



EMBO encounters

Newsletter of the European Molecular Biology Organization

Out of Europe, for Europe: creating a global scientific network

by MARIA LEPTIN



From the beginning, all EMBO programmes and activities were intended to catalyse cross-border exchange of ideas and knowledge. As a European organization EMBO funds activities to support the molecular life sciences in Europe. But it has always been recognized that 'good for Europe' does not mean 'restricted to Europe'. Thus the eligibility criteria for EMBO Fellowships, which

stipulate that the applicant move to another country, allow scientists from the EMBO Member States to take their fellowships abroad, and young scientists from any country in the world to apply for fellowships to work in one of the member states. The courses, workshops and meetings we fund accept participants without any national restrictions, except that organizers are expected to ensure a reasonable balance in the mix of nationalities. While the Courses & Workshops eligibility criteria do not allow EMBO-funded events to be held outside Europe, there is funding for plenary talks given at international meetings by EMBO Members and Young Investigators.

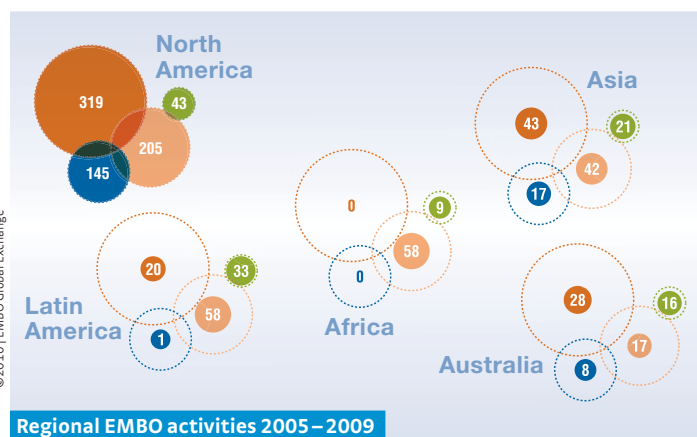
Global reach of EMBO activities

If we look at the global distribution of EMBO-funded activities outside Europe (see figure below), it is not surprising that we find a bias towards North America. In particular, the movement of postdoctoral fellows is primarily to the USA. However, the figure ignores population sizes, and if we take those into account, Australia (with 22 million

inhabitants compared to North America's 343 million) emerges as our strongest partner.

The numbers clearly illustrate room for improvement in our interactions with the other continents. The large numbers in the green and pale orange circles indicate that in some programmes we have good contacts with South America, Africa and Asia. However, in the case of the EMBO Short-Term Fellowships, the participating scientists often come to Europe from countries with a strong need for training in new methods and technologies. The high numbers in the green circles include many EMBO-funded plenary speakers at meetings. These activities are beneficial even if they do not represent a sustained cooperation with the partner countries. They are one way in which EMBO can begin to establish more intensive relations, and they may serve to open up paths for high-level, broad co-operations.

The remaining numbers – postdoctoral exchanges and associate members – which are a better measure for scientific partnership at a high academic level, are low. Strong interactions with some countries – for example Japan, with currently seven Associate Members, are hidden in the overall sums. But there are other countries in these continents for which the numbers do not reflect the quality and volume of molecular biology research going on there, or their importance for Europe. We have made a number of steps to improve Europe's relations with these countries. → →



Outer, dotted circles compare the number of interactions in North America with the inner, filled circles representing interactions with each of the indicated continents.

Long-Term (dark orange) and Short-Term (light orange) Fellowships include Europeans going abroad as well as foreign fellows coming to Europe.

EMBO Associate Members (blue) include ex-Europe members and European members who have moved abroad.

Courses and Workshops (green) include funded plenary lectures given by EMBO Members and Young Investigators at meetings in the indicated countries.

HIGHLIGHTS

International Conference on Research Integrity
EMBO discusses responsible research in Singapore

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Networking across the pond
Fourth EMBO Fellows Meeting in the US

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140 million euros for bio-medicine in Luxembourg
LCSB benefits from Grand Duchy's Health Science Plan

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EMBO Members feature in iBioSeminars
Online lecture series for students & teachers

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→→ A cooperation agreement with South Africa, in place since 2008 and renewed this year, allows, for example, EMBO lecture courses to be held in South Africa and provides travel stipends for South African scientists to attend EMBO courses. Negotiations with Singapore for a similar agreement are currently underway.

Establishing ex-Europe ties

The EMBO Global Exchange Programme was introduced in 2009 to establish further ties with non-European countries. The Global Exchange Committee and the EMBO Council have considered the rationale and philosophy of our contacts outside Europe. There are two extreme positions: the purely altruistic, and the purely selfish. The first states that as a rich community with a highly trained population and highly developed infrastructure, we have a moral obligation to help our neighbours reach a similar level of wealth and education. This general obligation may be compounded by a responsibility to make amends in countries we exploited as colonies. The other extreme is to see the rest of the world as a source for trained staff for European research labs. It is a problem for us that the first, noble aim is outside the agreed mission of EMBO, whereas the cynical, second aim would fit well. In addition, we have neither the financial means nor the expertise or connections to undertake significant development work in countries with a less-developed science base. On the other hand, it is not only wrong, but also not in our long-term interest to exploit others. Fortunately, we do not need to be dogmatic, and can choose a path that combines help for non-European countries with establishing long-term partnerships that will be mutually beneficial. It was therefore decided that EMBO Global Exchange would concentrate our interactions mainly on countries with well-developed research programmes in the life sciences, and to establish interactions at a high scientific level that will benefit both partners.

EMBO delegation to India

As part of EMBO Global Exchange activities, a delegation of EMBO Members – *Silvia Arber*, *Piet Borst*, *Tim Hunt*, *Vivek Malhotra* and *Benny Shilo* – visited India together with EMBO



Tim Hunt with Maithreyi Narasimha (left) and Himanshu Sinha (right) after his speech at the Tata Institute of Fundamental Research in Mumbai

staff in the first week of January. Nine different institutions in Delhi, Pune, Mumbai and Bangalore hosted members of the committee for scientific presentations and policy discussions, and our Associate Member in India, *VijayRaghavan*, helped to arrange meetings with members of government to plan cooperation agreements. The delegation was impressed with the availability of funds for top-level research in India and the general mood of forward-looking enthusiasm, both of which have allowed the recruitment of excellent young researchers back to India from America and Europe. This is the result of a clear government policy. Would it not be wonderful if more leaders acknowledged that ‘scientists are not just servants who do the bidding of their paymasters. They are driven by curiosity and seek knowledge often for its own sake. The fundamental discoveries of physics, chemistry and biology have come from this thirst for understanding rather than from any social compulsion’, as Prime Minister *Manmohan Singh* stated in his address to the 98th Indian Science Congress in Chennai. He also reminded the audience, ‘In the past five years, the Government has established eight new Indian Institutes of Technology and five Indian Institutes of Science Education and Research to provide high quality education and carry out research in frontier areas of science and technology’.

The transformation of this wealth of support into productive research is hampered in many institutions by old leadership structures and a dearth of young scientists trained in research environments conducive to front line research, and able to establish such structures back in India. This is one area where close interactions with EMBO and its members can help. There was also great interest in establishing Courses and Workshops in cooperation with EMBO. The philosophy of EMBO to run its programmes based on input from the community and evaluated by the membership, with no quotas or proscribed goals was widely appreciated. The government officials we met had an open mind on these ideas and we will hopefully soon be able to formulate a cooperation agreement.

Initially, our Global Exchange activities with new countries will most likely involve more giving than taking, an altruism that may be seen as contradicting the EMBO remit to serve European molecular biology. I believe this is a narrow view, and short-term help will have a large long-term payback in establishing friendly relationships with strong scientific partners outside Europe. I feel confident that with these activities EMBO remains true to our founding mission, creating the opportunities for scientific exchange through international mobility.

Upcoming deadlines

1 February

EMBO
Global Exchange Lecture Courses

15 February

EMBO
Long-Term Fellowships

15 April

EMBO
Installation Grants

International conference on research integrity

EMBO discusses responsible research in Singapore

The second World Conference on Research Integrity was held in Singapore in the summer of 2010, bringing together 340 delegates from over 50 countries. Participating countries ranged from leading research nations to rapidly emerging research bases like China, plus countries with less-developed scientific infrastructure. Equally broad was the spectrum of science represented, stretching from applied mathematics to biotechnology and chemistry. The conference represented a unique forum for comparing countries and scientific areas on key aspects of research integrity, including plagiarism, data fabrication and manipulation and ethics. Topics such as training in best practice of research, policing of research integrity and dealing with misconduct also provided lively debate. The conference culminated in a joint *Singapore Statement on Research Integrity* aimed at establishing a common set of standards (www.singaporestatement.org).

Research integrity is high on the agenda at EMBO also. Impeccable standards are a prerequisite for all programme activities such as applications for fellowships, publishing papers in scientific publications and organizing courses & workshops. EMBO Director *Maria Leptin* and Deputy Director *Jan Taplick* provided an overview of the organization's goals and activities related to research integrity at the conference. Jan was also a member of the conference planning committee and elected co-chair of the next world meeting. Head of EMBO Scientific Publications, *Bernd Pulverer*, presented at the session on *Research Integrity Issues for Authors and Editors* on how the editorial process and journal policies aim to ensure a high level of research integrity for all four EMBO scientific publications.

EMBO also contributed to the set of basic guidelines for authors and editors, presented by *Elizabeth Wager*, chairperson of the

Committee on Publication Ethics (COPE) and *Sabine Kleinert*, senior executive editor of *The Lancet* and vice-chair of COPE (<http://www.wcri2010.org/press/conferencematerials.asp>).

At the same session, *Douglas N. Arnold*, president of the US Society for Industrial and Applied Mathematics gave a lively account of his extensive detective work to uncover a researcher who had taken scientific misconduct to a new level by building a career on a fictitious string of research achievements and academic posts. This case study was an eye opener on how the research community can be deceived for years.

Many other examples of research misconduct were presented at the conference, ranging from accounts of Russian wonder healers and science wizards to common types of data manipulation found in the biosciences. *Hongwei Zhang* from China National Knowledge Infrastructure presented a new plagiarism detection tool that works with Chinese characters. Software that translates between languages is essential to allow the detection of unauthorized and unattributed translation of research. The new initiative shows how seriously the country is taking research integrity.

Many agencies and research institutions are setting up formalized structures to report and to investigate research integrity breaches. At the same time, the pressures to publish in order to secure funding, lack of training in ethics and best practice, and the financial gains that can be derived from academic research conspire to the high rate of research misconduct that we are currently witnessing. The World Conference on Research Integrity is an ideal platform to address this issue.



Bernd Pulverer (far right), Head of EMBO Scientific Publications, among conference speakers from the session discussing best practices for authors and editors.

A particularly tough challenge is to arrive at a global set of standards of research conduct and policing. An example of cross-fertilization between fields is the interest of the US Society for Industrial and Applied Mathematics in adopting a system similar to the transparent peer review used in EMBO publications (*The EMBO Journal* (2010), 29, 3891–3892).

Presentations and background material from the event can be downloaded from the conference website www.wcri2010.org. Conference proceedings will be published early this year.

The EMBO Council (as of January 2011)

- | | |
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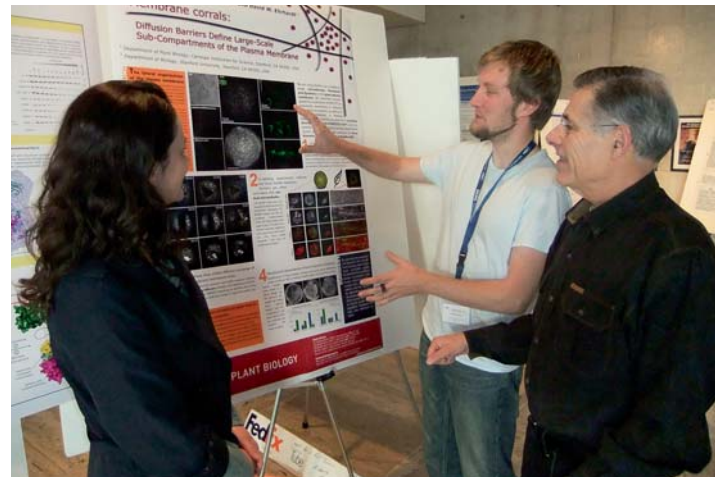
* The European Molecular Biology Conference (EMBC) is the intergovernmental funding body of EMBO.

Networking across the pond

EMBO US Fellows Meeting at the Salk Institute

“The US West Coast is a place to do things you cannot do elsewhere. Hosting the EMBO US Fellows Meeting already for the second time in San Diego falls very much in this tradition,” stated EMBO Member and meeting host, *Inder Verma*, in his keynote address at the Salk Institute, which was celebrating its 50th anniversary in 2010.

More than one hundred EMBO Fellows living and working in the US and in Canada came to attend the two-day meeting in November. EMBO brings its North American community together every other year to inform them about funding opportunities in



Europe. *Thomas Wollert*, group leader at the Max Planck Institute in Martinsried, one of the invited speakers, talked about his career after the EMBO Fellowship. “There are a number of funding options for junior research leaders returning to Europe,” he advised his younger colleagues. “If you have a promising and innovative proposal, don’t wait for a specific opening. Funding agencies provide substantial budgets to start a lab, often with free choice of institute.”

Hartmut Vodermaier, an editor of *The EMBO Journal*, explained how EMBO is currently transforming the traditional peer-review into a more transparent process by abolishing confidential referee comments. *Nicholas Steneck* from the University of Michigan led a vivid discussion on research integrity. “Being an EMBO Fellow is the right time to think about responsible research practices,” advised Steneck. “Be aware of professional problems early in your career and manage them before they become unresolvable dilemmas.”

Jan Taplick, EMBO Deputy Director and programme manager, gave an update on what is new at the organization. “We have seen a dramatic increase in applications over the past year due to the tense funding climate,” he said. He pointed out that in 2010, the EC supported the programme with extra funds, which resulted in one hundred additional fellowships. EMBO support does not stop at the end of the fellowship. All former

fellows can participate in EMBO Laboratory Management Courses to train them in leadership, effective problem solving and communication. Hundreds of former fellows have highly recommended the courses since their inception in 2006.

More than one hundred EMBO Fellows working in the US and Canada came to Salk Institute to swap ideas and socialise



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by **FABIAN FILIPP**

Sanford-Burnham Medical Research Institute

EMBO recognizes 63 researchers for outstanding contributions to the life sciences

New Members elected in 2010

▶ Sixty-three life scientists from Europe and around the world were elected to EMBO ranks this year. They come from 14 different countries. Forty-nine work in countries across Eu-

rope and become EMBO Members. Fourteen from this year's election work in the United States, Japan and Taiwan and are honoured as EMBO Associate Members. Twelve female

researchers are recognized this year. In total, EMBO membership now comprises almost 1,500 life scientists.

EMBO MEMBERS

- **Anna Akhmanova**
Erasmus Medical Center
Rotterdam, NL
- **Judith Patricia Armitage**
University of Oxford, UK
- **Jürg Bähler**
University College
London, UK
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ETH Zurich, CH
- **Michael Bate**
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- **Roland Beckmann**
Ludwig Maximilian University of Munich, DE
- **Michel Bornens**
Curie Institute Paris, FR
- **Nick Brown**
The Gurdon Institute
& University of Cambridge, UK
- **Keith Caldecott**
University of Sussex, UK
- **Jason W. Chin**
MRC LMB Cambridge, UK
- **Tim Clausen**
IMP Vienna, AT
- **Vincent Colot**
Ecole Normale Supérieure Paris, FR
- **Maria Pia Cosma**
CRG Barcelona, ES
- **Gideon J. Davies**
University of York, UK
- **Ilan Davis**
University of Oxford, UK
- **Stefanie Dimmeler**
Goethe University Frankfurt, DE
- **Patrik Ernfors**
Karolinska Institute Stockholm, SE
- **Marie-Anne Felix**
CNRS & Ecole Normale Supérieure Paris, FR
- **Dominique Ferrandon**
IBMC Strasbourg, FR
- **Jiri Friml**
VIB/Gent University, BE
- **Rudolf Glockshuber**
ETH Zurich, CH
- **Keith Gull**
University of Oxford, UK
- **Douglas Hanahan**
ISREC Lausanne, UK
- **Michael Häusser**
University College London, UK

- **Karl-Peter Hopfner**
Ludwig Maximilian University of Munich, DE
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University of Lausanne, CH
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- **Ernest Laue**
University of Cambridge, UK
- **Thomas Laux**
University of Freiburg, DE
- **Elena A. Levashina**
IBMC Strasbourg, FR
- **Carlos López-Otín**
University of Oviedo, ES
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Gulbenkian Science Institute
Oeiras, PT
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Berlin, DE
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ISREC Lausanne, CH
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Berlin, DE
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Center for Molecular Biology of
Inflammation – ZMBE
Münster, DE
- **Carol Robinson**
University of Oxford, UK
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Villigen, CH
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Cancer Research UK
London Research Institute, UK
- **Miltos Tsiantis**
University of Oxford, UK

- **Malcolm White**
University of St Andrews, UK
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Trinity College Dublin, IE
- **John Wood**
University College London, UK
- **Arturo Zychlinsky**
Max Planck Institute for
Infection Biology Berlin, DE

EMBO ASSOCIATE MEMBERS

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Osaka University, JP
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- **Chi-Huey Wong**
Academia Sinica
Taipei, TW
- **Shinya Yamanaka**
CiRA, Kyoto University, JP

EMBO Events – January to September 2011

PRACTICAL COURSES

Drosophila techniques
PT–Lisbon, 11–18 March

Advanced optical microscopy 2011
UK–Plymouth, 23 March–2 April

Methods in chemical biology
DE–Heidelberg, 27 March–2 April

Mass spectrometry and proteomics
DK–Odense, 6–13 April

Phosphoproteomics
DK–Odense, 28 April–3 May

Small angle neutron and X-ray scattering from proteins in solution
FR–Grenoble, 16–20 May

Methods for miRNA discovery and analysis: From *in situ* hybridization to new generation sequencing
IE–Galway, 21–27 May

Exploiting anomalous scattering in macromolecular structure determination
FR–Grenoble, 6–10 June

Electron microscopy and stereology in cell biology
FR–Illkirch, 14–24 June

Mouse phenotyping
CH–Zürich, 20 June–2 July

Bioinformatics and comparative genome analyses
FR–Paris, 27 June–9 July

High throughput methods for protein production and crystallization
FR–Marseille, 4–13 July

Marine animal models in evolution and development
SE–Fiskebäckskil, 4–14 July

Developmental neurobiology: From worms to mammals
UK–London, 8–22 July

Single-molecule nanomanipulation and analysis of protein–DNA interactions
FR–Paris, 10–24 July

Multilevel modeling of morphogenesis
UK–Norwich, 17–29 July

Structure, dynamics and function of biological macromolecules by solution NMR
DE–Garching, 29 July–5 August

Computational biology: Genomes, cells & systems
IS–Reykjavik, 6–13 August

PRACTICAL COURSES (cont.)

Studying protein–protein interactions by advanced light microscopy and spectroscopy
HU–Debrecen, 16–22 August

Image processing for cryo-electron microscopy
UK–London, 30 August–9 September

Two-photon imaging of brain circuits
DE–Munich, 3–10 September

Protein bioinformatics tools – focus on regulatory proteins: sequences, structures, interactions, networks
DE–Heidelberg, 25 September–1 October

Current methods in cell biology
DE–Heidelberg, 29 September–7 October

WORKSHOPS

Immunology and metabolism
FR–Marseille, 13–15 January

Function and structure of septins, filament-forming GTP-binding proteins
DE–St. Goar, 6–9 March

2011 EMBO Molecular Medicine Workshop: Cell death & disease
AT–Oberurgel, 10–14 March

Chromatin structure, organization and dynamics
CZ–Prague, 9–13 April

Frontiers in sensory development
ES–Barcelona, 3–6 May

Cell biology of the neuron
GR–Heraklion (Crete), 7–11 May

The operon model and its impact on modern molecular biology
FR–Paris, 17–20 May

Biophysical mechanisms of development
PT–Oeiras, 24–27 May

Lineage commitments: Emphasis on extra-embryonic–embryonic interfaces
BE–Leuven, 25–27 May

Synthetic lethality: From yeast to man
AT–Vienna, 10–12 June

50 years of X-inactivation research
UK–Oxford, 20–24 July

Exploring the logic of the cell cycle
FR–Montpellier, 2–5 September

WORKSHOPS (cont.)

Retinoids 2011
FR–Illkirch, 22–24 September

Chromosome structure, damage and repair
GR–Anavyssos, 25–28 September

CONFERENCE SERIES

Stem cell research: Development, regeneration and disease
FR–Paris, 6–8 April

Protein transport systems: Structures, mechanisms, and medical aspects
IT–Santa Margherita di Pula, 16–20 April

Myogenesis: The molecular and cellular mechanisms regulating skeletal muscle development and regeneration
DE–Wiesbaden, 10–15 May

Spatial 2011: Systems dynamics of intracellular communication
CH–Engelberg, 15–19 May

Homeostasis and perturbations of immunity
IT–Alghero, 16–20 May

The biology of molecular chaperones: From basic mechanisms to intervention strategies in disease and aging
AT–Grundlsee, 19–24 May

Chromatin and epigenetics
DE–Heidelberg, 1–5 June

Cancer proteomics 2011: Systems biology, developmental models and data integration
IE–Dublin, 20–23 June

Europhosphatase 2011: Protein phosphatases from molecules to networks
AT–Baden bei Wien, 18–23 July

Intracellular RNA transport and localized translation
IT–Barga, 7–11 August

Protein synthesis and translational control
DE–Heidelberg, 7–11 September

Lymphocyte signaling: Translating membrane signals into differentiation programs
IT–Pontignano (Siena), 10–14 September

Nuclear receptors: From molecular mechanism to health and disease
ES–Sitges (Barcelona), 16–20 September

CONFERENCE SERIES (cont.)

Meiosis
IT–Capaccio/Paestum, 17–21 September

Ubiquitin and ubiquitin-like modifiers: From functional modules to systems biology
HR–Cavtat (Dubrovnik), 21–25 September

Dynamic endosomes: Mechanisms controlling endocytosis
GR–Kato Galatas (Crete), 24–29 September

The assembly and function of neuronal circuits
CH–Ascona, 25–30 September

Host genetics control of infectious diseases
FR–Paris, 28–30 September

Nuclear structure and dynamics
FR–L'Isle sur la Sorgue, 28 September–2 October

ESF–EMBO SYMPOSIA

Molecular bioenergetics of cyanobacteria: From cell to community
ES–Sant Feliu de Guixols, 10–15 April

B-cells and protection: Back to basics
ES–Sant Feliu de Guixols, 12–17 July

Biological surfaces and interfaces
ES–Sant Feliu de Guixols, 26 June–1 July

Glutathione and related thiols in living cells
ES–Sant Feliu de Guixols, 4–9 September

Epigenetics in context: From ecology to evolution
ES–Sant Feliu de Guixols, 18–23 September

Synthetic biology of antibiotic production
ES–Sant Feliu de Guixols, 2–7 October

EMBO/FEBS LECTURE COURSE

Biophysics of channels and transporters
IT–Sicily, 10–18 May

Biomembrane dynamics: From molecules to cells
FR–Cargèse, 21–29 June

EMBO GLOBAL EXCHANGE LECTURE COURSES

HIV/AIDS
ZA–Stellenbosch, 30 January–5 February

Structural and biophysical methods for biological macromolecules in solution
CN–Beijing, 28 April–5 May

Bioinformatics: Tools, resources and applications
MA–Tangiers, 13–23 June

Next generation sequencing for Africa
KE–Nairobi, 5–10 September

EMBO|EMBL SYMPOSIA

Seeing is believing: Imaging the processes of life
DE–Heidelberg, 17–20 March

Cancer genomics
DE–Heidelberg, 17–19 September

The EMBO Meeting 2011 – Advancing the life sciences
AT–Vienna, 10–13 September

For more information and a list of all courses, workshops, conferences and symposia please go to events.embo.org

Forthcoming application deadlines for organizers to apply for EMBO funds:

1 February

EMBO Global Exchange Lecture Courses

1 March

EMBO Courses & Workshops

New deadline!

1 March

EMBO Plenary Lectures



Expert network of female scientists

EMBO supports gender balance as partner of AcademiaNet

► The launch of AcademiaNet (www.academia-net.de) in Berlin last November welcomed Maria Leptin as a speaker – along with former Secretary General of EMBO, *Christiane Nüsslein-Volhard*, and German Chancellor *Angela Merkel*, who inaugurated the new portal. AcademiaNet contains profiles of 500 female experts in various areas of science and the humanities. Many of them have affiliations to EMBO, either as members, young investigators or former fellows.

The Robert Bosch Foundation introduced the online portal to improve the gender balance in high-level scientific positions, where women are still under-represented. It promotes highly qualified women as candidates for top-level jobs, speakers at conferences and interview partners for the media. AcademiaNet pursues a similar goal as the Women in Life Sciences database, which five years after its creation has grown to include 650 female life scientists (<http://wils-database.embo.org>).

On the panel in Berlin: **Matthias Kleiner** (left), President of the German Research Foundation, **Christiane Nüsslein-Volhard**, **Maria Leptin** and the journalist **Andreas Sentker**

EMBO Poster Prize competition

Congratulations to the following winners of the competitions held at recent EMBO-funded events:

Natascha Sattler

University of Geneva, Switzerland

Functions of CD36 homologues during infection of *D. discoideum* with *M. marinum*

Presented at the EMBO/FEBS Lecture Course, *Host-microbes interactions*.

GR-Spetses, 1–9 September 2010

Gaëlle Boncompain

Curie Institute, Paris, France

Travel through the cell in a RUSH

Presented at the EMBO Conference Series, *Cell biology meets microbiology*.

PL-Krakow, 9–14 October 2010

Art Lustig

Tulane University, New Orleans, USA

Is an *mre11-A470T*-induced epigenetic state related to telomere function and end structure in yeast?

Presented at the EMBO Conference Series, *Telomeres and the DNA damage response*.

FR-Marseille, 14–17 September 2010

Hidehiko Inagaki

California Institute of Technology,

Pasadena, USA

Visualizing dopamine modulated circuits between different behavioral states in *Drosophila melanogaster*

Presented at the ESF-EMBO Symposium, *Functional neurobiology in minibrains: from flies to robots and back again*.

ES-Sant Feliu de Guixols, 17–22 October 2010

Franz Meitinger

German Cancer Research Centre (DKFZ),

Heidelberg, Germany

The F-BAR protein Hof1 links mitotic exit signals with re-polarization to facilitate cytokinesis

Presented at the ESF-EMBO Symposium, *Emergent properties of the cytoskeleton: Molecules to cells*.

ES-Sant Feliu de Guixols, 3–8 October 2010

Christine Neupert

ETH, Zurich, Switzerland

Evaluation of the RFT1 flippase in vivo reveals a role of ERAD in the maintenance of membrane asymmetry

Presented at the EMBO Conference Series, *Towards a comprehensive understanding of endoplasmic reticulum functions*,

ES-Gerona, 3–8 October 2010

Katie Hyma and Justin C. Fay

St. Louis, USA

Divergence in wine characteristics produced by wild and domesticated strains of *Saccharomyces cerevisiae*

Presented at the EMBO Conference Series, *Experimental approaches to evolution and ecology using yeast*.

DE-Heidelberg, 29 September–3 October 2010

Editor Picks – EMBO Publications

In each issue of *EMBOencounters*, the editors of *The EMBO Journal*, *EMBO reports*, *Molecular Systems Biology* and *EMBO Molecular Medicine* highlight particularly interesting papers.

THE EMBO JOURNAL

RESEARCH ARTICLES

FoxO1 regulates Tlr4 inflammatory pathway signalling in macrophages

Fan WQ, Morinaga H, Kim JJ, Bae E, Spann NJ, Heinz S, Glass CK & Olefsky JM
doi:10.1038/emboj.2010.268

Two PABPC1-binding sites in GW182 proteins promote miRNA-mediated gene silencing

Huntzinger E, Braun JE, Heimstädt S, Zekri L & Izaurralde E
doi:10.1038/emboj.2010.274

Wnt signalling requires MTM-6 and MTM-9 myotubularin lipid-phosphatase function in Wnt-producing cells

Silhankova M, Port F, Harterink M, Basler K & Korswagen HC
doi:10.1038/emboj.2010.278

RITA, a novel modulator of Notch signalling, acts via nuclear export of RBP-J

Wacker SA, Alvarado C, von Wichert G, Knippschild U, Wiedenmann J, Clauß K, Nienhaus GU, Hameister H, Baumann B, Borggreffe T, Knöchel W & Oswald F
doi:10.1038/emboj.2010.289

RNAi-based screening identifies the Mms22L–Nfkbil2 complex as a novel regulator of DNA replication in human cells

Piwko W, Olma MH, Held M, Bianco JN, Pedrioli PGA, Hofmann K, Pasero P, Gerlich DW & Peter M
doi:10.1038/emboj.2010.304

c-IAP1 and UbcH5 promote K11-linked polyubiquitination of RIP1 in TNF signalling

Dynek JN, Goncharov T, Dueber EC, Fedorova AV, Izrael-Tomasevic A, Phu L, Helgason E, Fairbrother WJ, Deshayes K, Kirkpatrick DS & Vucic D
doi:10.1038/emboj.2010.300

EMBO reports

SCIENTIFIC REPORTS

The hypoxia-inducible transcription factor pathway regulates oxygen sensing in the simplest animal, *Trichoplax adhaerens*

Loenarz C, Coleman ML, Boleininger A, Schierwater B, Holland PWH, Ratcliffe PJ & Schofield CJ
doi:10.1038/embor.2010.170

RNA channelling by the eukaryotic exosome

Malet H, Topf M, Clare DK, Ebert J, Bonneau F, Basquin J, Drazkowska K, Tomecki R, Dziembowski A, Conti E, Saibil HR & Lorentzen E
Cryo-EM structures of the yeast RNA exosome in the apo and the RNA-bound states provide direct structural evidence for a substrate threading mechanism.
doi:10.1038/embor.2010.164

REVIEWS

The ZEB/miR-200 feedback loop—a motor of cellular plasticity in development and cancer?

Brabletz S & Brabletz T
doi:10.1038/embor.2010.117

MAPK signalling in cellular metabolism: stress or wellness?

Gehart H, Kumpf S, Ittner A & Ricci R
doi:10.1038/embor.2010.1

SCIENCE & SOCIETY

Science under politics. An Italian nightmare

Cattaneo C & Corbellini G
doi:10.1038/embor.2010.198

Fermenting knowledge: the history of winemaking, science and yeast research

Chambers PJ & Pretorius IS
doi:10.1038/embor.2010.179

molecular systems biology

RESEARCH ARTICLES

A systematic screen for protein–lipid interactions in *Saccharomyces cerevisiae*

Gallego O, Betts MJ, Gvozdenovic-Jeremic J, Maeda K, Matetzki C, Aguilar-Gurrieri C, Beltran-Alvarez P, Bonn S, Fernández-Tornero C, Jensen LJ, Kuhn M, Trott J, Rybin V, Müller CW, Bork P, Kaksonen M, Russell RB & Gavin AC
doi:10.1038/msb.2010.87

Chromatin regulators as capacitors of interspecies variations in gene expression

Tirosh I, Reikhav S, Sigal N, Assia Y & Barkai N
doi:10.1038/msb.2010.84

mRNA turnover rate limits siRNA and microRNA efficacy

Larsson E, Sander C & Marks D
doi:10.1038/msb.2010.113

Epistatic relationships reveal the functional organization of yeast transcription factors

Zheng J, Benschop JJ, Shales M, Kemmeren P, Greenblatt J, Cagney G, Holstege F, Li H, Krogan NJ
doi:10.1038/msb.2010.77

Dynamic interaction networks in a hierarchically organized tissue

Kirouac DC, Ito C, Csaszar E, Roch A, Yu M, Sykes EA, Bader GD & Zandstra PW
doi:10.1038/msb.2010.71

Emergent cooperation in microbial metabolism

Wintermute EH, Silver PA
doi:10.1038/msb.2010.66

REVIEW

A comprehensive molecular interaction map of the budding yeast cell cycle

Kaizu K, Ghosh S, Matsuoka Y, Moriya H, Shimizu-Yoshida Y & Kitano H
doi:10.1038/msb.2010.73

EMBO Molecular Medicine

RESEARCH ARTICLES

Mitochondrial fission and cristae disruption increase the response of cell models of Huntington's disease to apoptotic stimuli

Costa V, Giacomello M, Hudec R, Lopreato R, Ermak G, Lim D, Malorni W, Davies KJ, Carafoli E & Scorrano L
doi: 10.1002/emmm.201000102

Hsp72 is an early and sensitive biomarker to detect acute kidney injury

Barrera-Chimal J, Pérez-Villalva R, Cortés-González C, Ojeda-Cervantes M, Gamba G, Morales-Buenrostro LE & Bobadilla NA
doi: 10.1002/emmm.201000105

V600EBrf induces gastro-intestinal crypt senescence and promotes tumour progression through enhanced CpG methylation of p16INK4a

Carragher LA, Snell KR, Giblett SM, Aldridge VS, Patel B, Cook SJ, Winton DJ, Marais R & Pritchard CA
doi: 10.1002/emmm.201000099

Integration profile of retroviral vector in gene therapy treated patients is cell-specific according to gene expression and chromatin conformation of target cell

Biasco L, Ambrosi A, Pellin D, Bartholomae C, Brigida I, Roncarolo MG, Di Serio C, von Kalle C, Schmidt M & Aiuti A
doi: 10.1002/emmm.201000108

Sensitized phenotypic screening identifies gene dosage sensitive region on chromosome 11 that predisposes to disease in mice

Ermakova O, Piszczek L, Luciani L, Cavalli FMG, Ferreira T, Farley D, Rizzo S, Paolicelli RC, Al-Banchaabouchi M, Nerlov C, Moriggl R, Luscombe NM & Gross C
doi: 10.1002/emmm.201000112

REVIEW

Stressin' Sestrins take an aging fight

Budanov AV, Lee JH, Karin M.
doi: 10.1002/emmm.201000097

Next issue

The next *EMBOencounters* issue – Summer 2011 – will be dispatched in July 2011. Please send your suggestions, contributions and news to: communications@embo.org by 30 April 2011.

Editor Yvonne Kaul

Contributing editor Suzanne Beveridge

Proofreading Meryl Schneider

Print layout Uta Mackensen

Web version Sabine Rehberger-Schneider

E-newsletter Sandra Krahl, Katja Linssen

The EMBO Journal Cover Contest 2011

Submit images by 15 February

Ever since it was first held in 2003, the annual contest for the best cover images for *The EMBO Journal* has grown in popularity and number of submissions. In fact, most of the front covers published over the last two years were selected from the top-scoring entries in previous contests. The editors in Heidelberg continue to be amazed by the aesthetic and creative potential of our readers and our authors.

If you have a talent for photography, fine art, or for producing beautiful pictures in the lab – pictures that you think would make a glorious front cover – submit your images before the 15 February deadline. As always,

one winner will be selected from each of the two categories, *Best Scientific Cover* and *Best Non-Scientific Cover*. Perhaps more importantly, however, there is a chance that one of your images will end up being printed on the cover of *The EMBO Journal* and receive the attention of thousands of fellow scientists worldwide.

Have a look at covercontest.embo.org to find out how you can participate. We are sure that as in previous years, our 2011 contest will be a lot of fun for everyone involved.

by VOLKER WIERSDORFF



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Twenty-one group leaders to receive support from EMBO

2010 selection of EMBO Young Investigators

This year, 137 young group leaders applied to become part of the EMBO Young Investigators network. Twenty-one scientists from nine countries were selected by a committee of EMBO Members to benefit from the financial and practical support of its prestigious programme (<http://www.embo.org/programmes/yip.html>). Over the course of three years, they will receive 15,000 euros annually and will also be offered networking opportunities, lab management and non-scientific skills training as well as PhD courses for their students. This year, successful candidates have established research groups in Belgium, Germany, Israel, Italy, the Netherlands, the United Kingdom, Portugal, Spain and Switzerland.

Upcoming deadline

1 April

EMBO
Young Investigators

EMBO YOUNG INVESTIGATORS 2010

- **Eugene Berezikov**
Small RNAs and regeneration
Hubrecht Institute
Utrecht, NL
- **Marc Bühler**
Non-coding RNAs and chromatin
Friedrich Miescher Institute
Basel, CH
- **Jason Carroll**
Estrogen receptor activity
Cancer Research UK
Cambridge, UK
- **Davide Corona**
Chromatin remodelling and epigenetics
University of Palermo/
Dulbecco Telethon Institute, IT
- **Oliver Daumke**
G-proteins in membrane remodelling
Max-Delbrück Center
Berlin, DE
- **André Fischer**
Epigenetic mechanisms of cognitive diseases
European Neuroscience Institute
Göttingen, DE
- **Stephan Grill**
Cellular biophysics
MPI-PKS/MPI-CBG
Dresden, DE
- **Robert Klose**
Epigenetics and chromatin biology
University of Oxford, UK
- **David Komander**
Specificity in the ubiquitin system
MRC-LMB
Cambridge, UK
- **Fyodor Kondrashov**
Evolutionary genomics
Center for Genomic Regulation/ICREA
Barcelona, ES
- **Ben Lehner**
Genetic systems
Center for Genomic Regulation
Barcelona, ES
- **Taija Makinen**
Lymphatic development
Cancer Research UK
London, UK
- **Beatriz Rico**
Neural circuits development
Alicante Neuroscience Institute, ES
- **Silvio Rizzoli**
STED microscopy of synaptic function
European Neuroscience Institute
Göttingen, DE
- **Matthias Selbach**
Cell signalling and mass spectrometry
Max-Delbrück Center
Berlin, DE
- **Bruno Silva-Santos**
Molecular immunology
Institute of Molecular Medicine
Lisbon, PT
- **Amos Tanay**
Epigenetics and genome regulation
Weizmann Institute of Science
Rehovot, IL
- **Madalena Tarsounas**
Telomeres and genome stability
University of Oxford, UK
- **Aurelio Teleman**
Signal transduction in cancer & metabolism
German Cancer Research Center
Heidelberg, DE
- **Kevin Verstrepen**
Genomics and systems biology
University of Leuven/VIB, BE
- **Daniel Wilson**
Regulation of the ribosome
University of Munich, DE

140 million euros for biomedicine in Luxembourg

LCSB benefits from Grand Duchy's Health Science Plan

► The Luxembourg Centre for Systems Biomedicine (LCSB) was founded a little more than one year ago. Since then, the interdisciplinary centre at the University of Luxembourg has grown continuously. Today, the 25-member-research team concentrates on closing the link between systems biology and medical research. A special focus is on Parkinson's disease. EMBO Member *Rudi Balling*, former head of the Helmholtz Centre for Infection Research in Germany, was recruited as director of the LCSB. A five-year strategic collaboration with *Leroy Hood* and the Institute for Systems Biology (ISB) in Seattle, USA – has given the LCSB a flying start and secured intensive knowledge transfer.

But how did this initiative come about? A budget of 140 million euros for five years in support of biomedical research in a small country like the Grand Duchy of Luxembourg is a lot. Luxembourg is well known for the



PhD student at the LCSB bench

©Dirk Hans for LCSB

financial sector and its role in the EU. Science did not seem to be considered a rewarding field of activity in the past. But this has now changed. A comprehensive analysis of the most promising scientific fields, conducted by the government of Luxembourg, resulted in the *Luxembourg Health Science Plan*. The LCSB plays a key role in this plan. The country is on the way to diversifying its economic profile. The analysis offered new perspectives on biomedical research, which now shows the potential of becoming one of the most prosperous areas in science. This is why Luxembourg is strongly investing in and building up research centres like the LCSB.

The LCSB is not a lone player. Beside the collaboration with the ISB, Rudi Balling and his team are forming additional collaborations with the Massachusetts Institute of Technology in Boston, the Systems Biology Institute (SBI) in Tokyo and the University of Cambridge, UK. In the Grand Duchy,

the Integrated Biobank of Luxembourg and the Public Health Research Centre have recently established a coordinated alliance in personalized medicine.

The LCSB focuses on the analysis of biological mechanisms with an emphasis on neurodegenerative diseases, particularly Parkinson's disease. Using genome-wide high-throughput technology and computational biology, LCSB researchers are working on identifying new targets for medical prevention and intervention strategies as well as new tools to improve the predictability of the efficacy and safety of new treatments. They analyse disease pathogenesis in the context of complex biological network composition and behaviour and perturbations in the homeostasis of physiological networks. The goal is to develop mathematical descriptions of such networks and use them for modelling and simulation of how diseases develop and how they are influenced by genetic predisposition and external factors such as drugs, nutrition or life style.

by **DIRK HANS**

Scientific writer



LCSB Director Rudi Balling

©Dirk Hans for LCSB

► Last September, the US government hosted the second in a series of internet-based meetings aimed at raising awareness in the international community of *dual use research* – science that carries a potential for misuse. The focus of this event was Europe. It was hosted by the National Science Advisory Board for Biosecurity (NSABB) in partnership with EMBO, the European Science Foundation, the European Society of Clinical Microbiology and Infectious Diseases, and Institut Pasteur. The interactive event ended with panelists responding to viewers' questions. The webcast

US/Europe initiative to promote responsible research

Second webcast meeting focuses on Europe

Does Your Research Raise Security Concerns: Strategies for Promoting Responsible Research in the Life Sciences includes both presentations and discussions by European and US scientists on *dual use research* with a special focus on antimicrobial resistance and synthetic

biology. The archived version of the webcast is available at:

http://oba.od.nih.gov/biosecurity/internationalwebcast_europe2010.html

Everyone's a winner

EMBO Member Manuel Espinosa fosters exchange between basic and medical scientists in Spain



© Manuel Carnero & Mapi Garcillán-Barcia

Basic scientists and medical researchers often speak different languages. Research units of pharmaceutical companies or hospitals tend to expect fast results and often pursue a specific goal. The main motivation of basic researchers, on the other hand, is to expand knowledge and to better understand the basic mechanisms of life – without obvious commercial or immediate interest. “It is important however that both sides work together and learn from each other,” states *Manuel Espinosa*, EMBO Member and group leader at the Centre of Biological Research in Madrid.

To bring both science branches together, Manuel founded a network of labs from academia and hospitals two years ago. The *Spanish Network on Extrachromosomal Elements (REDEEX)*, funded by the Spanish Ministry of Science and Education, is designed to meet and exchange once a year during a two-day-conference. “The network’s common denominator is Plasmid Biology in a very broad sense,” explains Manuel.

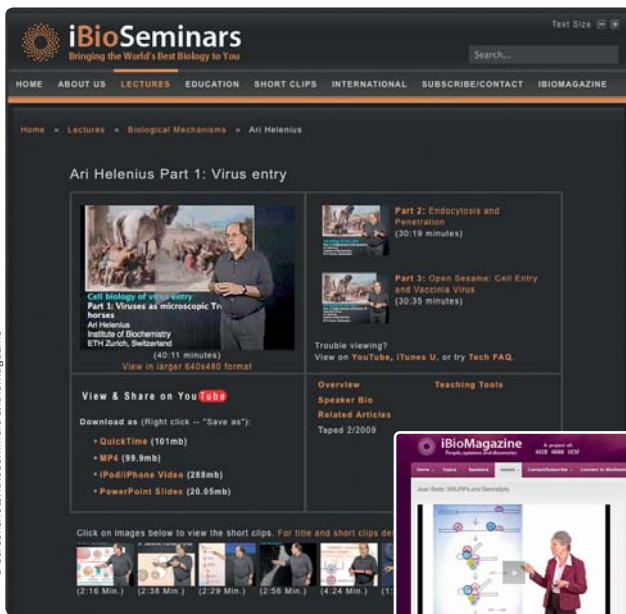
Redeex started off with 25 labs and has grown to include 40 now. Every year, the conference participants focus on a different topic. The 2010 meeting in Santander was designed to discuss the plasmid-mediated propagation of antibiotic resistance and plasmids used as models in Systems Biology. The 2011 meeting, coordinated by another EMBO Member, *Miquel Coll*, and Barcelona University professor *Antonio Juárez*, will concentrate on Plasmid Epidemiology and Plasmid Translational Biology.

Part of the network’s activities is an exchange of students between labs to perform simple experiments or to learn new techniques. This year, ten students were selected to gain experience in other research centers.

For Manuel, this experiment is already a success story. While the first meeting gathered mostly researchers from academia, half of the participants of the second meeting came from hospitals. The style of the meetings is informal. Approximately seventy participants

EMBO Members Manuel Espinosa (sixth on the right) and Miquel Coll (front row, second on the left) at the meeting in Santander

sit at round tables, discussing and sharing their concerns, and drawing conclusions. “We, basic researchers, need to know what are the practical problems in the real world,” says Manuel. “And medical scientists should understand why our research sometimes takes a long time.” He is convinced that finding a common language will help both sides approach science in a novel way and eventually produce substantial gains for all Spanish science.



World's leading biologists at your fingertips

iBioSeminars target scientists and students; EMBO Members invited as speakers

fifteen-minute videos that provide behind-the-scenes accounts of famous discoveries and advice for young scientists.

The seminars are recorded in a studio in an engaging news-style format. The other difference from traditional university seminars is that there is an introduc-

tion to each scientific field for non-specialists and students. Both introduction and research lectures can be web streamed separately or downloaded to a computer or iPod/iPhone. *iBioSeminars* give target groups such as undergraduates and professors a useful tool to learn about a specific subject and also to catch a glimpse of how leading scientists go about their research. Some of the sessions offer lecture notes, questions and assignments for students that facilitate teaching.

The project's founder is *Ron Vale* from the Howard Hughes Medical Institute (HHMI), who launched *iBioSeminars* in 2007 with the support of HHMI and the American Society of Cell Biology. Today, *iBioSeminars* and *iBioMagazine* bring together some of the world's best life scientists. The majority are members of the US National Academy of Science, many are EMBO Members, and six are Nobel Prize winners. Currently, 55 lectures are available online and the organizers plan to add about 20 new *iBioSeminars* lectures and 40 *iBioMagazine* videos per year.

At the beginning of February, *iBioSeminars* will make its filming debut in Europe, with *Kai Simons* from the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden, Germany, who will record a lecture on *Membrane organization and traffic* in the studio of the European Molecular Biology Laboratory in Heidelberg.

Fifty-seven lectures available in 145 countries around the world – what started as an experiment just three years ago has grown to a global initiative accessed by thousands of people. *iBioSeminars* (www.ibioseminars.org) offer free, high-quality online lectures to a broad audience around the world. The rapidly growing video series describes ongoing research in leading laboratories and covers diverse topics ranging from cell biology to global health. A companion series called *iBioMagazine* (www.ibiomagazine.org) features five-to



Tim's present & past colleagues at the Royal Society in London



Paul Nurse speaks at the symposium

A one-day symposium to honour the former chair of the EMBO Council *Tim Hunt* was organized at the Royal Society in London last December. More than 250 scientists came to celebrate the outstanding achievements of the Nobel Laureate, who closed his labora-

tory at the Cancer Research UK London Research Institute (LRI) after 20 years of active research at the end of 2010. The list of symposium speakers included Tim's previous lab members, his collaborators and colleagues from LRI and also the President of the Royal

Society, *Paul Nurse*, with whom Tim shared the Nobel Prize in 2001. Tim retires from his lab, but not from active research: he will keep an office and continue to interact with scientists at the Lincoln's Inn Fields and Clare Hall laboratories.



New impulses for molecular medicine at Max Delbrück Center

The MDC campus in Berlin-Buch

Since its establishment in 1992, the Max Delbrück Center for Molecular Medicine (MDC) in Berlin-Buch has pursued a vision of using the knowledge gained from basic research to produce new forms of diagnosis, treatment, and prevention of common diseases. In that short time, the MDC has achieved a reputation as one of Europe's leading centers for biomedical research. *Thomas Sommer*, assistant director of MDC, and several other group leaders are EMBO Members, including *Carmen Birchmeier*, *Walter Birchmeier*, *Achim Leutz*, *Gary Lewin*, and *Thomas Jentsch*. Bringing together a molecular biology institute with neighboring hospital clinics to work on common problems has paid off with important discoveries about the basic mechanisms that underlie serious diseases.

These partnerships take many forms: Clinicians head research groups at the MDC; researchers and clinicians pursue mutual projects related to disease, and the MDC offers intensive training programs in basic research and other types of support to clinicians.

The landscape of biomedical research is changing rapidly due to new concepts, methods, and technologies – as well as socioeconomic factors like changes in the pharmaceutical and health care industries. So the MDC continues to adapt by developing new research projects, institutes, and large international initiatives that should play a central role in molecular medicine in the coming years and will spawn many new collaborations with scientists in Germany and abroad.

Two major projects – an Experimental and Clinical Research Center (ECRC) and the Berlin Institute for Medical Systems Biology (BIMSB) – are well established and scheduled for significant growth over the next few years.

ECRC increases scope of disease-related research

The ECRC is currently housed in a former hospital with generous space for laboratories and patient care and supports many ongoing translational projects. A joint project of the MDC and Charité University Hospital, the ECRC has some unique features, including a scope that includes several types of diseases. Activities at the center will be enhanced with a new building due to be completed at the end of 2011. It will provide more laboratory and outpatient space for groups and projects with a strong clinical focus. Already in place are new imaging facilities for model organisms and patients. A major aim of the center is to broaden interactions with the Charité regarding research into a wide range of diseases.

Extension of the MDC into central Berlin

The BIMSB is growing at a rapid pace and will soon have its own building in the city center to further promote interactions with universities and other institutes in Berlin and a much wider network of national and international partners. BIMSB has a strong scientific research programme focused on the elucidation of the post-transcriptional regulatory code and its integration with major cellular regulatory mechanisms, with a particular focus on microRNAs. It offers cutting-edge platforms in areas including genomics, proteomics, imaging technologies, and computational models. BIMSB and other MDC scientists also have access to a small-molecule screening platform administrated by their neighbours on campus, the Leibniz Institute for Molecular Pharmacology, and accompanying expertise in chemical biology. A main goal in establishing the institute is to strengthen basic research at the MDC and more widely implement interdis-

plinary approaches. The move downtown will facilitate collaborations with universities and many other partners in Berlin.

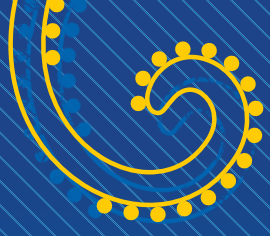
Criteria for success

The success of these projects will depend on a style of research that has become a hallmark of the MDC and is increasingly important in biomedical research. Projects must have a strong footing in basic research while pursuing medically relevant themes. Single labs must be able to draw on all available technologies, clustered in centralized facilities, to make use of a wide range of model systems and organisms, to have access to human tissue samples and clinical data, to develop applications as easily as possible from their work, and to pursue phenotypes wherever they lead. Several MDC labs have discovered a range of diseases in different tissues that are linked to common molecules and fundamental cellular processes. The MDC's role as an institute is to remove any barriers that prevent groups from making these smooth transitions, to provide the platforms and expertise that they need, and to develop new means of training physician-scientists. All of the major new infrastructures and large-scale efforts currently in planning are based on these principles.

by **RUSS HODGE**

Science Writer





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22 May

Late registration

21 August

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AWARDS OF EXCELLENCE

EMBO Members

2011 Paul Ehrlich and Ludwig Darmstaedter Prize*Paul Ehrlich Foundation*

The chemist and biologist **Cesare Montecucco** of the Department of Biomedical Research at the University of Padua, Italy, has won the 100,000 euro Paul Ehrlich and Ludwig Darmstaedter Prize 2011 for his contribution to research in the field of bacterial diseases, including tetanus, botulism, anthrax and *Helicobacter pylori* associated diseases. The prize is among the most prestigious of international awards granted in Germany in the field of medicine. EMBO Fellow **Stephan Grill** wins the 2011 Paul Ehrlich Prize for Young Researchers worth 60,000 euros for his contributions to cell biology.

Gottfried Wilhelm Leibniz Prize 2011*German Research Foundation (DFG)*

Anthony Hyman, director at the Max-Planck-Institute of Molecular Cell Biology and Genetics in Dresden, Germany, was awarded one of the 2011 Gottfried Wilhelm Leibniz Prizes for his contributions to discovering the molecular mechanism of conserved cytoskeletal processes, while illuminating how they promote interesting, cell type-specific biology in the *C. elegans* embryo. This highest German research prize consists of a research grant of 2.5 million euros, to be used within seven years.

2010 M Jeang Retrovirology Prize*Ming K. Jeang Foundation*

Michael H. Malim, Head of the Department of Infectious Diseases at King's College London, receives the 2010 M. Jeang Retrovirology Prize. The prize, which is awarded annually and partly sponsored by the Ming K. Jeang Foundation, recognizes groundbreaking research from retrovirologists. According to the jury, Malim made key scientific contributions to our understanding of HIV-1 replication, which also illuminated new fundamental biological processes.

German Academy of Sciences*Leopoldina*

Ivan Dikic, the Director of the Institute of Biochemistry at the Goethe University Frankfurt, Germany, was elected new member to the German Academy of Sciences Leopoldina. Founded in 1652, Leopoldina is the world's oldest academy in natural sciences.

2010 Scrip Lifetime Achievement Award*Scrip Intelligence*

Jonathan Knowles receives the 2010 Scrip Lifetime Achievement Award. The panel of judges acknowledged "his long academic and commercial career that has been distinguished by his passion for personalized medicine". Scrip Awards celebrate outstanding achievements in the pharmaceutical, biotech and allied industries.

Public Service Award*American Society for Cell Biology*

Thomas Pollard, Professor of Cell Biology and Molecular Biophysics & Biochemistry at Yale University, US, received the Public Service Award from the American Society for Cell Biology, which "recognizes outstanding national leadership in support of biomedical research". Pollard has served the society as president and chair of their public policy committee.

Croonian Lecture Prize*The Royal Society*

John Ellis from the University of Warwick, UK, was awarded the 2011 Croonian Lecture Prize worth £1,000 for his "pioneering contributions to biochemistry and molecular biology, also plant sciences". The Croonian Lecture is the Society's premier lecture in the biological sciences. It will be given in May 2011.

EVENTS

EMBO Fellows

EMBO Fellow **Marcus Buschbeck** and **Miquel Angel Peinado** are organizing an open access conference on **Signaling to chromatin in cancer and differentiation**.

The conference will be held at the Institut d'Estudis Catalans in Barcelona from **31 March to 1 April 2011**. More at www.tinyurl.com/IMPCC-conference

EMBO encounters

SUMMER 2011

The next *EMBOencounters* issue – Summer 2011 – will be dispatched in July 2011. Please send your suggestions, contributions and news to: communications@embo.org by 30 April 2011.

A GOOD READ – PUBLICATIONS FROM THE EMBO COMMUNITY

Driving the cell cycle with a minimal CDK control network

Damien Coudreux (EMBO Fellow) & Paul Nurse (EMBO Member) *Nature* **468**, 1074–1079 22 December 2010

Collective cell migration requires suppression of actomyosin at cell–cell contacts mediated by DDR1 and the cell polarity regulators Par3 and Par6

Eric Sahai (EMBO Young Investigator) *et al.* *Nat Cell Biol* **13**, 49–58 19 December 2010

Spatially asymmetric reorganization of inhibition establishes a motion sensitive circuit

Keisuke Yonehara (EMBO Fellow) *et al.* *Nature* doi:10.1038/nature09711 19 December 2010

TRIM24 links a non-canonical histone signature to breast cancer

Stefan Winter (EMBO Fellow) *et al.* *Nature* **468**, 927–932 15 December 2010

A unique chromatin signature uncovers early developmental enhancers in humans

Alvaro Rada-Iglesias (EMBO Fellow) *et al.* *Nature* doi:10.1038/nature09692 15 December 2010

Lysine methylation of the NF-κB subunit RelA by SETD6 couples activity of the histone methyltransferase GLP at chromatin to tonic repression of NF-κB signaling

Dan Levy (EMBO Fellow) *et al.* *Nat Immunol* **12**, 29–36 5 December 2010

Structural characterization of a misfolded intermediate populated during the folding process of a PDZ domain

Ylva Ivarsson (EMBO Fellow) *et al.* *Nat Struct Mol Biol* **17**, 1431–1437 14 November 2010

The proteasome antechamber maintains substrates in an unfolded state

Tomasz L. Religa (EMBO Fellow) *et al.* *Nature* **467**, 868–871 13 October 2010

Rad51 protects nascent DNA from Mre11-dependent degradation and promotes continuous DNA synthesis

Vincenzo Costanzo (EMBO Young Investigator), Arnab Ray Chaudhuri (EMBO Fellow) *et al.* *Nat Struct Mol Biol* **17**, 1305–1311 10 October 2010

Phenotypic profiling of the human genome by time-lapse microscopy reveals cell division genes

Anthony A. Hyman, Richard Durbin, Jan Ellenberg (EMBO Members) *et al.* *Nature* **464**, 721–727 1 April 2010

EMBO INFO

EMBO events

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 Janelia Farm Research Campus, US

Jan Ellenberg
 European Molecular Biology Laboratory, DE

Mark Ellisman
 University of California, San Diego, US

Peter Friedl
 Radboud University Nijmegen Medical Centre, NL

Daniel Gerlich
 Swiss-Federal Institute of Technology Zurich, CH

Klaus Hahn
 UNC-Eshelman School of Pharmacy, US

Chris Hawes
 Oxford Brookes University, UK

Na Ji
 Janelia Farm Research Campus, US

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Additional speakers will be selected from abstracts.

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