals, which optimises the active compounds the facility identifies.

The service is available to scientists at EMBL, DKFZ and Heidelberg University. Visit the webpage or contact Joe (lewis@embl.de) or Vineet (pande@embl.de).



Active site of influenza virus cap snatching domain bound to a ligand

New lab, new country – and non-stop barbecue weather

Valerie Hilgers (right) graduated on Lab Day, but unlike most of her peers, who walked from the lab or travelled from an outstation, she flew for 13 hours to collect her award!

In 2007, when Steve Cohen moved to Singapore to direct the Temasek Life Sciences Laboratory (TLL) he took with him most of his lab members, including a rather reluctant Valerie. “At first I wasn’t happy about moving to Singapore,” says Valerie, who admits that she lamented the loss of her friends, the EMBL facilities and the canteen, among other things.

Arriving eight months after the rest of Steve’s group, she found that the laboratory was already operating and she could quickly start work. “English is an official language in Singapore so there are no language barriers,” she says. “Within a short period I had met many new colleagues from the large postdoc community, resulting in some really good friendships.

“Great science in Singapore is equally matched with a great lifestyle there. One’s motivation to work is in constant competition with non-stop BBQ weather and the opportunity to travel and go diving in nearby Malaysia, Vietnam, Cambodia, Indonesia and India.”

Living conditions in Singapore are also very good. “Postdocs receive a housing allowance, so they can afford to share modern apartments complete with pool, gym, BBQ facilities and tennis courts,” explains Valerie. “The selection of cuisine is amazing too – Chinese, Thai, Indonesian, Singaporean, Indian – and all very affordable.”

Valerie hasn’t lost contact with her

academic colleagues here in Heidelberg, which is very important to her as she returns to Singapore to take up her postdoc position at Steve’s new laboratory at the IMCB in the city’s Biopolis science hub. She recommends a trip to Singapore for postdocs who like travel, new experiences and good science.

– Ellen Dearden



Photo: Michela Zuccolo

In search of Yun Li

In 1980 Sven Hovmöller was a postdoc in EMBL Heidelberg’s Structural and Computational Biology Unit. His lifelong interest in China meant he was thrilled to meet another postdoc, Yun Li, who joined the unit from the Shanghai Institute of Biochemistry. Thirty years later, Sven – now professor of chemistry at Stockholm University – would like to find his long-lost colleague.

“My interest in China started when I was a child,” he explains. “I was always fascinated by the idea that if you dug a hole from Sweden you would end up in China. During the 1968 student revolution, I was very interested in politics and China’s cultural revolution. It was only later that I grew to understand that it was a terrible time in China.”

Yun Li was the first Chinese person Sven had ever met. “She was very friendly, interesting and kind. I remem-



Photo: Xiaodong Zou

Above, Sven; inset, Yun Li

ber being moved by her stories about how poor the conditions were in China.”

Both eventually left EMBL, but Sven’s interest in China remained. In 1984, he recruited his first Chinese student, Da Neng Wang, who later also joined EMBL to work with Werner Kühnbrandt. “I discovered that the Chinese PhD students who were allowed to go abroad were exceptionally talented,” says Sven. “Typi-

cally, they were the best in the province at the university entrance test – in other words, the best among 10,000.”

Having been one of the first professors in Sweden to have Chinese PhD students, Sven says there are now thousands of Chinese in Sweden with a university education. “In my department, we have more Chinese than Swedes.”

Does China still send their best students to Europe and the US? “Yes, but many of them are now attracted by business and law, where the money is. But if all the Chinese scientists moved back, China would be number one for science.”

In 1987, Sven got a second PhD student. “Xiaodong Zou is now my wife and a very successful scientist,” he says. “We have two wonderful sons, who speak Chinese better than me. I would love to find Yun Li and tell her my story!”

If you can help find Yun Li, contact Sven at sven.hovmoller@mmk.su.se.

Shedding light on scientific exchange

Exchange and networking are key tenets of science, as a cell biologist and imaging specialist discovered when she spent six months at EMBL Heidelberg

When postdoc Caroline Medioni moved from Marseille to Nice to work for Florence Besse at the Institute of Developmental Biology and Cancer (IBDC), she assumed she'd be making an easy transition from one French town to another. But before long, she found herself heading to Heidelberg instead.

Caroline's group leader, Florence, had previously been a staff scientist in Anne Ephrussi's group at EMBL Heidelberg, working on RNA localisation in *Drosophila*. When she recruited Caroline to her group, which unravels *in vivo* the mechanisms of RNA transport in neurons involved in olfactory memory

in the central nervous system of the fly, Florence saw a chance to make the most of the expertise in imaging and microscopy she brought with her. "Florence immediately charged me with developing a new protocol to follow axon growth in real time in an intact brain – a task which involved joining Anne's group," says Caroline. "I needed the highly efficient microscopes that EMBL has, and Florence knew I would learn more about RNA localisation *in vivo*. Also, I'd never worked away from my native France before, and she thought coming to EMBL would be a wonderful opportunity for me."

Caroline was happy to take up Florence's challenge. "My time at EMBL was really productive," she says. "I used the up-to-date microscopes at the Advanced Light Microscopy Facility, where the staff were very supportive. The mechanical workshop built an imaging chamber for my samples and I went on theoretical and practical microscopy courses."

Caroline is still collaborating with her former team members and hopes to return at the end of the year. "My only fear is that EMBL is a bit like the Truman Show," she says. "When this is the only world you know, life afterwards might not be easy!"



Florence Besse's group (l-r): H el ene Bruckert (predoc), Giovanni Marchetti (postdoc), Florence Besse, Guillaume Dolla (masters student), Caroline. Not pictured: Lucile Palin (technician)

Dilofo Days for Greek scientists

Fifteen EMBL alumni working in Greece gathered for their fourth annual meeting in the picturesque villages of Asprageloi and Dilofo on 26-27 June 2010. Along with 13 family members and ten postdocs from their research groups, the alumni enjoyed a sunny weekend discussing life and science in Greece.

Amongst the decisions tabled was an agreement to hold an annual scientific meeting parallel to the alumni gathering, with talks from well known scientists. Provisionally called "Dilofo Days", this meeting would be open to all scientists involved in biology research and would aim to inspire young scientists. Alumni decided to approach the nearby University of Ioannina for funding.

A senior advisor for the teaching of science in Greek schools attended the meeting and provoked a lively discussion about the quality of biology textbooks and how biology is taught in schools. The meeting participants committed to reviewing textbooks with an eye to improving them.



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.

Please mark your diaries with the forthcoming alumni events:

- 27 August: deadline for **John Kendrew Award** applications for 2011.
- **Iberian Local Chapter meeting:** 6 September, 16:30-18:00, at the EMBO meeting at Palau de Congressos de Catalunya in Barcelona.
- **Alumni Association board meeting:** December, EMBL Heidelberg.

Gigantic genome gigabytes

The 1000 Genomes Project – which aims to build the most detailed map of human genetic variation – has publicly released the data from the completion of the pilot phase.

The pilot data is freely available to the scientific community and the public and can be downloaded from EMBL-EBI at <ftp://ftp.1000genomes.ebi.ac.uk>. The gigantic dataset is also obtainable via the Amazon Web services (AWS) computing cloud, which means that anyone can access it, even if they don't have the capacity to download it locally.

Paul Flicek, leader of EMBL-EBI's Vertebrate Genomics team and co-chair of the 1000 Genomes Data Flow group, is excited at the prospect. "Our goal is to make this data widely available before publication," he says. "We hope this will encourage scientists to make maximal use of the data in new and creative ways and speed scientific discovery."

In addition to amassing over 50 terabytes of data, three pilot projects assessed essential aspects of project feasibility, including optimisation of the use of next generation sequencing platforms and data processing methods. Completion of the pilot phase provides the foundation for the project's expansion to collect genomic information from 2,500 people from 27 different populations – quadruple the pilot project's data-

set, and an amount that's unprecedented in biomedical research. "We'll be looking at 200 terabytes when it's completed," says Paul. Even early in the project, just copying the vast quantities of data between EMBL-EBI and the National Center for Biotechnology Information – part of the US National Library of Medicine – consumed large fractions of both groups' capacity on the internet for several days.

*"We'll be looking at 200 terabytes when the project is completed"
- Paul Flicek, EMBL-EBI*

Each participant in the full project has provided explicit consent for full and public release of DNA samples and sequence data, including recognition of potential risks. By cataloguing the variations, scientists can use them for association studies relating genetic variation to disease.

"We're eager to make rapid progress on the full set of 2,500 genomes and to provide the resulting data for use by the disease genetic community," says project co-chair David Altshuler from the Broad Institute, Massachusetts. "These data will define more precisely the genetic risk factors that we already know about, as well as leading to the discovery of many more."

Belgian waffle

On 15 July EICAT Coordinating Manager Matthias Haury said goodbye to EMBL with a barbecue and party after just over four years in the role, which involved managing and developing EMBL's training departments. He's heading to Brussels to take up the position of Head of Science Operations at the European Cooperation in Science and Technology from 1 September.

"Working with Matthias was good fun," says Head of the Course and Conference Office Sally Davison. "He is an inspirational manager, with an exceptional skill set. I learned a lot from him."

"I had a wonderful time working with Matthias; he's really uncomplicated, multitalented and a visionary manager," adds Scientific Training Officer Jacqueline Dreyer. "I'll miss working with him in English, brainstorming in German, discussing in Spanish, mailing in French and chatting in Portuguese!"



Photo: Mehnoosh Fayner

Matthias and the COO team

From school pupils to Nobel laureates: something for everyone at ESOF

Where else would you find a prize-winning British novelist and a famous Italian neuroscientist sharing the podium but at the Euroscience Open Forum (ESOF)?

A.S. Byatt and Giacomo Rizzolatti were



among the 780 speakers and exhibitors at ESOF 2010 in Turin in July. Held every two years, ESOF is renowned for its multi-disciplinary, pan-European approach. It is a hub for everyone from school pupils to Nobel laureates, and aims to fuel curiosity about all disciplines of science from natural science, mathematics and engineering to humanities and the arts.

As one of the seven intergovernmental research organisations of EIROforum, EMBL participated in the ESOF buzz. "It's a big platform for EIROforum to showcase the importance of fundamental research and our expertise in operating large-scale infrastructure," said EMBL's Head of Communica-

tions, Lena Raditsch. EIROforum hosted a stand (left) and a reception for invited guests at Turin's Lingotto centre.

The seven-day event attracted 4,300 participants and more than 400 journalists, while the Science in the City satellite event in downtown Turin drew 75,000 visitors. One participant was EMBL's European Learning Laboratory for the Life Sciences (ELLS). In collaboration with partners, including the Biotechnology Foundation of Turin, ELLS took part in a project called 'A journey through the world of Biotechnology'. This included a multimedia exhibition, labs for children and students, workshops for high school teachers and a presentation by former EMBL unit head Eric Karsenti on the Tara Ocean Project.

The next ESOF will be in Dublin in 2012.

An archaeologist of the genome

Evolutionary geneticist Svante Pääbo from the MPI for Evolutionary Anthropology in Leipzig talks to Eleanor Hayes about how he excavates the genome to understand human evolution

Evolutionary genetics – what does that involve?

In a way we're like archaeologists. We do excavations but instead of excavating an old cave, we excavate our genome, looking at variations in the DNA sequences of humans. One of the big insights in evolutionary genetics in the last 20 years is that modern humans came from Africa rather recently. From a molecular point of view, we're all Africans: either we're living in Africa or we've been recently exiled.

And your research group has also been working on Neanderthals?

That's right. Neanderthals only ever lived in Europe and western Asia. But when we compared modern human DNA to Neanderthal DNA, people from everywhere except Africa had a small Neanderthal contribution to their DNA. Even people from China or Papua New Guinea where there never were any Neanderthals.

How did that happen?

We don't really know, but probably when modern humans first left Africa, they came through the Middle East and from there, colonised the entire world outside Africa. The Neanderthals were also living in the

Middle East, and the two groups seem to have interbred – and their descendants carried the Neanderthal contribution with them when they migrated further – to Australia or Papua New Guinea or the Americas.

What are you working on at the moment?

On the tip of a little finger found in Siberia. It's definitely from some hominid or human form, but we don't know what. We started by sequencing the mitochondrial genome and found it was very different from both the present-day humans and Neanderthals. In terms of the mitochondrial genome, we share a common ancestor with Neanderthals about half a million years ago, but with this hominid, the latest common ancestor was about a million years ago.

And the next steps?

At the moment we're sequencing the whole genome. We're trying to see how it is related to the Neanderthals and to us. It's extremely exciting. We don't know anything at all about this hominid. Maybe it's a type of human that was everywhere in Asia like

"In future we'll be describing new organisms much more often from their DNA"



Photo: Public Library of Science (PLoS)

the Neanderthals were in Europe.

It sounds amazing.

Yes. But it's probably also a sign of the future. This little bone fragment has hardly any information about how the individual looked, but if it's well enough preserved we can reconstruct the whole genome from it. And I think in future, we will describe many new organisms in terms of their DNA rather than how they looked.

Walking on sunshine

This year's EMBL Heidelberg Staff Association summer party on 26 June made the most of the whole campus with a dedicated games area outside the main lab, freeing up plenty of space for food, drink and merrymaking on the ATC esplanade.

Thanks to building maintenance, the canteen staff and everyone else who helped to make it all happen!



Photos (top row): Marietta Schupp; (bottom row): Hugo Neves

⇒ Registration is now open for the following **EBI hands-on bioinformatics training courses**: ‘EMBO Practical Course: Analysis and Informatics of Transcriptomics Data’ will be held from 18-23 October (registration deadline 3 September) and the joint EBI-Wellcome Trust Proteomics workshop runs from 12-18 December (registration deadline 20 August). See www.embl.de/training/handson to register and for full details.

⇒ The **Annual Report 2009-2010** is now available to view at www.embl.de/aboutus/communication_outreach/publications/index.html, or to download as a PDF. Alternatively, pick up a copy from OIPA or around EMBL, or order one from info@embl.de.

⇒ EFDA-JET took over **chairmanship of EIROforum** from EMBL at the end of July this year. During EMBL’s year-long stint as chair, the European Commission and the EIROforum partners pledged to extend their collaboration. In a signing ceremony at ESO in Garching on 24 June, EMBL DG Iain Mattaj, European Commissioner for Research, Innovation and Science Máire Geoghegan-Quinn and the Directors General or equivalent of the other EIROforum members, formalised their desire to maintain and further develop their cooperation, for the benefit of European science.

⇒ Please see <http://intranet.embl.de/>

Spreading the word

EMBL’s involvement in this year’s Federation of Biochemical Societies (FEBS) Meeting in Gothenburg, Sweden at the end of June was varied and fruitful. As well as giving talks, running workshops and participating in panel discussions, several scientists from EBI helped man the exhibition stand with OIPA. A networking reception at the beginning of the meeting was held in the exhibition area, during which the stand was inundated with questions from young scientists eager to apply for postdoc positions and the PhD programme.



[personnel/training_development/index.html](http://www.embl.de/personnel/training_development/index.html) for information on upcoming courses in the **General Training and Development Programme**.

⇒ A record number of international science journalists and numerous scientists attended the first **EMBO|EMBL**

Symposium held in the ATC in June. The topic of human genetic variation attracted ten journalists from peer-reviewed journals such as *Genome Biology* and *Cell* in the USA to Germany’s *Die Zeit*. They sat in on lectures and interviewed group leaders about their research. The symposia aim to highlight forward-looking topics and new developments in the life sciences. The second **EMBO|EMBL Symposium**, ‘Structure and Function of Neural Circuits’ will take place in the ATC on 5-8 September. Keynote lectures will be delivered by Jeff Lichtman from Harvard and David Anderson of HHMI. The third meeting in the series, ‘The Non-Coding Genome’, will take place on 13-16 October. Details of all the EMBO|EMBL symposia can be found at www.embo-embl-symposia.org.



Photo: Marietta Schupp

Buckets of bioinformatics – the EBI Summer School

Instead of sun, sea and sand, attendees of the joint EBI-Wellcome Trust bioinformatics summer school encountered sequence searching, structures and systems biology.

The course, held at EMBL-EBI on 14-18 June, brought together 29 PhD students and postdocs from across Europe all eager to get to grips with using bioinformatics

resources in their own research. Help was provided by an expert collection of speakers and trainers, including six EBI group and team leaders and external experts such as Bill Pearson, developer of the FASTA sequence similarity tool and Des Higgins, author of ClustalW. The course also provided the chance for the attendees to get to know one another while discussing their work and following up the day’s teaching with the database experts over dinner.

Feedback showed a high level of appreciation for the trainers, who were on hand throughout to answer questions. One

participant commented that a particularly memorable aspect of the school was “how knowledgeable and committed the trainers are.” Another said: “I’m now aware that there are far more possibilities in applying bioinformatics to my research than I previously realised.”

EMBL-EBI’s Outreach and Training team would also like to extend their thanks to the course trainers.

from the Staff Association

□ Keep up-to-date with events at www.embl.de/~staff (for EMBL pensioners: www.embl.de/~staff/pensioners).



Photo: Laura Hubbard

events@EMBL

12 August EMBL Heidelberg
Fleamarket for kids' clothing, toys, etc.

23-31 August EMBL Hamburg
EMBO Practical Course: Protein expression, purification and crystallisation

28-31 August EMBL Heidelberg
9th EMBL Conference: Transcription and chromatin

29 August-5 Sept EMBL Heidelberg
EMBO Practical Course: Cryo-electron microscopy and 3D image processing

5-8 September EMBL Heidelberg
EMBO | EMBL Symposium: Structure and Function of Neural Circuits

6-10 September EMBL-EBI
EMBO Practical Course: Computational aspects of protein structure determination and analysis: from data to structure to function

14-16 September Stromberg
Faculty Retreat

20 Sept-2 October EMBL Heidelberg
EMBO Practical Course: Microscopy, Modeling and Biophysical Methods

21-22 September EMBL Heidelberg
Course: Techniques for the generation of transgenic mice - theory and practical exercises

22-25 September EMBL Heidelberg
EMBO Conference Series: Chemical Biology 2010

29 Sept-3 Oct EMBL Heidelberg
EMBO Conference Series: Experimental Approaches to Evolution and Ecology using Yeast

1 October EMBL Heidelberg
7th public MMPU Research Day

6 October EMBL Heidelberg
Vision 2020 lecture series: Infectious agents linked to the causation of human cancers. Harald zur Hausen, German Cancer Research Centre

9 October EMBL Heidelberg
Octoberfest

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

people@EMBL



Sabine Blum joined EMBL Heidelberg in June as the new unit secretary in the Genome Biology Unit. Originally from Wiesbaden, Germany, Sabine lived in Idaho, USA from the ages of seven until 11, after which her family returned to Germany. After studying translation at the University of Saarbrücken, Sabine worked in administration positions at Berkeley and Stanford, USA. "I miss California, but it's nice to be back near family and friends," she says of her new life in Heidelberg.

Eins, Zwei, Polizei

25 June saw a group of 18 policemen and women from the Department of Business Crime of the 3rd Police Department Heidelberg spend half a day at EMBL in a visit organised by Rainer Menzel and OIPA.

With a talk by Bernd-Uwe Jahn they learnt about the legal status of the institute and the small but distinct difference between immunity (which applies to EMBL) and exterritoriality (which does not), and other special features such as the nine-year limited contracts. Sebastian Kühner from Anne-Claude Gavin's lab provided a scientific insight into work at EMBL in his talk on *Mycoplasma pneumoniae*, and the visit was



rounded off with a guided tour of the premises and lunch in the Canteen.

"Though I was here before on official business I only had a vague idea about what EMBL really was," said Kriminalhauptkommissarin (Detective Chief Inspector) Andrea Henn afterwards. "I really like the idea of the anti-fossilisation policy at EMBL," commented Wirtschaftskriminalistin Manuela Wolfshörndl, whose normal job it is to hunt down insolvency fraudsters.

– Angela Michel

awards&honours

Margarida Amaral, a Visiting Scholar in EMBL Heidelberg's Pepperkok team, received the 2010 European Cystic Fibrosis Award jointly with David Sheppard from the University of Bristol at the 33rd European Cystic Fibrosis Conference in Valencia, Spain, on 16 June. Margarida, who's at EMBL on an extended sabbatical from the University of Lisbon, received the award for her work using siRNA screens to understand the molecular mechanisms of CFTR, the protein which is defective in cystic fibrosis.

Melanie Stefan, a postdoc in the Le Novère group at the EBI, has been awarded the Christian Doppler Prize in Biology from the State of Salzburg. This prize, named after the physicist who discovered the Doppler effect, is presented once every two years to outstanding scientists from Salzburg. Melanie received the award for her PhD research into synaptic proteins that are involved in learning and memory.

Pedro Ballester, a postdoc in the EBI's Thornton group, has been awarded a Methodology Research Fellowship from the UK's Medical Research Council. These four-year awards enable promising postdoctoral scientists to make the transition to the next stage of their independent research careers. Pedro's fellowship will support his work in developing innovative computational methods for identifying potential drugs and predicting the function of candidate proteins.

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