

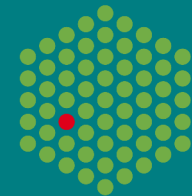
Career, age and gender perspectives in researcher mobility

Dr. Anne Ephrussi

EICAT Coordinator

European Molecular Biology Laboratory

EMBL



European Molecular Biology Laboratory

Facts & Figures

- Established in 1974
- Funded by 19 Member States
- Five sites in four countries
- Main site: Heidelberg, Germany
- Director General: Prof. Iain Mattaj
- 1400 staff, 60 nationalities
- Budget: 127 Mio Euro (2006)

Missions

- Basic research in molecular biology
- Advanced training (postgraduate)
- Services to member states
- Development of technology
- Technology transfer



EMBL: The Rationale

“Such a Laboratory... would enable Europe to regain initiative in a field to which its contributions in the past have been so great, and which holds immense promise for the future of increases in human knowledge, or greater understanding of health and disease, and economic benefit.”

AS VALID NOW AS IN THE 1960s

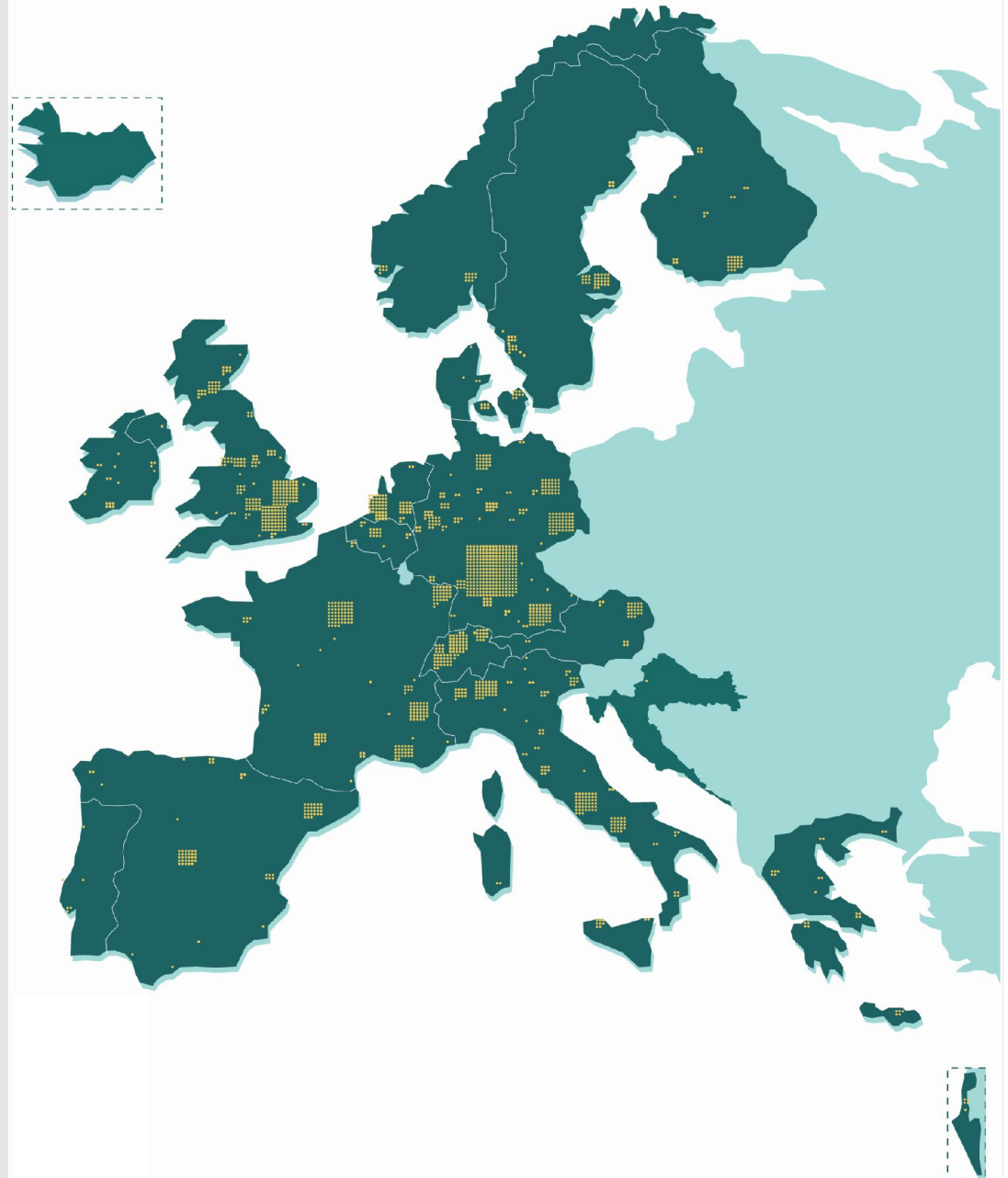
European Molecular Biology Laboratory

- **Among the top world institutions**
- **Highest non-USA research performance (ISI Science Indicators 1992-2002)**
- **International center for advanced training in life sciences**
- **“Repatriation” of top talent to all European countries**

EMBL Alumni

- 80% of EMBL alumni return to member states
- Total number of EMBL alumni: 3,848
- Number of EMBL alumni with known address: 2,354
- Number of alumni residing in member states 1,872

Scientific Leaders are the most precious EMBL product



Training at all levels

- Staff - Time-limited contracts
 - Scientists at all levels
 - Ambitious interdisciplinary research
 - Lifelong Training and Career Development
 - Staff leave after 9 years. (80% to member states)
- Students - International PhD Programme
 - EMBL is an international PhD degree-granting authority
 - Strong links to national universities (currently 180 students from 39 countries)
- Postdocs - Postdoctoral Program
 - New EMBL Interdisciplinary Postdocs (EIPODs)



EMBL Ambassadors in other European scientific institutions

Training at all levels

- Visitors - Visitors Programme
 - World-famous courses conferences and workshops
 - Over 3000 visitors per year
- Non-Specialist Community - Outreach Activities
 - ELLS: Science training for high-school teachers
 - Science in School (EIRO Forum)
- Science and Society Programme
 - Lectures
 - Conferences
 - Discussion Groups



EMBL International Center for Advanced Training EICAT

- EMBL International PhD Programme
- EMBL Postdoctoral Programme
- EMBL Courses and Conferences
- EMBL Scholars' Programme
- EMBL Visitors' Programme
- EMBL Collaborative Training Programme
- Collaboration with the EMBL Science and Society Programme
- Collaboration with the EMBL Office of Information & Public Affairs



EMBL International PhD Programme (EIPP)

- Created in 1983
- Can award its own PhD degree (since 1997)
- Joint PhD degree with 27 universities in 18 countries
- EMBL fellowships only for students from Member States
- Louis Jeantet Foundation fellowships for 2 students from Eastern Europe
- 60% EMBL fellowships / 40% external fellowships
- Average: 170-200 students from more than 40 countries
- Shared applicant pool

EMBL International PhD Programme

Recruitment - Admission

- Outstanding applicant pool (500-700 / year)
 - Self-selection
 - About 1:7 interviewed, around 1:14 accepted
- “Shared Applicant Pool“ Initiative
 - Interested Scientists can access the EMBL applications
- Evaluation of Applications
 - Evaluation by EMBL scientists familiar with the country’s national education system
 - Evaluation by 2 designated EMBL Units
- Individual 5-day Selection by EMBL Faculty
 - Invited candidate interviewed by 15-20 Group Leaders
 - Final Admissions Assessment (panel interview members of all EMBL units)
 - Final admission: 1:2 (~ 40-50 accepted)














EMBL International PhD Programme

Mentoring, Guidance and Thesis Defense

- Core course at the start (2 months)
- Thesis Advisory Committee (TAC)
 - 3 EMBL Group Leaders and 1 University Professor
- Annual TAC meetings
 - present a written report and discuss annual progress
 - discuss proposed future work
- 4 years to complete PhD work

- PhD Degree
 - from EMBL
 - from national universities
 - jointly from EMBL and one of its Partner Universities

27 Partner Universities

	1. Katholieke Universiteit Leuven	BELGIUM
	2. University of Copenhagen	DENMARK
	3. Technical University of Denmark	DENMARK
	4. University of Helsinki	FINLAND
	5. Åbo Akademi	FINLAND
	6. Université Louis Pasteur de Strasbourg	FRANCE
	7. Université Joseph Fourier de Grenoble	FRANCE
	8. Université Denis Diderot de ParisVII	FRANCE
	9. Université Pierre et Marie Curie de ParisVI	FRANCE
	10. University of Heidelberg	GERMANY
	11. University of Munich	GERMANY
	12. University of Crete	GREECE
	13. Eötvös Lorand University	HUNGARY



14. University of Iceland

ICELAND



15. University College Cork

IRELAND



16. University of Milano

ITALY



17. University of Bergen

NORWAY



18. University of Oslo

NORWAY



19. Universidade de Lisboa

PORTUGAL



20. Universidade Nova de Lisboa

PORTUGAL



21. University of Moscow

RUSSIA



22. Universidad Autonoma de Madrid

SPAIN



23. Karolinska Institutet

SWEDEN



24. University of Stockholm

SWEDEN



25. University of Geneva

SWITZERLAND



26. Radboud Universiteit Nijmegen

THE NETHERLANDS



27. University of Dundee

UNITED KINGDOM

EMBL International PhD Programme

Philosophy and Results

- Interdisciplinarity and collaboration
- Fostering independence of students
- Students are ambassadors of EMBL and their home countries
- Creating an international network

Fostering Independence

International EMBL PhD Students Symposia (9th in 2007)

EMBL PhD Student Symposium on EVOLUTION
EMBL, Heidelberg, 9th and 10th November 2001

CONFIRMED SPEAKERS:

- Stav ANDERSSON (Uppsala, SWI)
- Luca CAVALLI-SFORZA (Stanford, USA)
- Simon CONWAY MORRIS (Cambridge, UK)
- Denis ROUSSEAU (Lyon, FRA)
- Andrew FREEDY (Cambridge, UK)
- Andrew GRIFFITHS (Cambridge, UK)
- Jonathan HOWARD (Göteborg, SWE)
- Richard LENSKE (East Lansing, USA)
- Christine ORENIGO (London, UK)
- Swante FABIEN (Leipzig, GER)
- Rudolf RUPP (Bonn, GER)
- David ATEN (Princeton, USA)
- Erik SZATHMARI (Budapest, HUN)

Workshop on the origin of life: a special case in the light of evolution.

EMBL PhD students are organizing a two-day workshop to discuss some of the most exciting topics in the field of evolution. The program will highlight the latest research in molecular evolution with a focus on the origin of life and the evolution of the eukaryotic cell. The workshop will include a series of talks, a poster session, and a round-table discussion on the origin of life. The workshop is open to all PhD students, postdocs, and senior scientists. The workshop is held in the EMBL building in Heidelberg, Germany. For more information and to apply, please contact the EMBL office at phd@embl.org.

EMBL PhD Student International Symposium at the EMBL, Heidelberg, Germany
Life within Boundaries
Membranes & Compartments in Biology

November 14 - 16, 2002

EMBL PhD students are organizing a three-day interdisciplinary symposium to address many exciting topics in the field of membranes and compartments in biology. The programme will highlight the most recent research in membrane biology and biophysics and introduce the latest ideas on the role of membranes in the origin of life, intracellular compartmentalization and the maintenance of eukaryotic architecture. Lectures will include both selected presentations and detailed discussions of each topic, making the symposium accessible to young scientists from all fields of life sciences.

CONFIRMED SPEAKERS INCLUDE:

- Jason P. Drenth (Rutgers University, USA)
- Gary W. Gould (Glasgow University, GB)
- John E. Heuser (Washington University, USA)
- Eric Jacobson (University of Illinois, USA)
- Oron Lancet (Weizmann Institute, Israel)
- Jennifer L. Lippincott-Schwartz (NIH, USA)
- William J. Lucas (University of California, USA)
- William E. Martin (University of Dundee, UK)
- Rudolf M. Maier (Rudolf Virchov University, USA)
- Jared Shaw (University of Utah, USA)
- Kai Simons (Max-Planck Institut, Dresden, D)
- Günther von Heijne (Biochemisches Institut, Basel, CH)
- Paul W. Winkler (UCSF, USA)
- Hans Westerhoff (Amsterdam University, NL)

SCIENTIFIC SESSIONS:

- The origin of life
- Biophysical properties of membranes
- Transport and signalling across membranes
- Intracellular compartmentalization
- Supracellular architecture

For more information and to apply, please contact our EMBL office at phd@embl.org. Application fee is 100 Euro (including meals). The symposium is limited to 150 participants. Deadline for application is June 30, 2002.

4th International EMBL PhD Students Symposium
A Life of Encounters:
Recognition in Biology

20th-22nd November 2003
EMBL, Heidelberg

EMBL PhD students are organizing a three-day interdisciplinary symposium to address many exciting topics in the field of recognition in biology. The programme will highlight the most recent research in molecular recognition and biophysics and introduce the latest ideas on the role of recognition in the origin of life, intracellular compartmentalization and the maintenance of eukaryotic architecture. Lectures will include both selected presentations and detailed discussions of each topic, making the symposium accessible to young scientists from all fields of life sciences.

CONFIRMED SPEAKERS:

- John Heuser (Washington University, USA)
- Paul Winkler (UCSF, USA)
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- Paul Winkler (UCSF, USA)

SCIENTIFIC SESSIONS:

- Molecular and Biochemical Recognition
- Cell-to-Cell Recognition
- Immunity and the Recognition of Self
- Organisms, Recognition and Behaviour

For more information and to apply, please contact our EMBL office at phd@embl.org. Application fee is 100 Euro (including meals). The symposium is limited to 150 participants. Deadline for application is June 30, 2003.

5th International EMBL PhD Students Symposium
DESIGN OF LIFE
LEARNING FROM NATURE

HEIDELBERG, GERMANY, DECEMBER 2-4, 2004

SCIENTIFIC SESSIONS:

- MOLECULAR DESIGN
- BUILDING ARTIFICIAL STRAINS
- NATURAL BIONOTECHNOLOGY
- MIMICKING NATURE

SPEAKERS:

- Alan Alberts (Cambridge University, UK)
- Richard Anderson (University of Cambridge, UK)
- John Arnold (University of Cambridge, UK)
- John Arnold (University of Cambridge, UK)
- John Arnold (University of Cambridge, UK)
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For more information and to apply, please contact our EMBL office at phd@embl.org. Application fee is 100 Euro (including meals). The symposium is limited to 150 participants. Deadline for application is June 30, 2004.

EMBL Interdisciplinary Postdocs (EIPODs)

- First Call in June 2007
- EMBL Research Units propose 5 interdisciplinary projects (across Units) - 20 selected.
- International Advertisement - Deadline Aug. 31st, 2007
- Applicants select 2 projects or propose their own
- Selection mid-November
- Start early 2008
- Estimated intake 10-15 EIPODs per year

Researchers Charter and Code of Conduct

- EMBL has signed a statement of support together with the six EIROforum partners: CERN, EFDA, ESA, ESO, ESRF, ILL
November 2006
- EC initiative to develop attractive and sustainable labour market for researchers in Europe is welcome
- EIROforum organisations have already implemented most of the recommendations
- Mobility is recognised as a means to enhance professional development of reserachers

Gender issues: Female scientists at EMBL

- Pre- and postdoctoral fellows: 44%
- Group leaders: 15 %
- Senior scientific management: 20 %

Moving up or moving out

How the proportion of men and women varies through Europe's scientific ranks

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

Nature 4 July 2007

How to attract female scientists ?

- Open culture
- Pro-active recruiting
- Critical mass of female scientists
- Mentoring
- Transferable skills training
- Childcare facilities

What needs to be done?

- Increase the size of the pool by encouraging more female postdocs to stay in science
- Promote science careers for girls in school
- Address the issue early on: create awareness and provide help within research institutes
- Train faculty members as mentors
- Facilitate mobility: dual career programmes, support relocation etc.

A pan-European women ambassadors programme bringing role models to schools and universities



3 partners: EMBL, EMBO, CERN

Project Coordinator; Julia Willingale-Theune (EMBL)

Supported by FP6-2005-Science-and-Society

- **International Women in Science Conference (EMBO)**
"The Way Forward", 9-11 May 2007, Heidelberg
- **School Ambassadors (CERN)**
Young female science graduates will visit schools to talk about their life in science
- **University Ambassadors (EMBL)**
Top women scientists will give lectures at universities to talk about opportunities for women
- **Insight Lectures (CERN)**
Women scientists will talk about their research to a young audience

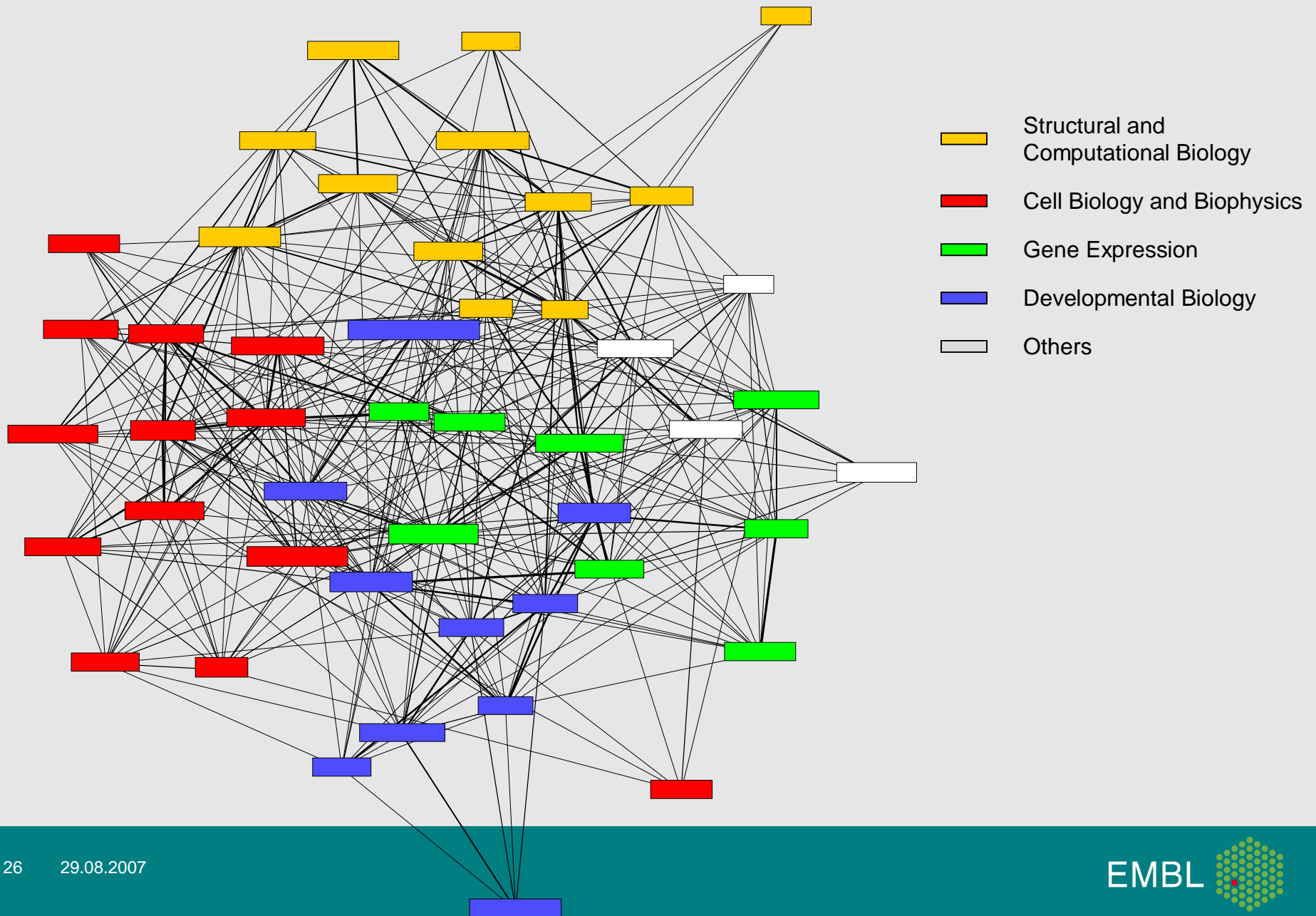


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<http://www.embl.org/>

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Collaborations between research groups at EMBL-HD



EMBL Courses & Conferences

Overview 2000-2005

- 109 Courses and Conferences held at EMBL Heidelberg
- Continuous Conference Activity
 - on 539 days (out of 1461 = 37%)
 - Over 9.300 participants
 - Over 28.000 participant days
- Various Sponsors and Co-Sponsors:
 - EMBO, EU, VW Foundation, GIF, HFSP



EMBL Courses & Conferences

The Advanced Training Centre



- Auditorium with capacity for ca. 450 participants
- Exhibition space for 300 posters
- 3 Teaching Laboratories
- Computer Training Laboratory
- Seminar rooms, library, office space for EICAT and visitors
- Catering and social facilities