EMBO & EMBC
annual report 2001

European Molecular Biology Organization

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upcoming events 2002

positive interaction for 30 years

This Annual Report once more summarizes the activities of both EMBO and EMBC. The first such report appeared last year, although both organizations have been working in harmony for over 30 years. A new indication of the closeness of the inter-governmental organization the EMBC and the non-governmental organization EMBO is the fact that this year I present the report as both the Executive Director of EMBO and the Secretary General of the EMBC.

Max Perutz (EMBO founder and Nobel prize laureate) who sadly died in January 2002 and Frank Gannon (EMBO Executive Director and EMBC Secretary General) at the opening of the EMBO Building in May 2001.

2001 – year of great importance

The year 2001 was one of great importance to EMBO. In particular, one must highlight the fact that EMBO moved into its own building in March 2001. The growing activities of EMBO over the past number of years made such a move necessary and permits the organization to fully fulfill its potential in conjunction with the EMBC.

start of new EMBO programmes

The year was also one in which the EMBO Young Investigator Programme moved from discussion to practical activities with a very successful launch and two rounds of selection. The EMBO World Programme also gained momentum during the year and expands the activity of EMBO in a direction that is in keeping with the general internationalization of science. Finally, the Science & Society activities of EMBO reached new maturity with several actions carried out particularly in conjunction with teachers as a mechanism of amplifying the message of modern science.

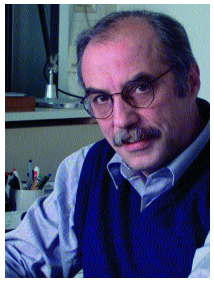
continuation of excellent initiatives

While highlighting the new, it is important to recognize that those items that have become standard for EMBO con-

tinued to be delivered and to thrive. This is true for the fellowships, courses and workshops and the EMBO Journals. In the latter context, EMBO *reports* is now in its second year, and has achieved a very credible acceptance amongst its ever growing number of readers. It was very positively highlighted in the Nature annual review of new journals and fulfils a particularly useful niche by having journalistic as well as scientific content.

Overall therefore, I believe that 2001 was a year when the appreciation of the full range of activities of EMBO was increased throughout Europe and the way they are prepared for further important actions by EMBO and EMBC in the coming years.

April 2002



Herbert Jäckle

chairman of
the EMBO Council

2001 – a year of new EMBO programmes

In 1964, the non-profit organization EMBO established itself as an academy by selecting 200 members amongst the leading scientists to promote molecular biology as a novel discipline in Europe. Subsequently, EMBO members convinced governments to found an inter-governmental organization, the EMBC, to guarantee continued support for *"... projects and persons to be chosen regardless of nationality and that the activities be guided by scientific excellence coupled with usefulness to European Molecular Biology."* In addition to ensuring that a high quality fellowship, courses and workshop programme was delivered, this also provided a framework to establish the EMBL in 1974. Thus, the initial vision of the founding fathers had become reality. The success of EMBL speaks for itself, and complements EMBO's continued leading role in guiding an exploding field of science in a Europe that is very different from the one in 1964.

The Annual Report provides a measure of the continued high-quality contributions of EMBO under the guidance of Frank Gannon. As you will find in this report, EMBO has continued to direct its efforts towards new ideas, initiatives and programmes, which confirm EMBO's commitment to quality.

EMBO's success is dependent on and linked to the efforts of its members in taking on the burden of serving in the various EMBO committees and to the excellence of EMBO staff members who provide the fantastic support which has come to seem so natural to the scientific community. Thank you all!

May the Annual Report inspire you to contribute – one way or another – to the future success of EMBO: a reliable source of scientific excellence in Europe.

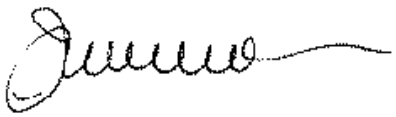
April 2002

EMBO & EMBC – organizations with a special status

When reflecting on 2001, in preparation for this Annual Report preface, I am struck by the accelerated growth in the activities of the EMBC as delivered by EMBO.

Inter-governmental organizations have a very special status, as they reflect the wishes of the ministries in the member states. In the case of the EMBC, that means that we currently carry out actions based on input from 25 countries, which effectively covers the European Union and the adjacent countries. Given the well-recognized importance of molecular biology and the life sciences in general, it is very fortuitous that Europe has already an existence as a special inter-governmental organization focussed on this area. The EMBC has achieved much since it was founded over thirty years ago. It is now however poised for a much more visible and dynamic role in European scientific actions.

I am particularly excited about the discussions that have been initiated in the past year about the possibility of establishing a research council in the area of our involvement. This is both an opportunity and a challenge for all. It would involve a small change in how science is organized in Europe, but would bring with it a new dimension that should be very enriching for all. I am confident that with the expert input from our colleagues in EMBO that this discussion will advance in a way that will have an impact on the quality of research in the future in Europe and contribute directly towards the establishment of the European Research Area. While highlighting this particular aspect, I am aware that I overlook many of the activities that are described in this annual report. I hope that you as a reader will appreciate the expanding activities of the EMBC/EMBO and use us as a platform for future concepts that are necessary for a healthy life sciences sector in European countries.



April 2002

Julio Celis

President of the
European Molecular Biology
Conference (EMBC)

EMBO & EMBC present & past

aims
history
what is molecular biology
EMBO & EMBC joint actions in 2001

EMBO's aim is to promote biosciences throughout Europe.
It has done this very
successfully over a period of nearly 40 years.

EMBO

EMBO's mission is to promote biosciences in Europe. This goal is achieved through a number of activities, e.g. the organization of courses and workshops, the provision of fellowships for long-term and short-term visits to other laboratories, a new programme designed to highlight young independent researchers of high quality, the involvement in discussions that bring scientists and non-scientists together, and the publication of two scientific journals. These activities help to increase the attractiveness of Europe as a location for scientists, and to encourage the communication of scientific expertise.

Today, EMBO consists of more than 1000 well known scientists from the EMBC member states. Among them are more than 20 Nobel Prize winners including Tim Hunt and Paul Nurse, who were awarded the prize in 2001. Its actions are coordinated at the EMBO headquarters on the EMBL campus in Heidelberg, Germany.

EMBO's activities fall into two different categories: those that are part of the General Programme funded by the EMBC, and those that have been initiated and developed by EMBO independently. Each of these is described in different sections of this report.

EMBC

Most of EMBO's actions are funded by 24 (soon to be 25) member states, which together form the inter-governmental organization called the European Molecular Biology Conference (EMBC).

This organization was established to build on and consolidate the work that had been initiated by EMBO. It takes a pan-European (expanded to include some neighbouring countries) view of research and supports a very broad range of science through the programmes that bear the EMBO name. Of particular significance for science in Europe today is the fact that the EMBC includes not only the EU countries, but also many of the accession countries and those that have links with the EU to permit participation in the Framework Programme. The relationship between EMBO and EMBC is very solid, and has worked effectively since 1970. The EMBC monitors the actions that EMBO performs on its behalf, but does

not interfere in the execution of the programmes. This arrangement has worked well for over 30 years based on a trust that has been well established between the scientific communities represented by EMBO and the member states acting through the EMBC.

Member states decided to establish this inter-governmental body because they were, to quote from the agreement, “Establishing the European Molecular Biology Conference”,

“conscious of the important role of molecular biology in the progress of science and the well-being of mankind;

considering that there is need for completing and intensifying, through inter-governmental action, the international co-operation already prevailing in this domain;

desirous of developing European cooperation in the domain of molecular biology with a view to encourage activities which are of particular scientific merit.”

As an inter-governmental organization, the EMBC promotes a strong transnational approach to molecular biology. The necessity for exchange of expertise between countries becomes more and more evident with the increasing importance and impact of life sciences on our daily life.

EMBL

The third set of initials that one encounters in this context is EMBL. EMBL, the European Molecular Biology Laboratory, was established as a special project of the EMBC, and became an independent entity in 1974. It also is supported by a subset of the EMBC member states and provides a further input into the overall goals of the organizations i.e. improving the quality of science based on molecular biology throughout Europe. The EMBL is independent from the EMBC and EMBO, but all three act in a mutually supportive manner, both at a strategic and practical level. For full details of the EMBL please see the EMBL Annual Reports or visit their website at: http://www.embl-heidelberg.de.

Gitta Bourke works as the Administrator for the EMBC.

the start

The origins of molecular biology and of EMBO can be traced to the early 1960s, when scientists became aware of the possibility of studying biological entities at a molecular level. This was spectacularly illustrated by the description of the structure of DNA, and by the first X-ray crystallographic studies of proteins. Those at the forefront of this research had the vision to anticipate ill-defined but far-reaching new possibilities that would come from this new area of science, which they called molecular biology. Their commitment led them to join forces in order to promote cooperation in molecular biology in Europe.

Although these scientists were responding to new possibilities, they were also reacting to new threats. European science in the early sixties was fragmented and nationally based. Funding was not secure, and many of those who had worked in the United States were very aware of the differences between the support and the working environment for scientists there as opposed to Europe. The possibility of a "brain drain", where leading young European scientists attracted to molecular biology would inevitably move to the USA, was very real, and required action. It was also a time at which some of the methods required by the molecular biologists were available only in a very limited number of locations. Visits between scientists in different countries became a prerequisite to their work.

CERN – a suitable role model

At this time, CERN, an organization devoted to the development and advancement of high energy physics on a European-wide scale, already existed. This way of working together was new to scientists in the field of molecular biology, but was seen to be inevitable to leaders of the move to establish EMBO. The founders of EMBO took CERN as their model, and the exciting developments in molecular biology as their justification to establish a new international organization.

Following the model of CERN, many of the EMBO founding fathers felt that the obvious goal of the organization should be to establish a central location where molecular biologists could work and visit. The European Molecular Bio-

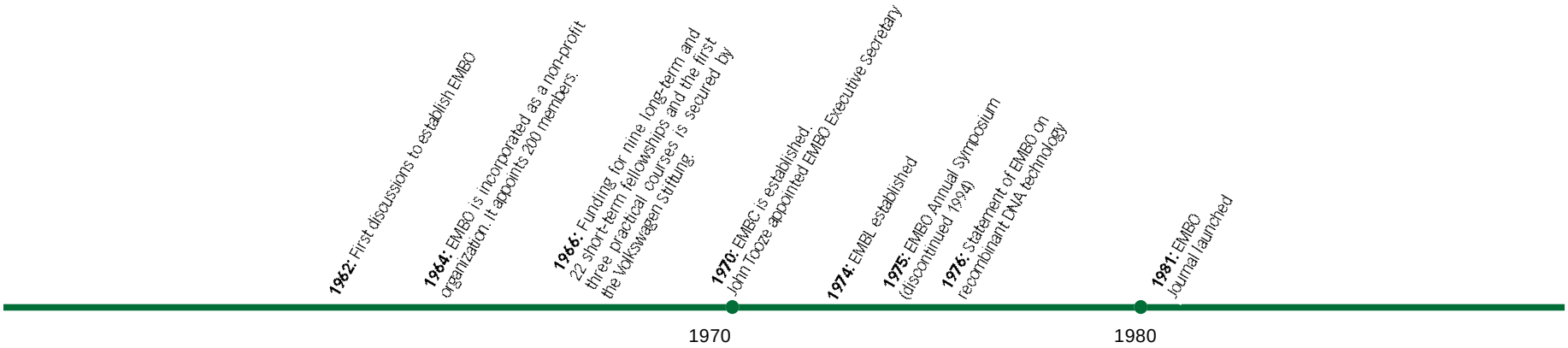
logy Laboratory (EMBL) was in due course created, although establishing it was a task that required many years of concentrated effort by EMBO. Other founding members of the organization thought that EMBO should move into action more rapidly, and set more readily achievable goals. The awarding of post-doctoral fellowships soon became a cornerstone of EMBO's programme. EMBO was also to play an important role in organizing practical courses and workshops. Taken together, these activities provided, on a Europe-wide basis, the potential for a large training programme with a built-in trans-national component. Indeed, fellowships, courses and workshops have been the most visible contributions of EMBO to European science since 1966.

EMBO – an international academy

Although the initial discussions about EMBO were carried out by a restricted group that included James Watson, Leo Szilard, Max Perutz, John Kendrew, Victor Weisskopf and Sydney Brenner, it soon became clear that the organization needed a broader base. EMBO was incorporated as a non-profit organization in 1964 under Swiss law, and it selected approximately 200 leading scientists from within the emerging discipline as members. EMBO thus established itself as an academy, and took its first steps towards becoming a unique organization no longer working only on the model of a central laboratory such as CERN, but developing its own combination of mechanisms appropriate to molecular biology in Europe. The number of EMBO members has subsequently increased through annual elections by the existing membership. The EMBO members play a key role in EMBO's activities: in addition to several other contributions, they provide expert peer review of applications for fellowships, and they identify individuals to organize courses and workshops. The annual election of new members ensures that the range of skills and areas of molecular biology covered by EMBO continuously evolves.

With a growing definition of its future role and a clearer idea of the activities that should characterize the organization, the founders of EMBO eventually faced the inevitable question of funding. In the short term, the funding for

Jennifer Schulze-Eyßing works as the Administrator for the EMBO Council and takes care of EMBO members issues.

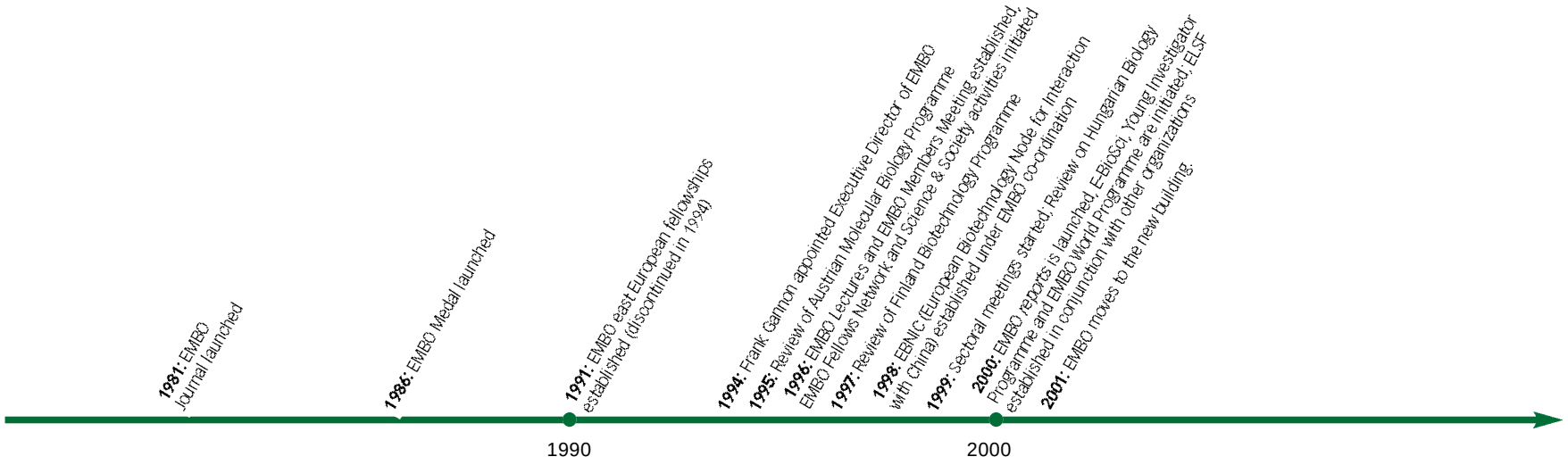


the organization came in the form of a grant of US$ 687.000 from the Volkswagen Foundation in 1965. Further support was provided by the Israeli Government and by Interpharma, a Swiss company. Together, these sources made it possible to award nine long-term fellowships and 22 short-term fellowships in 1966. In addition, three practical courses were organized in that year. The organization had taken off, and all of its activities were expanded upon in the subsequent years.

As the aid from the Volkswagen Foundation to support EMBO activities and administration was time-limited, the EMBO Council approached European states to look for more long-term support.

1970 – birth of the EMBC

The combination of the overall concept, the achievements through the initial activities and the quality of the individuals associated with EMBO, led 14 governments to participate in an inter-governmental action in 1970. These governments were Austria, Belgium, Denmark, the Federal Republic of Germany, France, Greece, Israel, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, and the United Kingdom. The legal framework for this governmental support was of necessity different to that which bound EMBO. As a result, the European Molecular Biology Conference (EMBC) was established, with the dual aim of providing a secure source of funds for the EMBO fellow-



ships, courses, workshops and administration, and to provide a framework to establish the European Molecular Biology Laboratory.

Today, the EMBC guides and funds the activities of EMBO that fall within the area of its General Programme. EMBO, in turn, acts through its members as a guarantor of the quality of the programmes, and as a source of new initiatives appropriate for the evolving area of molecular biology. These initiatives may, on occasion, be separate from the General Programme.

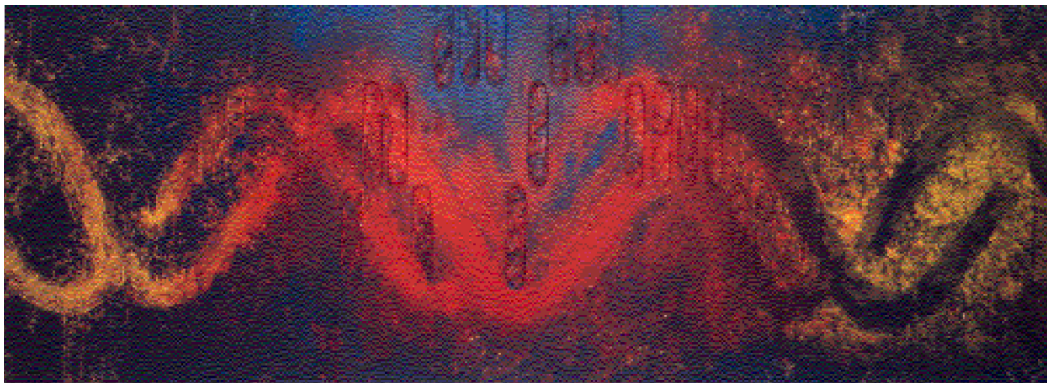
Since 1970, the number of member states of the EMBC has continued to grow. Today, Croatia, the Czech Republic, Finland, Hungary, Iceland, Ireland, Poland, Portugal, Slovenia and Turkey have been added to the core group of 14 members. Currently, the Grand Duchy of Luxembourg is in the process of ratifying the agreement. In recent years, new members have come increasingly from Eastern Europe. In this way, the EMBC is contributing to the integration of these countries into into the European scientific community.

molecular biology – a term with changing definition

EMBO, EMBC and EMBL all include molecular biology in their titles. What exactly molecular biology means is often a point of discussion, and there is no doubt that this has changed over the years. Initially, the words "molecular biology" were used to indicate the shift from descriptive biology (such as traditional zoology, botany, or microbiology), to one that was more close to the mechanistic events which underpinned what was observed. Studying biology at the molecular level is obviously the goal of molecular biology, but when it was first used as a flag to rally those who worked at the molecular level it had to recognize that there were others already working in that area, particularly the biochemists.

not easy to define

The term molecular biology therefore came also to mean an approach that was not restricted by any particular standard University departmental division but could also include the use of microbiological, genetic, biochemical etc. approaches.



In the late 1970s molecular biology became associated almost to an exclusive sense in some people's minds with the isolation of genes. Recombinant DNA technology was the terrain in which people first became familiar with molecular biological approaches and perhaps confusion over what the term meant was inevitable. Those who recall that molecular biology had as its founders those who defined the structures level of complex proteins at the molecular will understand that this is an inadequate description. Today the reality is that nearly all of those who study biology or the life sciences integrate into their analysis a molecular approach.

molecular biology –
a widely adapted concept

Molecular biology is a definition of the scale at which analysis is performed and also an acceptance that description of phenotype or anatomical detail is not adequate. From its inception, EMBO has always used the broadest possible interpretation of molecular biology and continues to do so today. The fact that its membership includes cell biologists, structural biologists, neurobiologists, immunologists, microbiologists, virologists, plant biologists etc., is perhaps the strongest indication of this broadly based definition. The more modern terms such as bioscience or the life sciences equally well describe the range of the membership of EMBO. In this way, EMBO has continued to evolve and respond to the new developments, and hence is well placed to continue to have a strong input to these in the future.

EMBO long-term fellowships

The number of applications (see page 29) for long-term fellowships in 2001 fell from 707 to 645. The number of awards made was 147, which corresponds to a 23 percent success rate. 35 percent of the fellowships were awarded to scientists from the EMBC countries who wished to work in a non-EMBC member state. This percentage has remained relatively constant over the last five years. Eight percent of the fellowships were provided to Europeans returning to an EMBC country compared with five percent in 2000, and eight percent were for scientists from outside the EMBC countries who wished to carry out their studies in Europe. This number compares with nine percent in 1999, and ten percent in 2000. These scientists came from Japan, Canada, America, Australia, Costa Rica and Chile.

The the number of applications and awards for long-term fellowships since 1977 is shown on page 103.

EMBO short-term fellowships

The number of applications for short-term fellowships in 2001 was 233. This shows a decrease from the year 2000 when the number of applications was 274. The number of applications and awards is shown on page 103. Overall, 124 (53 percent) of the applicants were successful.

courses & workshops

In 2001, 17 practical courses, three lecture courses and 21 workshops were organized by EMBO (see pages 112 – 113). A complete listing of those planned for 2002 is shown on pages 116 – 119.

EMBO young investigator programme

The EMBO Young Investigator Programme (see page 36) was launched at the end of 2000, the first and second selections being made during 2001. The overall statistics were very impressive, a total of 565 applicants coming from the two rounds of calls for proposals. From these 78 applicants (13.8 percent) were successful. The applicants came from 24 countries, and the awardees came from 17, which shows a very wide spread of quality scientists throughout the EMBC member states. A complete list of the successful applicants is shown on page 106 – 108.

More detailed statistical information on the applications and awards is shown on page 110.

electronic information programme

The Electronic Information Programme (see page 38) moved forward significantly during 2001. Following the appointment of Les Grivell as Programme Manager, a series of in-depth meetings took place with potential partners, the result being two applications for funding from the EU, both of which were successful. The first of these (entitled E-BioSci) was made to the Quality of Life Programme, and the second named ORIEL to the Information Society Technology Programme. The contracts for these were signed in December 2001 and the programme was fully launched at the start of 2002. The aim of the initiative is unchanged, i.e. to provide a complete information service in all aspects of scientific information of relevance to the Life Sciences.

EMBO & EMBC annual report

The first joint Annual Report for EMBO/EMBC was also presented to both organizations, and accepted with enthusiasm.

EMBC matters

meetings

The EMBC met twice during the year 2001, the first part taking place in Grenoble in July and the second part in Heidelberg in November. The Finance Advisory Group of the EMBC also met in Heidelberg on May 22 – 23. In addition, the newly established Strategic Working Party of the EMBC had two meetings in Heidelberg on January 28 – 29 and October 22 – 23. The Strategic Working Party considers longer term strategies for the EMBC and proved to be an interesting context for the discussions of future directions of the Conference.

officers

The officers of the EMBC for the year 2001 were Glauco Tocchini-Valentini (Italy, Secretary General), Julio Celis (Denmark, President), Vaclav Paces (Czech Republic, Vice-President) and Reinhard Lührmann (Germany, Vice-President). Sakari Karjalainen (Finland) was the Chair of the Finance Advisory Group and David Smith (United Kingdom) was the Vice-Chair of the Finance Advisory Group.

This section reports on the actions carried out by EMBO/EMBC during 2001 to fulfil formal requirements of both organizations

At the second part of the EMBC session, the officers for 2002 were elected. They are Frank Gannon (EMBO) as Secretary General, Julio Celis (Denmark) as President, Vaclav Paces (Czech Republic) and Reinhard Lührmann (Germany) as Vice-Presidents. David Smith (UK) was elected Chair of the Finance Advisory Group and Brita Beije (Sweden) was elected as Vice-Chair.

decisions on the general programme

The Conference received *reports* on the delivery of the General Programme, and approved the measures that had been taken.

rules and procedure

A radically revised set of Rules of Procedure (the former ones had been in place since 1970) was considered at both sessions of the Conference and accepted unanimously.

financial aspects

Some revisions on the Financial Rules were accepted, the accounts for the previous year were also accepted as was the budget for 2002 and a revised budget for 2001. The Conference also agreed that the Finance Advisory Group should serve in the future as an Audit Committee with a subsection of the officers acting as the core group with responsibility for this function within the Finance Advisory Group.

site agreement for the EMBC

Having discussed the possibility of the EMBC requesting a site (headquarters) agreement in its own right at both meetings of the EMBC and at the Strategic Working Party, the EMBC passed a formal resolution to the effect that it would seek such a site agreement at the earliest possible date.

prolongation of the EMBC agreement

A major topic for discussion in the EMBC was the prolongation of the Agreement, which binds the member states to the Conference. The current Agreement covers the period up to April 2004 with a decision being required on prolongation at least one year in advance. Most of the discussion on the prolongation topic related to the future of the Conference. A wide range of new options were presented to it by the officers of the organization. These discussions will continue during 2002

both in the Strategic Working Party and in the Conference itself.

A major sub-topic within that context was the discussion on the role of the EMBC/EMBO in establishing a European Research Council in its area of expertise.

new member states

The application of the Grand Duchy of Luxembourg to become a member of the EMBC was considered by the Conference, and agreed upon unanimously. The formal steps required to ratify the Agreement by the Grand Duchy of Luxembourg are currently underway.

EMBO matters

meetings

The 53rd meeting of the EMBO Council took place in Heidelberg in September, 2001. The various EMBO Committees met regularly throughout 2001 to deliver on the actions for which EMBO is responsible.

officers & council members

The Chair for 2001 was Herbert Jäckle (Germany) with Susan Gasser (Switzerland) as Vice-Chair and the Secretary General was Walter Gehring (Switzerland). At the EMBO Council Meeting in September 2001, Herbert Jäckle was re-elected as Chair for 2002 and Susan Gasser as Vice-Chair. The outcome of the proposals for the new EMBO Council members, and the subsequent election, was that Carlos Martinez-A. (Spain) was elected for the first time, Cesare Montecucco (Italy) and Andre Sentenac (France) were re-elected and Antonio Coutinho (Portugal) (for a second year term) and Ingrid Grummt (Heidelberg) were co-opted. As the six-year term of office had ended for Walter Gehring, the Council selected Christiane Nüsslein-Volhard (Germany) as the new Secretary General.

membership election

Each year, EMBO members propose and vote for the selection of new members. The Council noted the results of the membership ballot through which 20 new members were elected and ten others were co-opted. The latter included new members from Croatia, which is still at an early stage in its membership of EMBO, and had a serious deficit in the number of scientists who are associated with EMBO. A complete list of new members is to be found on page 76.

current chairs of the EMBO committees

Course Committee	**Pascale Cossart** new
Fellowship Committee	**Daniela Rhodes** new
Science & Society Committee	**Denise Barlow** new
Membership & Publication Committee	**Cesare Montecucco** new
Electronic information Committee	**Glauco Tocchini-Valentini**
Young Investigator Programme Committee	**Jean-David Rochaix**

The Council also ratified the selection of new associated members. These are leading scientists who work outside Europe. A list of the new associate members is also given on page 76.

committees

The Council approved changes in various committees based on the turnover of the membership, and also appointed new Chairs where required (see table left).

activities

The Council received a full report on all of the EMBO activities. In addition, they noted the continued interest in EMBO Lectures, which were provided in eight countries last year. The list of those who gave EMBO Lectures is shown on page 56. The Council was particularly pleased with the progress that had been made on the EMBO Young Investigator Programme (managed by Gerlind Wallon), and also noted with satisfaction the successful progress that had been made in the context of E-BioSci under the leadership of Les Grivell.

new members meeting

In 2001 there were two New Members' Meetings arising from the unusually large number of members selected as a consequence of the Millennium Election in 2000. The first of these meetings was held in Heidelberg in May, and the second on the island of Crete in October. At these meetings, the speakers are the new EMBO members. It therefore provides an excellent opportunity for the broader membership and interested scientists in the region to hear top class presentations on a wide range of topics.

number of members to be elected in 2001

The Council decided that 24 new members should be elected in 2002 based on the fact that 94 had been proposed by the membership. The ballot papers for this election were distributed early in the year, and the closing date for election was April 8, 2002.

publications

The EMBO Journal had yet another very successful year. The quality of the papers remain at the highest level, its citation index of almost 14 being a strong measure of this. The Journal remains in the top five in its area, and achieves this score without the benefit of a significant number of reviews or

other aspects that are known to improve impact factors.

EMBO *reports* had a very successful year, and many new readers were drawn to it. It also benefited from a very positive review in Nature as part of their analysis of new journals. The style of EMBO *reports* is now well established, and hopefully will continue to grow in its success as measured by all parameters. It is not yet eligible for an impact factor, which will be another indication of where it is ranked by the scientific community and how its visibility has developed in its initial years.

The Council again discussed the concept of a new publication format, which has the working title of @EMBO. It required further reflection on this topic to ensure that it was clearly understood by all of the potential participants and to distinguish it from the current EMBO publication activities. The fact that it would be a useful and perhaps even necessary component of the E-BioSci activities was noted.

the EMBO building

A major highlight of the year was the completion of the EMBO building. The building consists of three stories with an area of 1550 square metres. In addition to housing the increased number of staff it provides a very good location for the various committee meetings that take place under the aegis of EMBO.

EMBO world programme

The activities in EMBO throughout the world continued to grow under the management of Mary Gannon during 2001. A more complete report of this is provided on pages 58 – 61. The Council agreed to an expanded budget for this activity, which includes the provision of fellowships of up to nine months for visits to Europe by scientists from elsewhere in the world. This Fellowship Programme was launched formally in 2002 with a first closing date of May 1, 2002.

science & society

The activities in the area of Science & Society also expanded during 2001 under the management of Andrew Moore. Of particular importance was the decision to have a shift in the

activities of EMBO in this sector to provide more factual information to aid decision makers. These documents will be in the form of position papers of EMBO. The annual EMBO/EMBL meeting on Science & Society this year was dedicated to the topic “From Genomes to Cures” and was again a well attended and successful meeting. The theme for 2002 will be “Infectious Diseases.” 2001 also saw the start of an initiative directed at improving and updating the knowledge of school teachers in molecular biology, with a very successful meeting of this group taking place in Heidelberg in July 2001. Other activities in the Science & Society Programme are reported on pages 48 – 51 of this report.

external co-operation

The EMBO Council made a historical decision when it agreed that it was timely for EMBO to establish co-operation agreements with external organizations. This was particularly necessary in view of the globalization of science and the greater involvement of EMBO worldwide through the World Programme. Decisions on these will be made on a case by case basis at the annual EMBO Council meetings.

the history of EMBO

When the EMBO Council discussed this matter in 2000, it considered the possibility of having a meeting in 2002 to celebrate 40 years of the origin of EMBO. On reflection, at the Council meeting in 2001, it was thought better to have the anniversary celebration coincide with the formal establishment of EMBO in 1964, rather than the meetings which gave rise to it. In the interim a meeting on the more historical aspects of EMBO will be organized in 2002 as a preparation for the 2004 events.

women in the life sciences

During 2001, EMBO took a number of actions directed to highlight its concern that women in the area of life sciences should be treated in a manner ensuring their full participation in a scientific career. A very successful meeting entitled "The Glass Ceiling for Women in the Life Sciences" was organized in June, and gave rise to the position paper “Women in the Life Sciences” which has been widely distributed. The meeting has also been summarized in a brochure, which is currently available. In general EMBO redoubled its efforts to monitor the

involvement of women in its various programmes, and is taking corrective, but not quota-driven, actions whenever necessary.

financial aspects
The EMBO Council agreed to a budget for 2002, and accepted the audited Accounts for 2001.

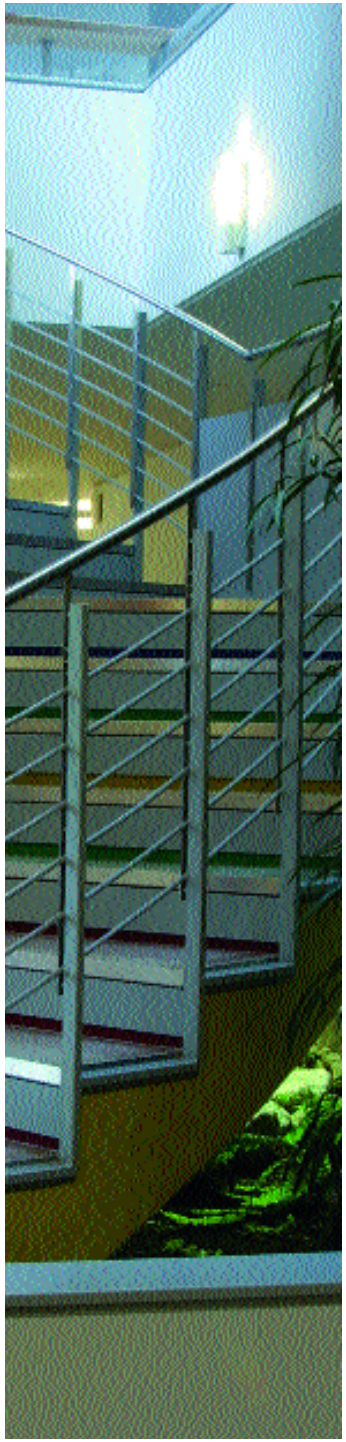
EMBO medal
The EMBO Medal for 2001 was awarded to Matthew Freeman for his work in the area of Developmental Biology. The formal award was made during the Crete New Members Meeting (see pages 54 – 55 for details).


Bernhard Huber (left) is EMBO's Financial Manager
Bärbel Laur (right) started to work at EMBO as Financial Administrator in October 2001.

sectoral meetings
The EMBO Council re-examined the concept of sectoral meetings and agreed that they were a useful component of the EMBO calendar. In 2002, the next sectoral meeting will be held on the topic of immunology, and will take place in Lisbon on November 22 – 24.

peer review committee
Having considered the activities of EMBO in recent years, the Council noted that the Peer Review Committee was one which was only brought to life on an occasional basis. The Council therefore decided that to formally terminate the existence of the Peer Review Committee and to use an ad hoc group to advise it on peer reviewing matters in the future. In the past, the Peer Review Committee had been very helpful in the delivery of reviews of science in Austria, Finland and Hungary.

communication
In 2002 EMBO enhanced its communication activities through active press work and other initiatives. In July 2001 Ellen Peerenboom was appointed as EMBO's Press and Public Relations Officer.



joint EMBO & EMBC activities

fellowships
courses & workshops
young investigators programme
E-BioSci

EMBO equals excellence.

It is a measure of the foresight of EMBO's founders that the activities carried out today have not changed significantly from those initially envisaged. Taken together, the services to the scientific community described on the following pages are defined as the General Programme, the funds for which are provided by the EMBC.

Jan Taplick (left), Françoise De Grasse (middle) and Liselott Ahlgren (right) take care of EMBO fellowships.

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since March 2002

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EMBO facilitates exchange & mobility

One of the first actions that EMBO and EMBC took after their foundation in the 1960s was to establish the post-doctoral Fellowship Programmes, which remain a cornerstone of the organizations today. The fellowships provide a good training opportunity for young scientists in and from Europe. They also promote movement between European countries and, when justified, elsewhere in the world.

long-term fellowships

EMBO long-term fellowships which have closing dates on February 15 and August 15, allow scientists to do research in a different country for a period of up to two years. Long-term fellowship awards have remained relatively stable in the last years with approximately 150 grants awarded annually. A full list of the successful applicants and statistics related to long-term fellowships are provided on pages 78 – 91. This level of postdoctoral fellowships is arguably the highest in Europe, and certainly within the same range as that of the European Union in this scientific area.

EMBO supports highly qualified scientists

The quality of the fellows is assured by the thorough assessment by a selection committee (see page 75). All long-term fellowship applications are read and scored independently by its members. In addition, a wider range of EMBO members (several hundred) is involved in the process at the interview stage, which is carried out in association with almost every fellowship application.

short visits to a laboratory

EMBO short-term fellowships allow for exchanges of up to three months' duration between laboratories in the member states. They are particularly useful to laboratories in less favoured regions, as they allow them to complement their research at home with experiments that could not have been performed in their local environment. The programme is open to applications at all times and to scientists at all stages of their research carreers. In 2001, 124 short-term fellowships were awarded from 233 applicants. For details see pages 92 – 105.

applications and awards of EMBO fellowships in 2001

short-term fellowships 2001	
applications	233
awarded	124
long-term fellowships 2001	
applications	645
awarded	147

EMBO long-term fellows are at an exciting time in their scientific careers, when collaborations blossom, and many go on to establish their own research group. To aid this process, and to foster a sense of community among the best of Europe's young molecular biologists, the annual meeting of fellows at the end of their fellowship continues. At the meeting, fellows present their research, and network with their peers, building collaborations and friendships.

Though fellows receive only one expenses paid invitation, many are so enthusiastic about the meeting that they attend in subsequent years. In addition to the scientific presentations and special lectures the meeting generates a lively debate on topics as diverse as science and society, women in science, and academia versus industry. A popular component of the meeting is a talk given by the EMBO members that chair each session, entitled "My scientific biography and science".

fellows meeting 2001

The Fellows Meeting in 2001 took place on June 24 – 27 in Heidelberg, and for the first time included an associated media workshop. 50 fellows who started their fellowship in 1998 attended the meeting in addition to several fellows from previous years.

The distribution of areas of molecular biology presented by the fellows during the 2001 fellows meeting was as follows:

Gene Expression	**8%**	**Plant Biology**	**6%**
Developmental Biology	**8%**	**Immunology**	**6%**
Structural Biology	**26%**	**Microbiology**	**4%**
Cell Biology	**34%**	**Neurobiology**	**8%**

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www.embo.org/projects/fellowsnet/index.html

special lectures

Gottfried Schatz,
President of the Swiss Science and Technology Council and EMBO member

"What is holding back science in Europe?"

Tim Hall,
European Commission, Brussels, Head of Unit Policy Aspects in the Health Sector (Quality of Life Programme)

"The 6th Framework Programme"

Peter Goodfellow,
GlaxoSmithKline, UK,
Senior Vice President, Discovery

"Science and Industry"

Scientific biographies

Denise Barlow,
Institute of Molecular Biology,
Austrian Academy of Sciences, Salzburg

Hinrich Gronemeyer,
IGBMC, Strasbourg, France

Karin Mölling,
Institute of Medical Virology,
Zürich, Switzerland

Mike Owen,
ICRF, London, UK

Luis Serrano,
EMBL, Heidelberg, Germany

Participants of the EMBO Fellows Meeting 2001

the associated media workshop, June 27, 2001

EMBO's interests in improving the relationship between science and society extend to improving the way in which scientists and the media interact. An important element of this is the manner in which scientists communicate their research during interviews and documentaries. Communication of science to a lay audience or to the media is largely neglected in a scientist's training. EMBO feels it is important for young scientists to learn how to communicate with the media, and, equally importantly, to understand how the media work. For this reason a media workshop was incorporated into the Fellows Meeting, and all fellows (both past and present) for whom EMBO has contact information were informed and invited to participate in the workshop. EMBO invited four journalists, Holger Breithaupt, David Derbyshire, David McNab and Vivienne Parry, to conduct the workshop.

David Derbyshire had circulated among the fellows during the meeting, identifying those who, on the basis of their research, would be interesting to interview during the workshop. These fellows were interviewed by him (in a mock newspaper interview) and by David McNab (in a mock TV documentary interview).

The interview session was arguably the most entertaining and instructive part of the workshop. At the beginning of the session, Vivienne Parry, David Derbyshire and David McNab described the type of communication and manner of behaviour necessary to communicate ideas in their respective media (tabloid press, broadsheet press and TV documentary).

Before performing the mock documentary interview, Vivienne Parry and David McNab presented a role-play in which David McNab (playing the scientist) demonstrated in exaggeration some frequently made errors. The EMBO fellows who were interviewed and the audience found it an educating experience.

lessons learnt

If one thing bothers scientists more than anything else when communicating their research to journalists or the public, it is simplification and reduction. These, however, are absolutely vital

processes in the transformation of scientific information into information that a lay public can understand. The invited journalists impressed on the young scientists that simplifying for the sake of clarity should not be considered lying, and that neglecting details or giving broad generalisations was more effective than elaborating the intricate inconsistencies that characterise the biological sciences. Metaphors and comparisons are extremely useful aids in this respect. As expected, the language used by the fellows interviewed was sometimes too scientific, but unforgiving and persistent interviewers eventually turned the scientific communicators into communicators of science...

feedback on the meeting

According to a questionnaire, almost without exception the fellows found the workshop useful, and thought that it should be repeated in coming years. In general, the fellows much appreciated the opportunity to discover how the media obtain their information and turn it into the product that the public reads, hears or sees.

talks presented by invited journalists at the media workshop

Holger Breithaupt, EMBO *reports*:
Blame the press! Is there such a thing as journalistic ethics?

David Derbyshire, The Daily Telegraph newspaper, UK:
Science reporting at a national newspaper – how stories develop and are reported.

David McNab, BBC TV, UK:
The scientific documentary

Vivienne Parry, BBC TV, News of the World (tabloid newspaper, UK):
What the public want to know, and when they want to know it.

Together with the EMBO fellowships EMBO courses and workshops provide a good training opportunity for young scientists in and from Europe.

In addition to the Fellowship Programmes, the EMBO and EMBC annually provide funds for approximately 20 practical courses on a wide range of emerging methods in different areas of molecular biology, and a further 20 workshops at which experts on a given topic meet to discuss progress in their area.

The EMBO Course Committee (see page 75) meets twice annually to decide on the courses and workshops that EMBO will support. Some of these are spontaneously proposed; others are invited when the Course Committee or the EMBO staff identify a course that would be a useful addition to the calendar of molecular biology events in Europe.

courses

The aim of the practical courses is to ensure that new methods are rapidly disseminated among interested European scientists. New methods are given preference over established ones. In this way, EMBO courses act as an early catalyst in transferring new methods to a broad number of European laboratories. Generally, 20 scientists participate in a practical course. As the attendees come from a wide range of countries, the impact of the course is amplified upon their return to the home laboratories. You will find a list of courses for the years 2001 and 2002 on pages 112 and 118 respectively.

Courses are also a useful way of making new contacts and developing collaborative networks in molecular biology throughout Europe. All participants are asked to complete an evaluation form of the practical course. This, in conjunction with the report by the course organizers, is considered by the Course Committee when deciding whether a course should be repeated.

lecture courses

A second type of course, included in this programme, is one that moves away from the laboratory and into the lecture hall. A large number of students at an early stage in their career participate in these meetings, which either take place in a summer school environment such as Spetses Island in Greece, in conjunction with FEBS, or in peripheral and new member states in the EMBC. The lecturers are experts from other parts of Europe, and the format ensures that up-to-date information is provided to those attending.

www.embo.org/meetings/support.html

workshops

EMBO workshops today are characterised by a combination of high-level scientific participation, timeliness and scope. Their multidisciplinarity brings together scientists from different fields of molecular biology who would not normally meet and exchange results. There are approximately 20 workshops annually, held in a wide range of EMBC member states.

One particularly interesting workshop, which has recently been added to the annual calendar, is the EMBO Members Workshop, entitled “Frontiers of Molecular Biology.” The programme of the meeting, which is held in a different country each year, is determined by the previous year’s newly elected EMBO members. As such, it is diverse in topic but constant in its high quality. The meeting introduces the new members to the organization. It also provides a unique opportunity for scientists in the region in which the meeting is held to hear presentations on a wide range of subjects. The style of the meeting differs from the general trend in molecular biology, where narrowly defined topics are discussed in great detail.

This meeting also provides an opportunity for all the EMBO members to discuss the organization and to provide input for future actions that EMBO should undertake. You will find two lists of workshops one for the years 2001 and one for 2002 on pages 113 and 116 – 117.

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supporting young researchers

The EMBO Young Investigator Programme supports researchers in the Life Sciences who have been independent for not more than three years. It can be difficult for young scientists at the start of their independent research careers to obtain funding, because they do not have long track records, a prerequisite to receiving any kind of grant. The extra exposure afforded by membership in the EMBO Young Investigator Programme should help the Young Investigators to win additional funds on their own and to give the selected young scientists an advantage through the recognition by EMBO. For the moment this leverage is a key aim of the programme. An award of EUR 15 000 per year is offered in most EMBC member states for the three year membership. The EMBC provides the funding for the administration and networking aspects of the programme.

EMBO has created a fund that provides additional funding for the selected Young Investigators where deemed necessary by the EMBO selection committee. This extra money could go towards paying a post doctoral fellow, a technician, equipment or anything else that would help the new laboratory. The EMBO Council has started the fund with a contribution of EURO 1 500 000. EMBO is currently seeking additional contributors to support this fund.

The programme has 78 members in 17 European countries (see pages 106 – 110) from two rounds of selection. The EMBO Young Investigators meet once per year at the EMBL. The meeting provides an opportunity to network and establish collaborations.

50 young investigators attended the first EMBO Young Investigator Meeting in July 2001.

www.embo.org/projects/yip/index.html

the programme offers:

- a yearly meeting: the meeting is held at the EMBL, Heidelberg (Germany)
- EMBL core facilities: privileged access
- EMBO mentorship: an EMBO member chosen by the Young Investigator serves as his/her mentor
- Young Investigator Lecture: support for lectures held by EMBO Young Investigators
- Networking: EMBO provides funds that support the networking among EMBO Young Investigator groups.
- PhD course: a self-organised course for the students of the EMBO Young Investigators
- EMBO Members Workshop: Young Investigators can participate once in an EMBO Members Workshop.
- EMBO *reports*: Young Investigators receive an invitation to write a review article for EMBO *reports*.
- Increased visibility: National and international granting agencies are informed of the awardee's status as an EMBO Young Investigator. This is also highlighted in communications.

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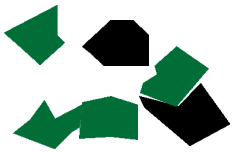
Anne Seller (middle) and Les Grivell are
EMBO's contact for the Electronic
Information Programme

E-BioSci & ORIEL

The EMBC incorporated electronic information and publishing services into its General Programme in July 2000. At present, activities falling within this programme consist of the E-BioSci information platform/network and the ORIEL project. The latter, while acting as the research arm of E-BioSci, also aims to contribute to long-term development of tools that will help research communities to manage large, complex, multimedia datasets and to navigate through an increasingly intricate and potentially confusing information landscape. Both E-BioSci and ORIEL are currently supported by grants from the European Commission which, subject to positive evaluation of progress, will extend until the end of 2004.

Ideas for the E-BioSci platform grew within EMBO out of exchanges with senior scientists at the National Institutes of Health in the US, and a series of subsequent discussions with a large number of other interested parties in Europe led to the formulation of the present initiative. The wide interest currently shown in the project by the academic research community, commercial and learned society publishers, libraries and a number of other European organizations, has demonstrated that there is a need for the services envisaged. At the press event held on September 6, 2001 to announce the launch of the project, Commissioner Busquin emphasized this point and stressed the importance of the project's potential contribution to the provision of a research information network within the European Research Area.

www.embo.org/projects/eip/index.html



gateway to the life sciences

As an information platform, E-BioSci aims to provide effective user access to different types of scientific information, including journal full text and molecular, genomic and multi-dimensional image databases. The current network members combine the skills and content already present, or being established in research institutions at various locations in Europe. Current plans for technical implementation focus on the establishment of an extendible federated network of resources, capable of communication via a common, open source protocol. This network will offer multiple entry points for end users, allowing them to search and retrieve information held anywhere across it, using different European language formats for their queries and recovering documents and files in any of these languages.

digital solutions

Given the complexity of the biological knowledge base, full implementation of the E-BioSci project will depend on the solution of outstanding, complex issues that will allow for more effective integration of bibliographic with sequence and sequence-related information and with other media. The ORIEL project aims to provide such solutions. The partners will work together with other information providers to devise and promote protocols that permit effective data retrieval and representation, where possible through the construction of interfaces that meet the needs of individual users. It is expected that many of these tools will be generic in nature, with potential for application in other data-intensive areas. The E-BioSci platform will provide rigorous and systematic testing and evaluation of individual ORIEL components by different types of users with a wide range of demands and expectations.

E-BioSci partners

EMBO (coordination)	
CINES	France
CSIC	Spain
DIMDI	Germany
EBI-EMBL	United Kingdom
EDINA	United Kingdom
ingenta plc	United Kingdom
INIST	France

ORIEL partners

EMBO (coordination)	
CINES	France
CNR-IBC	Italy
CNR-ITB	Italy
CSIC	Spain
EBI-EMBL	United Kingdom
ICGEB	Italy
IGH	France
ingenta plc	United Kingdom
INRIA	France
LIRMM	France
University of Montpellier	France
University of Oxford	United Kingdom

EMBO additional activities

the EMBO journal
EMBO *reports*
science & society
the EMBO gold medal
EMBO lectures
EMBO sectoral meetings
EMBO world programme
european life science forum

EMBO – a scientifically driven organization.

EMBO's activities fall into two categories: those which are part of the General Programme, supported by the EMBC, and those initiated and developed by EMBO as an independent organization. These additional activities are funded by the profits from the EMBO Journal.

Volker Wiersdorff and Astrid Lunkes are editors with the Journal. Astrid started in 2001.

Fiona Panayi (top), Lee Roberts-Baldwin (top left), Karen Thompson (right) joined the Journal team in December.

The EMBO Journal was launched in 1981, and is published for EMBO by Oxford University Press. In keeping with the general principles of EMBO, articles covering all areas of molecular biology are considered for publication in the Journal, and the selection of papers is based purely on scientific merit. The editors are supported in the selection by leading scientists throughout the world (in 2001, approximately 4000 individuals acted as referees) and by an active Advisory Editorial Board composed of EMBO members.

Although the number of papers submitted annually has grown substantially, reaching more than 2500 in 2001, the quality of the Journal has always remained very high by all criteria, making it a flagship for European molecular biology. Currently, its impact factor is 13.999, making it one of the most cited journals in the life sciences. The Journal is published twice monthly, and is also available in electronic form. Since 1998 the Journal has been extending its contents by including mini-reviews written by new EMBO members.

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Executive Editor

Iain Mattaj, EMBL
Executive Editor

Volker Wiersdorff
Editor

Astrid Lunkes
Editor

Frank Gannon
Associate Editor

Herbert Jäckle
Editor-in-Chief

Administrators
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Lee Roberts-Baldwin
Karen Thompson
Lauren Arnold (London)
Susan Gailor (London)

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The success of the EMBO Journal prompted EMBO to start another publication that would fill new niches created by the accelerating progress in molecular biology.

After careful consideration of various options, the organization launched EMBO *reports* in July 2000, with Frank Gannon as Senior Editor. EMBO *reports* is broadly centred on molecular biology, but its article formats are distinct from and complementary to those of the EMBO Journal. EMBO *reports* is divided into three sections: Science & Society, Reviews, and Scientific Reports. The dedicated input of the respective editors has produced a monthly journal that differs from others in many ways, and that represents a useful addition to the scientific literature.

The editorial team in Heidelberg; from left to right: Susan Owens, Marlies Otter-Nilsson, Holger Breithaupt, Caroline Simpson and Christine Blaumueller

the science & society section

This is an exciting time for scientists. Never before in history have science and technology had such an influence on the world that we live in. The biological sciences in particular are having a strong impact on society as they change and improve medicine, agriculture and, last but not least, our view of


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Golgi matrix protein GM130 interacts with rab 1b
Selectivity and toxicity of ribosomal antibiotics
Doppel is dispensable for prion pathogenesis


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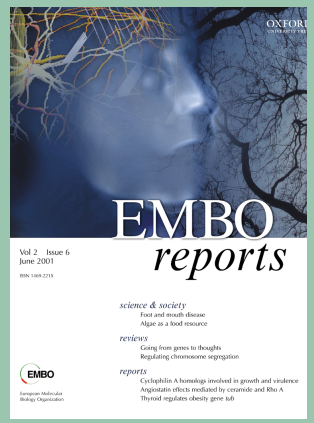
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Metaxin's new role in TNF-induced apoptosis
Novel stop codon readthrough mechanism in Drosophila


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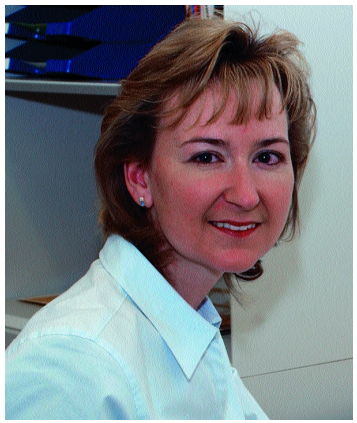
Susan Owens joined the EMBO *reports* team in 2001 as Assistant Editor.



the living world itself. But as with all new technologies, there are fears about and resistance to their use, which make it necessary for scientists to talk to the public and listen to their objections.

The Science & Society section of EMBO *reports* provides a platform for such a dialogue. It features analysis and viewpoint articles from scientists and professional journalists about the impact of molecular biology on society, politics and business and vice versa. From time to time, the section prints interviews with leaders in the scientific world, since it is more interesting and entertaining to hear the news first hand. To ensure an ongoing dialogue, EMBO *reports* prints correspondence commenting on previously published articles. Finally, the section reviews books that make a contribution to this important dialogue between science and the public.

Overall this section provides a European perspective on current debates, and allows for improved information flow between all parties that are involved directly or indirectly in science today.

the reviews section

The aim of the Reviews section is to bring together the latest information on a variety of timely topics, in the form of concise reports that are interesting to, and easily understood by, the molecular biology community at large.

Articles in this section fall into three broad categories: meeting reports, literature reports, and reviews. Meeting reports cover a wide range of workshops and conferences held throughout the world, and attempt to identify emerging trends within the scientific area covered by the meeting. Rather than providing details on all of the issues that are raised by the speakers at the meeting, these reports are lively expositions that distill the discussion at the meeting down to the essential findings that are shaping the future course of that field. Literature reports are brief articles that serve to highlight significant publications in a variety of journals, pointing out their contribution to the field. EMBO *reports* is particularly interested in covering articles whose full impact on molecular biology may not have been immediately appreciated by the entire community because of

their appearance in specialist journals. Reviews in EMBO *reports* are relatively brief, and cover important developments in an accessible manner. A special category of these reports is the "Concept", a type of review that allows more than the usual speculation, based on thoughtful analysis of the current literature. It is the hope that these articles, in particular, will spark the kinds of interdisciplinary discussions that often lead to the most unexpected discoveries.

the scientific reports section

The final section of EMBO *reports* features short Scientific Reports. These articles cover all areas of the molecular life sciences and are characterized by their quality as well as their interest to readers who are not specialists in the topic. The refereeing process is rapid and expert, with early online publication of accepted reports to facilitate speedy dissemination. The papers are sharply focused, and hence, shorter and different from those published in The EMBO Journal. The overlap between the Editorial Boards of The EMBO Journal and EMBO *reports* is another guarantee that this is a location for high quality papers. In this and other respects, EMBO *reports* and The EMBO Journal are highly complementary.

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connecting the public with science

EMBO's programme in Science & Society continues to grow and respond to scientific and technological developments that affect or could affect society. Aware of the ever growing need for dialogue, EMBO increasingly invests its efforts in organising initiatives that enable bi-directional communication between scientists and the public. As well as supporting molecular biology in scientific terms, EMBO develops and promotes activities that support the communication and understanding of molecular biology in society.

The engagement of EMBO in Science & Society in 2001 ranged from outreach – a local pilot project called GENAU! that went out to the public (Science in the pub) – to a teachers workshop in molecular biology. EMBO is becoming increasingly engaged with different sectors of society in its efforts to integrate science into society. The EMBO Science & Society Committee (see page 75) plays a vital role in planning the year's calendar of events, and in keeping a close eye on future developments.

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joint EMBO/EMBL
science and society conference

The most prominent annual event in the EMBO Science & Society calendar is an interdisciplinary joint conference co-organised with the EMBL. In 2001, the title of this meeting was "From Genomes to Cures." Scientists, patient representatives, science communicators, science historians, teachers, journalists, and ethicists convened in Heidelberg to discuss the contribution of the deciphering of the human and other genomes to improved healthcare, treatment and ultimately the cure of diseases. In the course of the four principal sessions (reassessing the implications of genomics for biomedicine, personalised medicine, gene therapy, and animal models in biomedical research) it became clear that we are at the beginning of a very long journey towards a more rational approach to disease treatment and cure. The tantalising hopes and expectations that genomic and proteomic analyses bring are often the vault of „hype“, but, as the conference demonstrated, not all hype is unjustified; exciting developments are nearing application. The final session of the meeting was devoted to communication and education. Several admirable initiatives to improve biology education in schools and to update teachers in their knowledge of the subject were presented. The conference will be followed in 2002 by the joint EMBL/EMBO conference "Infectious Diseases: Challenges, Threats and Responsibilities," in Heidelberg on November 8 – 9, 2002.

Engaging discussions took place at the Science & Society Meeting "From Genomes to Cures" .

EMBO members
science & society meeting

EMBO's annual associated meeting on science and society, held at the same time as the Members Meeting, continues to address topics of general interest. In 2001, the meeting was held in

Crete, under the title "The Economic Impact of Basic Research". Invited speakers Alessio Vassarotti (EC, Brussels), Andrew Webster (University of York, UK) Alan Williamson (Merck) and David Firn (Financial Times, London) presented the diverse ways in which research makes its way to the marketplace and hospital beds, and the costs and benefits involved in this process.

On October 12, 2002 in Oslo, the subject to be discussed at the equivalent meeting will be genetically modified foods under the title "From biotech to shopping basket; genetic modification and global food production."

EMBO and biology teaching

EMBO holds a strong belief in improving and maintaining biology education as a vital part of enhancing public dialogue and awareness in the life sciences. To this end, EMBO, in collaboration with EMBL and local interests, organised a pilot workshop in molecular biology for German biology teachers. The workshop acted as a model for Europe-wide expansion in coming years.

background

It had long been identified as an aim of the EMBO Science & Society project to reach teachers and schools, and more specifically to organise a continuing education symposium in the latest results and methods of molecular biology. This was realised in 2001 in collaboration with Steffanie Denger (EMBL) and local partners (Thomas Schutz; Heidelberger Life Science Laboratory, and Peter Gilbert; Oberschulamt Karlsruhe). Over 90 secondary school biology teachers throughout Germany attended the symposium, the themes of which (BSE, genetic diseases, stem cell research and molecular diagnosis) set the frame in which experiments and other teaching resources were presented. The symposium received substantial financial support from the Robert Bosch Stiftung, Stuttgart, to which EMBO expresses its thanks.

product and follow-up of the symposium

The symposium was highly acclaimed by the teachers as an invaluable opportunity to gain an insight into molecular

biology research and resources available for teachers. An in-depth report has been written for circulation. It is also available on the Internet and supplied bound to anyone who requests it.

GENAU! "science in the pub"

GENAU! is an experimental initiative to bring local life scientists and the public together in congenial settings to stimulate a dialogue on topics of public concern and interest.

Three GENAU! meetings took place in a local restaurant in Heidelberg in 2001. The topics were, respectively, BSE (invited scientists: Konrad Beyreuther and Gerd Multhaup, ZMBH) the human genome; chances and dangers (invited scientists: Matthias and Sabine Hentze), and Stem Cell Research – Curse or Cure? (invited scientist: Michael Punzel, University of Heidelberg).

Participants at the meetings were very enthusiastic about the initiative, and clearly valued the opportunity to meet and talk with local scientists. EMBO also learnt a great deal about communicating and establishing a forum for dialogue with the public at close quarters. GENAU! was judged a very worthy pursuit, but at the same time it is extremely labour-intensive.

EMBO wishes to share the experiences gained from this initiative with others who wish to do the same, and greatly welcomes enquiries from the membership and elsewhere.

report for teachers workshop, EMBL, Heidelberg, July 6 – 8
www.embo.org/projects/scisoc/download/lehrertagung_2001_bericht.pdf

GENAU!
www.embo.org/projects/scisoc/genau.html

Approximately 100 mostly female scientists from all over Europe participated in the discussions during a meeting called "The Glass Ceiling for Women in the Life Sciences" organised by EMBO in June 2001.

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The Glass Ceiling for Women in the Life Sciences

EMBO has worked for almost 40 years on improving the quality of science and scientific training throughout Europe. Recently more attention has focused on the general lack of representation of women, particularly at the higher levels of the career structure. In June 2001 a meeting called "The Glass Ceiling for Women in the Life Sciences" was organised by EMBO in Heidelberg, Germany. Approximately 100 mostly female scientists from all over Europe participated in the discussions on the reasons for the low representation of female researchers in the higher ranks of science. A booklet summarising the meeting, and a complete transcript are available on the web site. Additional reports on the meeting were published in EMBO *reports* and TIBS.

Arising from discussions that took place at and after the meeting, EMBO prepared a document that outlines the basis for supporting women in the life sciences. The EMBO Council adopted the document as the "EMBO Position Paper on Women in the Life Sciences." The Council also endorsed a fellowship programme to support the return of scientists who have taken a break of more then one year in their research careers for child care. It set aside funds for fellowships of a two-year duration. In contrast to other fellowships given by EMBO, the applicants are not required to change location. Otherwise, the usual EMBO standards regarding scientific excellence will be applied in the selections. A first call for applications is for August 15, 2002.

EMBO has taken the meeting as an incentive to review its performance regarding the participation of women in EMBO activities:

- Of the EMBO membership, only 12.6 percent are female. Though relatively low, the figure is in fact higher than the average representation of women in senior academic positions throughout Europe.
- The EMBO Council was in 2001 composed of 14 men and one woman. Of the six standing committees, three are currently chaired by women, 20 – 30 percent of the members of these commitees are female.

www.embo.org/projects/women/index.html

The EMBO Long Term Fellowship Programme has recently been reviewed internally. A detailed report on female participation in the EMBO Long Term Fellowship Programme has been published in EMBO *reports*. A significant difference in the success rate of male and female applicants was discovered. In the years 1996 – 2000, the female applicants were, on average, 20 percent less successful than the males. A thorough investigation of the reasons for this bias did not yield a conclusive result: it was found that women had to have a larger number of publications than the male cohort. On the other hand, the male applicants needed to have a higher cumulative impact factor. All of the selection committee members (male and female) consistently scored the male applicants higher than the females. These facts have been brought to the attention of the selection committee.

Similar meaningful statistics are not yet available for the EMBO Young Investigator Programme, as there were only two rounds of selection so far. In the first round female applicants have been marginally more successful than male applicants, whereas in the second round female applicants were 8.8% less successful than their male competitors. Whether these findings are statistically relevant will remain to be seen.

The EMBO courses and workshops have been reviewed for the year 2001. EMBO had asked course organizers to provide data on the numbers of male and female participants and speakers. On average 20 percent of the speakers and 46 percent of the participants are female. All of the events had at least one female speaker. More detailed statistics can be found on page 111.

references

Losing them is not an option. (2001) EMBO *reports*, 8, 651–655

Searching for discrimination. (2001) EMBO *reports*, 8, 655–657

EMBO Position Paper: Working together to achieve equal representation of men and women in the life sciences. (2001) EMBO

The winner of the EMBO Gold Medal 2001 was Matthew Freeman,Cambridge, UK. He was presented with the medal at a ceremony held during the EMBO Members Meeting in Crete in October 2001. The award was made in recognition of his outstanding contributions to the field of cell signalling particularly in the context of developmental biology.

This award is one of the ways in which the EMBO Council decided to highlight the quality of European molecular biology. The prize – a gold medal accompanied by a cash award – is awarded annually to a scientist under 40 years of age. Since 1986 the Gold Medal has had many illustrious recipients. Winners are invited to write a review of their scientific research for publication in the EMBO Journal. In addition, in recent years, the winner has been requested to deliver the EMBO Gold Medal Lecture at the annual EMBO Members Workshop. In this way the quality work of young European scientists is brought to the attention of a larger audience and serves as a model for scientists in Europe. It exemplifies the accomplishments of European scientists to a world-wide audience.

EMBO gold medal winners

1986	John Tooze (Heidelberg, D)
1987	Barbara Pearse (Cambridge, UK)
1988	Antonio Lanzavecchia (Basel, CH)
1989	Hugh Pelham (Cambridge, UK)
1990	Erwin Wagner (Vienna, A)
1991	Patrick Stragier (Paris, F)
1992	Carl-Henrik Heldin (Uppsala, S)
1993	Jim Smith (London, UK)
1994	Paolo Sassone-Corsi (Strasbourg, F)
1995	Richard Treisman (London, UK)
1996	Enrico Coen (Norwich, UK)
1997	Dirk Görlich (Heidelberg, D)
1998	Adriano Aguzzi (Zürich, CH)
1999	Konrad Basler (Zürich, CH)
2000	Christof Niehrs (Heidelberg, D) and Daniel St.Johnston (Cambridge, UK)
2001	Matthew Freeman (Cambridge, UK)

www.embo.org/press/freemanpr.pdf

interview with Matthew Freeman, EMBO gold medal winner 2001

EMBO What is your field of research?

Freeman: I work on intercellular signalling, trying to understand how cells communicate with each other. This is a fundamental property of cells and directs their behaviour. Our goals are twofold:understanding how animals develop and learning what goes wrong with cell signalling in disease.

EMBO: What do you find fascinating about your research?

Freeman: The best bits are those rare times when you actually understand something new and substantial. Most of the time what's fascinating is the balance between the incredibly specialised and detailed experimental models we work on and the bigger picture that we ultimately want to address. I feel strongly that in the end, the kinds of questions most scientists study are the kinds that non-scientists – even my children – find themselves asking. We just approach them in rather non-obvious ways.

Matthew Freeman,group leader at the MRC-LMB, Cambridge, England is this year's winner of EMBO Gold Medal.

EMBO: What does receiving the EMBO Gold Medal Award mean to you?

Freeman: Receiving the EMBO Gold Medal was a huge honour for me. Looking at the list of the previous recipients, it was a great group to join. The recognition of other scientists is very gratifying and the EMBO Medal is a nice mechanism for providing it. It is also a relief to be officially deemed to be youngish when one has just turned 40.

EMBO: Would you recommend young students to start a scientific career?

Freeman: Yes, but probably only if they have a slightly obsessive streak. I've really enjoyed my career so far but, if you are not fully committed, there are probably more comfortable and/or lucrative ways of spending one's life.

short cv Matthew Freeman

Date of Birth: June 16 1961

education

1983	University of Oxford BA (Hons), Biochemistry
1987	Imperial College, PhD, thesis title: gnu, a nuclear replication mutant of Drosophila

research posts

1987 – 1992	Postdoctoral Research Fellow, University of California, Berkeley
1992 – present	Scientific Staff Member, MRC-LMB, Division of Cell Biology
1997	Appointed to permanent scientific staff of MRC-LMB

EMBO lectures

EMBO puts great emphasis on the need for excellence. At the same time, it is also very aware of its mission to promote molecular biology in all of the EMBC member states. This sometimes requires special efforts to be made in order to stimulate molecular biology activities in particular countries.

Occasionally, it is not a geographical area that requires stimulation, but rather a new area of science in which molecular biology studies are becoming increasingly important.

Awareness of this aspect of the EMBO mission has led the organization to initiate an EMBO Lectures Programme: organizers of national meetings or international meetings are invited to select an EMBO member as a plenary lecturer at one of the sessions of the meeting. EMBO provides the funds to meet the lecturer's costs. This is advantageous to both sides: the organizing committee receives a high quality speaker, and EMBO and its activities are brought to the attention of the largest possible number of scientists.

Frank Grosveld
The Norwegian Biochemical Society Winter Meeting 2001, Beitostølen (N)
January 19 – 21

Michael Ferguson
Meeting on Synthesis and trafficking of glycolipids and glycolipid anchored proteins, Les Diablerets (CH)
March1 5 – 17

Christiane Nüsslein-Volhard
HGM2001 – 6th International Annual Human Genome Meeting, Edinburgh (UK)
April 19 – 22

Susan Gasser
27th FEBS meeting, Lisbon (P)
June 30 – July 5

Renato Paro
17th European Drosophila Research Conference, Edinburgh (UK)
September 1 – 5

Walter Gehring
Congreso de la Sociedad Española de Genetica, Sevilla (E)
September 18 – 21

Adriano Aguzzi
30 Convegno FISV, Riva del Garda (I)
September 21 – 25

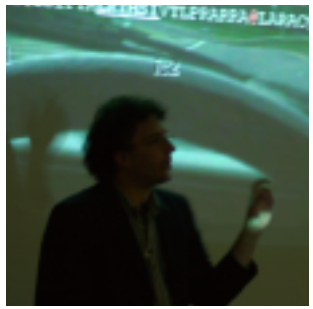
Luis Serrano
30th Annual meeting of The Danish Society for Biochemistry and Molecular Biology: From membrane to nucleus – signal transfer in the post-genomic era, Funen (DK)
October 1 – 3

Hartmut Michel
Structure and function of membrane proteins, The Galilee (IL)
November 4 – 7

www.embo.org/meetings/lectures/index.html

sectoral meetings

When EMBO was established over 30 years ago, molecular biology was viewed as a unifying approach to the study of biology. With time, the various fields that use molecular biology, have taken on their own specific characteristics. This has given rise, in some cases, to a greater loyalty to the particular field rather than the broader area of molecular biology.



As a result of these considerations, it was felt timely for EMBO to initiate a series of sectoral meetings to reinforce contact with specialist groups. The first of these, on Neurobiology, was held in 1999. In 2000, two further meetings took place: Plant Sciences (February 25 – 27, 2000) and Microbiology (May 12 – 14, 2000). A sectoral meeting on Immunology is planned for November 2002 in Lisbon.

Sectoral meetings serve a number of purposes. First, they renew and strengthen the contacts between EMBO and its members in a specific area. The very fact that the event takes place contributes in part to the goal, but some time is also set aside to describe the different activities of EMBO and how they involve the communities in the different sectors.

Furthermore, the meetings occasion a forward look into the future of molecular biology in a particular sector. The aim is to identify the trends that may dominate in the future, and the ways in which EMBO should react to these. This is also an opportunity for EMBO members to consider the future directions of their area of science, an important issue in relation to the future funding of those areas via the European Framework Programmes.

Another anticipated outcome is a consideration of the potential impact of new developments in a particular sector on society.

beyond europe

Although the E in EMBO stands for European, the organization has always acted in a way that respects the fact that the scientific world knows no such geographical boundaries. From the start of EMBO, its Long-Term Fellowship Programme, which is funded by the EMBC, has supported European fellows who worked outside Europe and scientists from around the world who wished to pursue a post-doctoral period in Europe. Some will be surprised to learn that 35 percent of the EMBO fellowships are used by those who wish to go outside Europe and approximately ten percent go to those who come from the rest of the world into the European area which is defined very widely within the EMBC. In recent years, globalization has drawn EMBO into an increased involvement in activities outside Europe. A major input to this was the co-ordination by EMBO of the EU funded programme EBNIC (The European Biotechnology Node for Interaction with China) which, for the past four years, has been engaged in building up contacts between the scientists in both communities through workshops, visits and the development of a website (www.ebnic.org). The contract, which had been prolonged without increased funding, ended on December 31, 2001. During the prolongation period the following activities were organised:

- workshop on “bioinformatics in the post genomic era” held in Shanghai in June 2001
- workshop on “proteomics” held in Zhuhai, China, November/December 2001
- sponsorship of travel for attendance at a Chinese meetings and visits to possible collaborating laboratories.

The activities in China through the EBNIC Programme will continue under the aegis of EMBO and indeed will be expanded upon in the coming years. In addition to the Chinese initiative, EMBO has also been an active adviser in the establishment of the Asia Pacific International Molecular Biology Network (A-IMBN), which is modelled on the success of EMBO in a similar heterogeneous cultural environment. This has

resulted in EMBO supporting plenary lectures in the region and in the joint delivery of a workshop in Singapore in October 2001. Support has also been provided for a session at an International Union of Biochemistry and Molecular Biology (IUBMB) meeting, which took place in South Africa in November 2001.

Considering all of these elements and, in particular, recognising the call for action by the European Commissioner Busquin to help establish a European Research Area that would be more accessible to scientists from outside Europe, the EMBO Council decided, in September 2001, to establish a World Programme. This Programme includes the following actions:

practical courses

The EMBO practical courses series has had a major impact on European science. It is obvious that the provision of such courses in other regions of the world would be of great benefit to the applicants. Such courses are also ideal locations for interactions between sci-

type of event & topic	organiser	location	dates
EMBO world programme course 2001			
RNA & Biotechnology	Qi-shui Lin	Shanghai, China	September 10 – 22
EMBO world programme workshop 2001			
Fish as model organisms in the genomic era	Suresh Jesuthasan Phil Ingham	Singapore	October 24 – 26
EMBO world programme plenary lectures 2001			
Buenos Aires Plant Biology Lectures	David Baulcombe	Buenos Aires, Argentina	October 17 – 19
4th Conference of the Asia-Pacific International Molecular Biology Network (A-IMBN)	Christof Niehrs	Taipei, Taiwan	November 3 – 4

entists from different cultures and frequently give rise to long term friendships and collaborations. In 2002, five jointly funded practical courses (ICRO/UNESCO/EMBO) will be supported. See page 119 for further details.

workshops

For 30 years, EMBO has delivered, annually, a series of high-class workshops that have contributed tremendously to the interaction of European scientists. Within the World Programme, this action will be expanded geographically and will build on the successes of the workshops which EMBO organized within the context of the China programme.

lectures

Everybody who has organized a major meeting realizes that it involves the significant task of identifying and finding the funding for plenary lecturers. EMBO, through its World Programme, is willing to provide EMBO plenary lecturers at meetings of a significant size, which are held worldwide. As is the case for the EMBO lecture programme in Europe, the speaker chosen is an EMBO member and information about EMBO, its World Programme and Europ-

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ean science in general is disseminated. A summary of the activities which were carried out in 2001 can be seen in the table on page 59.

fellowships

The EMBO Long-Term Fellowship Programme, as indicated above, is open to scientists worldwide. Experience with the EMBO short-term fellowships has shown that a more targeted programme for visits would also be very useful either to allow new techniques to be learned and transferred to the scientists from other communities, or to facilitate the continued interactions which one would wish following workshops. Keeping this in mind, the World Programme fellowships were formally launched in 2002 with the aim of furthering collaboration and interaction. Preference will be given to applicants from developing countries and emerging economies and the funding will be available for a six to nine month period. The annual closing date will be May 1.

screening service

It is also the view of EMBO that a major service to European scientists would be the screening of applicants from countries outside of Europe who apply for positions in European laboratories, as it is difficult to evaluate the qualifications of those applicants. Through the extensive contacts that EMBO is building up worldwide, it is planned to ensure that a reliable opinion can be provided by an expert who is familiar with the scientific community of the applicant. Further details will be announced as the service develops.

international advice

EMBO has already been called upon to provide advice to a number of molecular biology organizations in Europe. In the recent past it has expanded this to a world-based service. The start up of the Asia Pacific International Molecular Biology Network (A-IMBN) is but one example of this. Information and analysis which could be of use to scientific organizations and governments worldwide will be provided within the context of the World Programme. The fact that EMBO has previously carried out assessments of the scientific activities in the area of molecular biology in Austria, Finland and Poland is another example of the potential role for EMBO in providing such a service.

In 2002 EMBO enhanced its communication activities through active press work and other initiatives.

press conferences & press releases

The European Commission and EMBO officially launched the E-BioSci Project on September 6, 2001 in the presence of Commissioner Philippe Busquin at a press lunch in Brussels. The lunch was preceded by a presentation of the EC-funded E-BioSci project by Frank Gannon, and the project's coordinator Les Grivell. For this press event EMBO published a press release and two leaflets explaining E-BioSci and ORIEL and the benefits these offer to the scientific community. The event was widely covered by the international press.

A second press conference took place in November 2001 in the EMBO building, introducing the Science & Society Conference "From Genomes to Cures" to a broad range of journalists mainly from Germany. Speaking at this lively press conference were representatives from EMBO itself (Andrew Moore), research (Bernd Gänsbacher, Experimentelle Onkologie & Therapieforschung Klinikum r.d. Isar, Munich, Germany), industry (Sam Broder, Celera Genomics, USA) and patient groups (Ysbrand Poortman, European Association of Patient Organizations, Science and Industry, The Netherlands). The event was covered through reports mainly in German and Austrian newspapers and on radio.

Two press releases were distributed internationally to highlight the EMBO Gold Medal 2001 and its winner Matthew Freeman, group leader at the MRC Laboratory of Molecular Biology, Cambridge. One press release described in more detail Matthew Freeman's work in layman's terms.

A press release was also issued at the EMBC meeting in November 20001 in Heidelberg.

EMBO at conferences & meetings

EMBO's activities were further highlighted at different conferences and events. For example for the first time EMBO was present at the Biotechnica in Hannover (Germany) in October, informing an interested audience about its various projects. At two meetings concerning women in science – one in Brussels (November, 8 – 9 2001) and one in Cologne (November 1, 2001) –

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EMBO presented its activities in this area with a booth and posters.

special projects

For EMBO's project "Women in Science", several publications such as a flyer, a position paper and a follow-up booklet with interesting quotes from the "Glass Ceiling for Women in the Life Sciences" meeting were prepared as well as a poster for the new Restart Fellowships. This new fellowship was officially announced at a press conference in early 2002 which was covered by the international press. All of these activities were carried out in close co-operation with Gerlind Wallon.

EMBO homepage

One of the major communication initiatives in 2001 was to restructure the website. The site was re-launched in November displaying a user-friendly look and structure. For each programme there is a separate section, providing detailed information about it and its on-going activities. A list of events at www.embo.org/meetings/forthcoming.html shows EMBO's ongoing activities such as meetings, workshops, and courses all year round. As a new service you may also submit your own scientific meetings here and advertise them for free. This list is updated automatically, providing the scientific community with up-to-date information on forthcoming scientific meetings and events. EMBO continues to provide its positions vacant page at: www.embo.org/jobs/positionsvacant.html Feel free to place your vacancy here free of charge for six months. The new EMBO website receives a lot of positive feedback from the users.

EMBO newsletter service

In October, EMBO started its new newsletter service. Four to six times a year, the newsletter is sent out to EMBO members by e-mail, informing its readership about EMBO's initiatives and activities in brief. Detailed information on activities can be found on the website. The newsletters are also available on the EMBO website and can be downloaded as PDFs (www.embo.org/organisation/newsletters/).

For 2002 EMBO plans to show the exhibition Gene Worlds – Focus on food designed by the Food Museum Alimentarium in Vevey (CH) in Heidelberg and Oslo.

For different programmes and projects short information leaflets were produced and have been distributed.

ELSF mission

The European Life Sciences Forum (ELSF) is a platform established in 2000 by EMBO, EMBL and FEBS (Federation of European Biochemical Societies) with the aim of becoming the voice of the life sciences community. ELSF membership now comprises 12 members and associated members, organizations representative or supportive of the life sciences, biotechnology and biomedical research communities in Europe. The mission of the Forum is to increase the visibility and impact of these communities in the public and policy-making arenas, to advance research and to improve scientists' positions in European society.

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influencing the new EC framework programme

Initial efforts of ELSF were directed towards influencing the new Framework Programme of the European Commission (EC). The drafting of the Sixth Framework Programme (FP6), which will cover the period 2003-2006, is drawing to a close. In March 2002 the Commission launched a "Call for Expression of Interest" to participate in research actions for topics in thematic priorities. This call is an indication that the EC is seeking the opinion of scientists. It is also an opportunity for the scientific community to contribute to the preparation of the first calls of FP6 and to the definition of the content of the specific work programme. Several aspects of the FP6 proposal further demonstrate that the voice of the scientific community was heard and, to some extent, taken into consideration. ELSF contributed to this process through the provision of recommendations and through personal contacts with officials of the EC and members of the European Parliament.

The Forum is now recognised as a source of information and advice, and

is seen as a “multiplier”, which, through its members, can help to disseminate amongst the community information on EU policies and programmes. ELSF is thus in a position to establish a privileged partnership with the European Institutions.

future developments

One of the concerns voiced by both the EC and society at large, is the lack of engagement of scientists in public debate. Concerned about the situation, funding and public authorities now expect scientists to address societal issues and public concerns in fulfilment of their part of a research contract. ELSF aims to get involved in public and policy-making debate by responding to public consultations and through the establishment and propagation of the scientific community’s positions. For instance, ELSF and EMBO are planning a joint workshop on scientific careers in autumn 2002. In this context, securing the engagement of individual scientists and scientific organisations is also a major challenge for ELSF, and a pre-requisite to the further development of the Forum.

List of the members and associated members of ELSF

European Arteriosclerosis Society-EAS

European Cystic Fibrosis Society-ECFS

European Federation of Biotechnology-EFB

European Federation of Pharmacological Societies-EPHAR

European Molecular Biology Laboratory-EMBL

European Molecular Biology Organisation-EMBO

European Life Scientist Organisation-ELSO

European Plant Science Organisation-EPSO

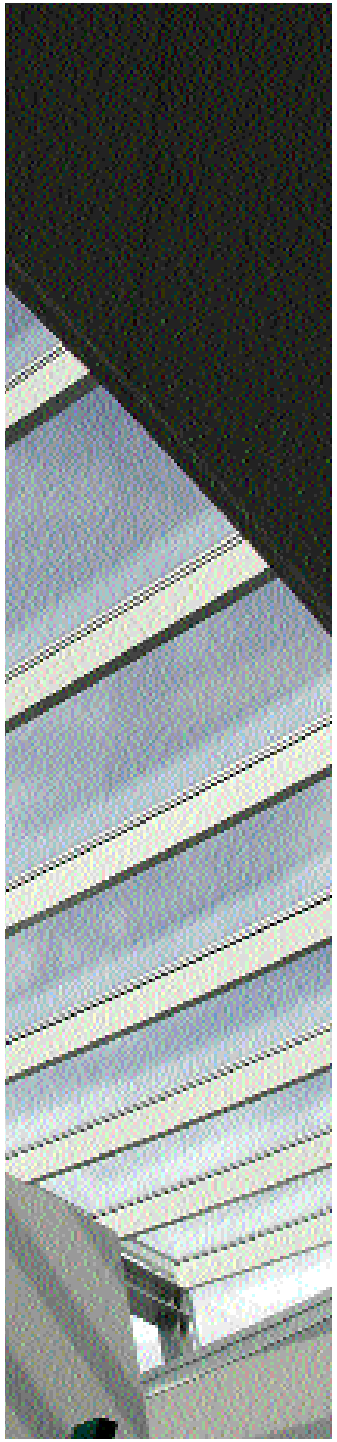
European Society of Gene Therapy-ESGT

Federation of European Biochemical Societies-FEBS

Federation of European Microbiological Societies-FEMS

Federation of European Neuroscience Societies-FENS

The European Science Foundation (ESF), an association of 67 organisations (research councils, academies and funding agencies) in 24 European countries, has a status of observer within ELSF.



annex

EMBO | staff in heidelberg as of march 2002

Eilish Craddock (right), Personal Secretary to Prof. Frank Gannon and Kerstin Hiester (left), Administrator

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council members

year(s) elected	name	country & town
1997,2000	Edoardo Boncinelli	I-Milan
2001	Erik Boye	N-Oslo
1998,2001	Brian Clark	DK-Aarhus
2000,2002	Antonio Coutinho	P-Oeiras
1997,2000	Francois Cuzin	F-Nice
2000	Susan Gasser (Vice-Chair)	CH-Geneve
2002	Ingrid Grummt	D-Heidelberg
1998,2001	Herbert Jäckle (Chair)	D-Goettingen
2002	Carlos Martinez-A.	E-Madrid
1999,2002	Cesare Montecucco	I-Padova
2001	Sean Munro	UK-Cambridge
2000	Paul Nurse	UK-London
1999,2002	André Sentenac	F-Gif-sur Yvette
2000	Giora Simchen	IL-Jerusalem
1998,2001	Peter van der Vliet	NL-Utrecht

ex officio:

Christiane Nüsslein-Volhard	(Secretary General of EMBO)
Julio Celis	(President of EMBC)
Frank Gannon	(Secretary General of EMBC and Executive Director EMBO)
Fotis Kafatos	(Director General of EMBL)
Carl-Henrik Heldin	(Chair of EMBL SAC)
Daniela Rhodes	(Chair of EMBO Fellowship Committee)
Pascale Cossart	(Chair of EMBO Course Committee)
Cesare Montecucco	(Chair of Membership & Publication Committee)
Denise Barlow	(Chair of Science & Society Committee)
Jean-David Rochaix	(Chair of EMBO Young Investigator Programme Committee)
Glauco Tocchini-Valentini	(Chair of EMBO Electronic Information Programme Committee)

EMBO committees

courses committee

1999	Ton Bisseling
2000	Pascale Cossart (Chair)
2002	Jonathan Howard
2002	Philip Ingham
2000	Juan Modolell
2000	Kirsten Sandvig
1999	Martin Schwab
2001	Anna Tramontano
2001	Joel Vandekerckhove
1999	Yosef Yarden

electronic information committee

2001	Graham Cameron
2000	Julio Celis
2000	Sigrun Eckelmann
2002	Gerard Giroud
2000	Jacques Haiech
2000	Carlos Martinez-Alonso.
2000	Marianne Minkowski
2002	Annette Thomas
2000	Glauco Tocchini-Valentini (Chair)
2000	Alicia Wise

EMBO young investigator programme committee

2000	Maurizio Brunori
2000	Doreen Cantrell
2000	Maria Carmo Fonseca
2000	Marc Chabre
2000	Yoram Groner
2002	Regine Kahmann
2000	Iain Mattaj
2000	Jean-David Rochaix (Chair)
2000	Gunnar von Heijne
2000	Maciej Zylicz

fellowship committee

2000	Francesco Blasi
2001	August Boeck
2002	John Diffley
2000	Thomas Edlund
1999	Costa Georgopoulos
2000	Crisanto Gutierrez
2002	Jan Hoeijmakers
2000	Bernard Malissen
2000	Daniela Rhodes (Chair)
2001	Varda Rotter

membership & publication committee

1999	Joel Bockaert
1999	Raymond Dixon
1999	Carlos Gancedo
1999	Frank Grosveld
2000	Robert Huber
2001	Ada Kruisbeek
2002	Maria Leptin
1999	Cesare Montecucco (Chair)
1999	Howard Riezman
2002	Hans Wolf-Watz

science & society committee

1999	Denise Barlow (Chair)
2000	Axel Brennicke
2001	Victor de Lorenzo
2001	Heidi Diggelmann
1999	Niels Fiil
2001	Matthew Freeman
1999	Fotis Kafatos
2001	Mary Osborn
2002	Roberto Sitia
2002	Mary Weiss

New EMBO members 2001

Karen Avraham	(IL - Tel Aviv)
Andrea Barta	(A- Vienna)
Michael Bevan	(UK - Norwich)
Wendy Bickmore	(UK – Edinburgh)
Dianna Bowles	(UK – York)
Marie-France Carlier	(F - Gif-sur-Yvette)
George Coupland	(D – Cologne)
Antonio Covacci	(I – Siena)
Philip Evans	(UK – Cambridge)
Alain Fischer	(F – Paris)
Amanda Fisher	(UK – London)
Christian Haass	(D – Munich)
Howard Jacobs	(FIN – Tampere)
Batsheva Kerem	(IL – Jerusalem)
Wilhelm Krek	(CH – Basel)
Christopher Lamb	(UK – Norwich)
Francisco Murillo	(E – Murcia)
Kesimir Pavelic	(HR – Zagreb)
Matthias Peter	(CH - Epalinges)
Ralf Pettersson	(S – Stockholm)
Jonathan Pines	(UK – Cambridge)
Margaret Robinson	(UK – Cambridge)
Bernard Rossier	(CH – Lausanne)
William Rutherford	(F - Gif-sur-Yvette)
Helen Saibil	(UK – London)
Angela Santoni	(I – Rome)
Diethard Tautz	(D – Cologne)
Cheryll Tickle	(UK – Dundee)
Laszlo Tora	(F – Illkirch)
Slobodan Vukicevic	(HR – Zagreb)

New associate members 2001

Philip Hanawalt	(USA – Stanford, CA)
Titia de Lange	(USA – New York, NY)
Erkki Ruoslahti	(USA – La Jolla, CA)
Bruce Stillman	(USA – Cold Spring Harbor, NY)
Alexander Varshavsky	(USA – Pasadena, CA)

EMBO | long-term fellowship awards 2001

country & name	nationality	guest laboratory	home laboratory	research interest
Austria				
Doris Bachtrog	Austrian	University of Edinburgh, UK	University of Vienna,Austria	The evolution of sex chromosomes in Drosophila
Alexander Fleischmann	Austrian	Columbia Universisty, New York,USA	IMP, Vienna, Austria	Identification of guidance factors controlling axon pathfinding in the olfactory sensory system
Belgium				
Emmanuel Lacroix	Belgian	CALTECH, Pasadena,USA	EMBL Heidelberg, Germany	Computer-based gene recombination experiments to promote evolutionary protein design
United Kingdom				
Richard Bayliss	British	EMBL Heidelberg, Germany	MRC-LMB, Cambridge, UK	Structural studies on the mechanism of microtubule nucleation by TPX2
Gareth Cromie	British	Fred Hutchison Cancer Research Center, Seattle, USA	Edinburgh University, Edinburgh,UK	Investigation of the late stages of meiotic recombination in *S. pombe* by the use of controlled double-strand breaks
Graham Simmons	British	University of Pennsylvania, Philadelphia,USA	University of Pennsylvania, Philadelphia,USA	Ebola virus glycoprotein mediates changes in cell morphology: a potential role in immune evasion
Matthew Smalley	British	Cancer Institute, Amsterdam, Netherlands	Institute of Cancer Research, London, UK	Conditional knockout of tumor suppressor genes in mouse mammary epithelium using a cleared fat pad transplantation model
Nicola Stanley	British	University of California, Los Angeles, USA	University of California, Los Angeles, USA	Mechanism of biofilm formation in *B.subtilis*
Josephine Sutcliffe	British	Max Planck Institute for Bio–chemistry, Martinsried,Germany	Max Planck Institute for Biochemistry, Martinsried, Germany	Function of Rab6-KIFL/Mklp2 in cytokinesis
Czech Republic				
Richard Stefl	Czech	ETH Zürich, Switzerland	Masaryk University, Brno, Czech Republic	Structure studies of A-to-I pre-mRNA editing by human ADAR2
Lucas Trantirek	Czech	University of California, Los Angels, USA	National Center for Biomolecular Research,Brno, Czech Republic	Comparison of strucural and conformational properties of functionally essential domains in Human and *Tetrahymena* telomerase RNA
The Netherlands				
Janneke Balk	Dutch	Philipps University, Marburg, Germany	Oxford University, UK	Fe/S cluster biogenesis in yeast: identification of factors involed in the cytosolic pathway

country & name	nationality	guest laboratory	home laboratory	research interest
Jetta Bijlsma	Dutch	Washington University, St Louis, USA	Washington University St Louis, USA	Control of Salmonella virulence functions by the SsrA-SsrB two component regulatory system
Tobias Dansen	Dutch	UCSF, San Francisco, USA	Utrecht University, Netherlands	The involvement of peroxisomes in the suppression of c-Myc induced apoptosis
Leendert Hamoen	Dutch	University of Oxford, UK	University of Groningen, Haren, Netherlands	What determines polar localization of DivIV?
Erik-Jan Kamsteeg	Dutch	Yale University, New Haven, USA	University Medical Center Nijmegen, Netherlands	Regulation of renal transporter proteins by exo and endocytosis
Wilhelm Mandemakers	Dutch	Stanford University, Stanford,USA	Erasmus University, Rotterdam, Netherlands	Identification of novel myelin-associated proteins that inhibit axon outgrowth
Ellen Nollen	Dutch	Northwestern University, Evanston,USA	Northwestern University, Evanston,USA	Stress signaling of growth and development
Valerie Notenboom	Dutch	Cancer Institute, Amsterdam, Netherlands	Ontario Cancer Institute, Toronto, Canada	Structural studies on ubiquitin ligase SCF
Jeroen Roelofs	Dutch	Harvard Medical School, Boston,USA	University of Groningen, Netherlands	Identification and characterization of new proteasome associated proteins
Dirk-Jan Scheffers	Dutch	University of Oxford, UK	University of Groningen, Haren, Netherlands	The *Bacillus subtilis* cytoskeleton
Jan Schuringa	Dutch	Sloan-Kettering Institute, New York,USA	Biological Center Haren, Netherlands	STAT3 as a survival factor for embryonic stem cells and leukemic cells
Arjan van der Vaart	Dutch	ISIS, University Louis Pasteur, Strasbourg, France	Pennsylvania State University, Pennsylvania, USA	Protein folding in the cell: The mechanism of GroEL assisted protein (un) folding
Frank van Voorst	Dutch	MRC-LMB, Cambridge, UK	Utrecht University, Netherlands	The role of sphingolipids and bilayer thickness in the secretory pathway
Dolf Weijers	Dutch	University of Tübingen,Germany	Institute of Molecular Plant Scienses, Leiden,Netherlands	Specificity of action of the IAA protein BDL in auxin responce during Arabidopsis embryo patterning
Finland				
Sanna Lehtinen	Finnish	Cornell University, Ithaca,USA	University of Tampere, Finland	Targeting and translocation of membrane proteins synthesized inside mitochondria
Olli Lohi	Finnish	MRC-LMB, Cambridge, UK	Haemeenlinna,Finland	Mechanisms of epidermal growth factor receptor regulation in Drosphila
France				
Jean-Michel Bellanger	French	ISREC, Epalinges s/ Lausanne, Switzerland	ISREC, Epalinges s/ Lausanne, Switzerland	Molecular mechanisms governing spindle positioning in the one-cell stage *C. elegans* embryo

country & name	nationality	guest laboratory	home laboratory	research interest
Jerome Boisbouvier	French	Nat.Inst. of Diabetes, Digestive & Kidney Disease, Bethesda, USA	Institute of Structural Biology, Grenoble, France	Characterisation of structure and dynamics of nucleic acid base pairing by liquid crystal and cross-correlated NMR
Nadege Bondurand	French	MRC, NIMR,London,UK	Henri Mondor Hospital, Creteil, France	Expression and function of the SOX10 tra scription factor during enteric nervous system development
Veronique Brodu	French	MRC, NIMR,London,UK	MRC, NIMR,London, UK	Specification of the oenocyte fate by abdominal A in Drosophila
Florence Corallou	French	University of Gent, Belgium	Marine Biological Association, Plymouth, UK	Regulation of cell-cycle by phosphorylation of Cyclin-dependent kinases in tobacco BY 2 cells
Rosa Cossart	French	Columbia University, New York, USA	INMED-CNRS U29, Marseille, France	Two-photon imaging of cortical activity responsible for dendritic spiking
David Dauvillee	French	University of Geneva, Switzerland	University of Science & Technology, Villeneuve d'Ascq, France	Assembly of Photosystem I and its relation to organellar iron metabolism in *Chlamydomonas reinhardtii*
Marie Delattre	French	ISREC, Epalinges, Switzerland	Institute Jacques Monod, Paris, France	Cellular and molecular dissection of centrosome duplication in the one-cell stage *C.elegans* embryo
Alexandre Djiane	French	Mount Sinai School of Medicine, New York,USA	University of Paris 6, Paris, France	New planar polarity genes in Drosophila
Patrice Dunoyer	French	John Innes Centre, Norfolk,UK	IBMP - CNRS, Strasbourg, France	Study of the interaction between potyvirus VPg and host transcriptional regulator: Role in viral multiplication cycle
Eric Fernandez-Bellot	French	University of Kent, Canterbury, UK	CGM-CNRS, Gif sur Yvette, France	The molecular basis of yeast prion strain variation
Antoine Galmiche	French	Max Planck Institute for, Infection Biology, Berlin,Germany	INSERM U452, Nice, France	Shigella-induced Caspase 1 activation and cell death in macrophages vs epithelial cells
Yann-Gael Gangloff	French	FMI, Basel,Switzerland	IGBMC, Illkirch, France	Characterization of the mechanism resp-onsible for cyclin E transcription inhibition in 40S ribosomal protein S6 deficient cells
Anthony Henras	French	University of California, Los Angeles, USA	Institute of cell Biology & Genetics Genetique, Toulouse, France	RNase III-mediated post-transcriptional regulation of the meiotic programme.
Fabrice Kolb	French	Friedrich Miescher Institute, Basel,Switzerland	University Louis Pasteur Strasbourg, France	Substrates and partners of the mammalian dicer, a multidomain protein involved in RNA interference (RNAi).

country & name	nationality	guest laboratory	home laboratory	research interest
Cecile Lebrand	French	MIT, Cambridge, MA,USA	University of Geneve, Switzerland	Role of cytoskeletal regulatory proteins in axon outgrowth and guidance
Gaell Mainguy	French	Institute for Developmental Biology, Utrecht,Netherlands	ENS, UMR 8542, Paris, France	Non-cell-autonomous induction of Hox genes in Xenopus: A transgenic approach
Alexis Maizel	French	Max Planck Institute for Developmental Biology, Tübingen, Germany	UMR 8542 - Paris, France	Molecular mechanisms and signification of LFY movement.
Laurent Malherbe	French	Duke University and Medical Center, Durham,USA	Duke University and Medical Center, Durham,USA	Evaluate the basis for clonal dominace in antigen-driven repertoire selection
Oriane Marchand	French	The National Institute for Medical Research, London,UK	ENS Lyon, France	Identification of hedgehog target genes
Anne-Helene Monsoro-Burq	French	Dept of Molecular & Cell Biology, UC Berkeley, Berkeley, USA	Institute for Embryology, Nogent-sur-Marne, France	Signalling during early neural crest development: Mesodermal control of slug activity
Sebastien Nisole	French	National Istitute of Medical Research,London,UK	Institute Pasteur, Paris, France	Mechanism of action of the Fv1 gene
Emmanuelle Passegue	French	Stanford University, USA	IMP, Vienna,Austria	Towards a better understanding of the molecular mechanisms of myeloid leukaemia
Julie Perroy	French	University of Montreal, Canada	UPR 9023, CCIPE, Montpellier, France	Role of GPCR oligomeric assembly in receptor function and pharmacology. GABAb receptor heterodimerization
Marion Peter	French	ICRF, London,UK	CRBM - CNRS UPR 1086, Montpellier, France	Targetting breast cancer motility by disrupting the protein kinase C-ERM (ezrin/moesin/radixin) signalling complex
Stephane Pien	French	University of Gent, Gent,Belgium	University of Zürich, Switzerland	Development control of cell division patterns during leaf organogesis
Sophie Quintin	French	Max Planck Institute for Molecular Cell Biology & Genetics, Dresden,Germany	IGBMC, Illkirch, France	The role of centrosomes in cell polarity in the *C. elegans embryo*
Nalini Ramarao	French	Institute Pasteur, Paris, France	Max Planck Institute for Infection Biologie, Berlin, Germany	Interaction of the Shigella protein IpaA with vinculin
Emmanuel Reynaud	French	EMBL Heidelberg, Germany	CNRS UPR 9051, Paris, France	Microtubules in vesicle trafficking in the early secretory pathway
Angela Taddei	French	University of Geneva, Switzerland	UMR 218, Institute Curie, Paris, France	Mechanisms of chromatin marking at late replicating origins
Germany				
Florian Boehl	German	Wellcome, CRC Institute, Cambridge, UK	ZMBH,Heidelberg,Germany	The characterization of boussole, a novel mutant affecting Drosophila oocyte polarity

country & name	nationality	guest laboratory	home laboratory	research interest
Helge Grosshans	German	Yale University, New Haven, USA	University of Heidelberg, Germany	Development timing in *C.elegance*: Identification of novel small temporal RNAs and their co-factors
Ulrike Grüneberg	German	Max Planck institute for Biochemistry, Martinsried,Germany	Max Planck institute for, Biochemistry, Martinsried,Germany	Regulation of the exit from mitosis metazoan organisms
Dorothea Haasen	German	ETH Zürich, Germany	University of Freiburg,Germany	Analysis of early events in cellular entry of simian virus 40
Vigo Heissmeyer	German	Harvard University, Boston,USA	Harvard University, Boston,USA	PKC-theta function in T-cell anergy/tolerance
Astrid Hoebertz	German	IMP, Vienna,Austria	University College London, UK	Functions of Fos-related antigens (Fra-1, Fra-2) in bone cells
Dirk Hofreuter	German	Yale University, New Haven, USA	Max von Pettenkofer Institute, Munich, Germany	Identification of virulence factors in *Campylobacter jejuni* essential for interaction with human epithelial cells
Carsten Janke	German	Centre de Recherches de Biochimie Macromoleculaire, Montpellier, France	CRC Beatson Institute of Cancer Research,Glasgow, UK	Analysis of structure, function and biochemical role of a newly identified enzyme complex, polyglutamylase
Martin Kerschensteiner	German	ETH Zürich, Switzerland	ETH Zürich, Switzerland	Neuroregeneration: A therapeutic strategy for multiple sclerosis?
Edgar Kramer	German	Max Plank Institute for Neurobiology, Munich,Germany	EMBL Heidelberg, Germany	Genetic analysis of trophic requirements for dopaminergic neurons
Klaus Leonhard	German	ICRF, London,UK	Institute für Physiologische Chemie, Munich, Germany UNIVERSITÄT??	Identification and biochemical analysis of components involved in cell morphogenesis in fission yeast
Markus Proft	German	Harvard Medical School, Boston,USA	Universidad Politecnica Valencia,Spain	Regulation of gene expression by ATF/CREB factors in yeast
Jens Tyedmers	German	Whitehead Institute for Biomedical Research, Cambridge, USA	Saarland University, Homburg, Germany	Biological impact of prion-based regulation of different protein functions in producing phenotypic diversity in yeast
Jörg Vogel	German	Hebrew University, Jerusalem, Israel	Uppsala University, Sweden	Novel small RNAs in *Escherichia coli*
Roland Wedlich-Söldner	German	Harvard Medical School, Boston,USA	Max Planck Institute for terrestrial Mikrobiology, Marburg,Germany	The role of class I myosin in actin polymerization in yeast and mammalian cells
Oliver Weichenrieder	German	Netherlands Cancer Institute, Amsterdam,Netherlands	Netherlands Cancer Institute, Amsterdam, Netherlands	Structural characterisation of the human L1 retroposition machinery
Claus-Peter Witte	German	Max Planck Institute for Plant Breeding Research, Cologne, Germany	Max Planck Institute for Plant Breeding Research, Cologne, Germany	Activation and inactivation mechanisms of tobacco CDPKs and identification of downstream phosphorylation targets

country & name	nationality	guest laboratory	home laboratory	research interest
Torsten Wittmann	German	Scripps Research Institute, La Jolla, USA	Scripps Research Institute, La Jolla, USA	The relationship of microtubules and Rho family small GTPases in motile cells
Antonin Wolfram	German	EMBL Heidelberg, Germany	Max Planck Institute for Biophysical Chemistry, Goettingen,Germany	Identification and characterization of proteins localized to vesicles which form the nuclear envelope
Greece				
Maria Koffa	Greek	EMBL Heidelberg, Germany	University of Glasgow, UK	Characterization of the molecular mechanisms that determine the RNA nuclear export pathways
Niki Kourmouli	Greek	Roslin Institute, Midlothian,UK	University of Crete, Heraklion,Greece	Histone modifications and nuclear reprogramming
Konstantinos Moutoussis	Greek	Max Planck Institute for Biological Cybernetics, Tübingen, Germany	Wellcome Dept of Cognitive Neurology, UCL, London, UK	“Invisible stimuli” and the relationship between brain activity and visual perception
Hungary				
Beata Jady	Hungarian	Institute de Genetique Moleculaire de Montpellier, France	Biological Research Centre, Szeged,Hungary	Real-time monitoring of intranuclear trafficking of single messenger RNA transcripts in living mammalian cells
Imre Törö	Hungarian	Sincrotrone Trieste S.C.P.A,Italy	Sincrotrone Trieste S.C.P.A,Italy	Structural studies on protein-protein interactions involved in the actin based motility of vaccinia virus
Attila Toth	Hungarian	Institute of Cancer and Developmental Biology, Cambridge, UK	MRC-LMB, Cambridge, UK	Screen for the identification of novel mouse genes involved in meiosis specific chromosome behaviour
Ireland				
Donal O'Carroll	Irish	Rockefeller University, New York,USA	Rockefeller University, New York,USA	Functional analysis in T cells of Cbp, a novel lipid raft associated adaptor molecule
Israel				
Kawther Abu-Elneel	Israeli	Harvard Medical School, Boston,USA	Hebrew University, Jerusalem,Israel	The role of Nudel phosphotylation by Cdk5 on the regulation of the associated proteins dynein and Lis1
Lital Alfonta	Israeli	Scripps Research Institute, La Jolla, USA	Hebrew University, Jerusalem,Israel	The design and implementation of protein chips for the detection of markers in ENU mutagenized mouse
Gil Blander	Israeli	MIT, Cambridge, USA	Weizmann Institute of Science, Rehovot, Israel	Identification of Sir2 targets and characterization of their functional role in the aging process

country & name	nationality	guest laboratory	home laboratory	research interest
Yuval Dor	Israeli	Harvard University, Cambridge,,USA	Hebrew University, Jerusalem,Israel	Lineage analysis of pancreatic stem cells
Ariel Lindner	Israeli	INSERM E19916, Paris, France	Weizmann Institute of Sciences, Rehovot, Israel	Evolving hyper-recombinase low-fidelity RecA
Rina Rosin-Arbesfeld	Israeli	MRC-LMB, Cambridge, UK	MRC-LMB, Cambridge, UK	Identifying new genes involved in the Wnt pathway
Dalit Sela-Donenfeld	Israeli	National Institute for Medical Research,London,UK	Hebrew University, Jerusalem,Israel	*In vivo* analysis of cell behaviour upon Eph-receptor/ephrin interactions
Tzvia Selzer	Israeli	Pennsylvania State University, USA	Weizmann Institute of Sciences, Rehovot, Israel	How a replisome bypasses a lesion in the DNA
Ofer Wiser	Israeli	UCSF, San Francisco, USA	UCSF, San Francisco, USA	The role of LGN in G-protein specificity
Italy				
Elisabetta Castoldi	Italian	Cardiovascular Research Institute Maastricht, Netherlands	University of Ferrara,Italy	Expression and functional characterization of coagulation factor V mutants derived from the factor V HR2 haplotype
Amelia Compagni	Italian	ICRF, London,UK	ICRF, London,UK	Functional characterisation of aphrinB1 during mouse development
Graziella Di Cristo	Italian	Cold Spring Harbour Laboratory, USA	Cold Spring Harbour Laboratory, USA	Cellular mechanisms of the regulation of GABAergic interneurons by BDNF
Angela Falciatore	Italian	University of Geneva, Switzerland	Stazione Zoologica “Anton Dohrn”, Napoli,Italy	Chloroplast-nuclear signalling in *Chlamydomonas*
Fulvio Reggiori	Italian	University of Michigan, Ann Arbor, USA	MRC-LMB, Cambridge, UK	Identification of the triggering event in the sequestration step of the Cvt pathway
Nicolas Toni	Italian	Salk Institute, La Jolla, USA	Salk Institute, La Jolla, USA	Morphological analyses of adult neuro-genesis in mouse hippocampus
Patrizia Tosetti	Italian	INMED/INSERM U29, Marseille, France	Tufts University School of Medicine, Boston, USA	Desensitisation of GABAB-mediated synaptic inhibition in the neonatal rat hippocampus: Mechanisms and pathological consequences
Portugal				
Ricardo Azevedo	Portugese	Albert Einstein College of Medicine, New York,USA	Jealott's Hill International Research Centre, Bracknell, UK	The genetic basis of cell lineage stochasticity
Renata Basto	Portugese	Wellcome/CRC Institute, Cambridge, UK	Complexo Interdisciplinar II, CGBM,Lisboa,Portugal	Identification of new centrosomal components
Diogo Castro	Portugese	Institute de Genetique et de Biologie Moleculaire et Cellulaire,	Karolinska Institute, Stockholm,Sweden	Regulation of proneural gene function by EGF and FGF signaling

country & name	nationality	guest laboratory	home laboratory	research interest
		Illkirch, France		
Sergio Filipe	Portugese	University of Oxford, UK	Rockefeller University, New York, USA	The relationships between chromosome replication, chromosome segregation and cell division in *Escherichia coli*
Mariana Gomes de Pinho	Portugese	University of Oxford, UK	Rockefeller University, New York,USA	Molecular genetics and cell biology of cell division in *Staphylococcus aureus* and *Streptococcus pneumoniae*
Leonor Oliveira	Portugese	CNRS, Gif-sur-Yvette, France	Institute for Chemical & Biological Technology, Oeiras, Portugal	Function of bacteriophage SPP1 portal protein during DNA packaging
Ekaterina Salimova	Russian	EMBL Monterotondo, Italy	ISREC, Epalinges s/Lausanne, Switzerland	Role of the actin cytoskeleton network in cancer metastasis and neurological disorders
Spain				
Consuelo Barroso	Spanish	University of California, Berkeley, USA	John Innes Centre, Norwich, UK	Cellular effects of altered polyglutamine tract length in the mutant huntingtin protein
Eduard Batlle	Spanish	University Medical Centre, Utrecht,Netherlands	University Medical Centre, Utrecht,Netherlands	Role of the EPHB2 and EPHB3 tyrosine kinase receptors and their ligand, Ephrin-B1, in Intestinal development and cancer
Ivan Belandia	Spanish	MRC-LMB, Cambridge, UK	Yale University, New Haven, USA	Structure determination of EmrE, a multi-drug transporter from *Escherichia coli,* by electron crystallograhpy
Jordi Benach	Spanish	Columbia University, New York,USA	Columbia University, New York, USA	Studies on the structural basis of polypeptid polypeptide substrate recognition by SecA
Mario Caceres	Spanish	Salk Institute, La Jolla, USA	Salk Institute, La Jolla, USA	Large-scale gene expression analysis of the adult human and monkey brain
Ildefonso Cases	Spanish	EMBL EBI, Hinxton,UK	Centro Nacional de Biotecnologia – CSIC, Madrid,Spain	Functional and comparative genomics of bacterial transcription
Florencia Cavodeassi	Spanish	UCL,London,UK	Universidad Autonoma de Madrid, Spain	Specification of the eye field within the anterior neural plate
Natalia Diaz Fernandez	Spanish	Institue of Structural Biology Jean-Pierre Ebel, Grenoble, France	Universidad de Oviedo, Spain	Computational chemistry and enzymology: cAMP-dependent protein kinase and intergration of computational methods
Rosa Farras	Spanish	IGM,Montpellier, France	IGM,Montpellier, France	Dissecting the mechanisms of accelerated degradation of JunB transcription factor in Mitosis
Eva Farre	Spanish	Scripps Research Institute,	Max Plank Institute for Molecular	Investigation of the role of TOC1 in the circadian

country & name	nationality	guest laboratory	home laboratory	research interest
		La Jolla, USA	Plant Physiology, Golm, Germany	clock regulation in *Arabidopsis thaliana*
Sara Fernandez-Lopez	Spanish	Stanford University, USA	Universidad de Santiago de Compostela, Spain	Use of non-polar nucleosides for the design of HCV inhibitors
Junkal Garmendia	Spanish	Imperial College of Medicine, London, UK	Centro Nacional de Biotechnologia, Madrid, Spain	Study of the Salmonalla containing vacuole-induced actin polymerization during the process of infection of macrophages
Sonia Lopez de Quinto	Spanish	EMBL Heidelberg, Germany	CSIC-UAM,Madrid, Spain	Analysis of the molecular mechanism of oskar mRNA transport
Enrique Martinez-Perez	Spanish	Stanford School of Medicine, Stanford,USA	John Innes Centre, Norwich,UK	Mechanism of meiotic chromosome pairing in *C.elegans*
Joaquim Navarro Egea	Spanish	Max Planck Institute for Neuro-biology, Martinsried,Germany	Universitat de Lleida, Spain	Mechanism of EphA4 signalling in axon guidance and synaptic plasticity
Angels Tapias Ribot	Spanish	IGBMC, Illkirch, France	IGBMC, Illkirch, France	How TFIIH participate in to the NER; Role of both helicases in the elimination of the damaged strand
Sweden				
Ingvar Ferby	Swedish	Max Planck Institute for Biochemistry, Martinsried, Germany	Max Planck Institute for Biochemistry, Martinsried,Germany	Identification and characterization of novel genes involved in the mitotic checkpoint in human
Gabriela Godaly	Swedish	Imperial College School of Medicine, London,UK	Lund University, Lund,Sweden	Role of neutrophils in mycobacterial infections
Mats Hellstrom	Swedish	European Institute of Oncology, Milan,Italy	Goteborg University, Goteborg,Sweden	Expression profiling of breast cancer metastasis using microarray technology
Kenth Johansson	Swedish	ESIL AFMB UMR 6098 CNRS-UI-UII, Marseille, France	Swedish University of Agricultural Sciences, Uppsala, Sweden	Structure-function studies of viral proteins involved in transcription and replication of measeles virus genomic RNA
Henrik Kaessmann	Swedish	Unversity of Chicago, USA	Max Planck Institute for Evol.Anthropology, Leipzig,Germany	Evolutinaty analysis of human transcription factor genes
Switzerland				
Dominic Hoepfner	Swiss	Utrecht University, Netherlands	Biocentre Basel, Switzerland	Identification and analysis of components involved in peroxisome abundance, fission and segregation
Thibault Mayor	Swiss	California Institute of Technology, Pasadena,USA	Max Planck Institute for Biochemistry, Martinsried, Germany	Global approaches for the identification of substrates of SCF ubiquitylation pathway
Ora Schüler-Furman	Swiss	University of Washington, Seattle, USA	University of Washington, Seattle, USA	Improvement of strucure and function prediction by mapping evolutionary

country & name	nationality	guest laboratory	home laboratory	research interest
				information onto modeled structures
Thomas Simmen	Swiss	Oregon Health Sciences University, Portland, USA	Immunologia Molecolare, DIBIT/Ospedale S. Raffaele, Milan,Italy	Localisation of human cytomegalovirus protein gB at the trans-golgi network and its role in virus envelopment and budding
Turkey				
Erdem Karatekin	Turkish	Institute Curie, Paris, France	Institute Curie, Paris, France	Molecular mechanisma of homology search by the *E.coli* RecA protein, studied by real-time fluorescence videomicroscopy
other nationalities				
Alka Agrawal	American	Institute Pasteur, Paris, France	Yale University School of Medicine, New Haven, USA	The basis of the irradiated sporozoite vacccine: Identification of Plasmodium genes essential for development to liver stages
Donna Hansel	American	Erasmus University, Rotterdam, Netherlands	The John Hopkins University, Baltimore, USA	Identification of neuronally derived molecules that induce Oct-6 gene expression in schwann cells
Juan Martinez	American	Institute Pasteur, Paris, France	Washington University School of Medicine, St Louis, USA	Towards an understanding of Rickettsia entry into mammalian cells
Brian Peter	American	MRC-LMB, Cambridge, UK	MRC-LMB, Cambridge, UK	Proteomic analysis of endocytosis in mamalian cells
Jeremy Sanford	American	MRC Human Genetics Unit Edinburgh,UK	Case Western Reserve University, Cleveland, USA	Stress signaling and regulated pre-mRNA splicing
Timothy Newsome	Australian	Imperial Cancer Research Fund, London,UK	Imperial Cancer Research Fund, London,UK	Role of Src and Fak in cell motility
Leonard Foster	Canadian	University of Southern Denmark Odense, Denmark	University of Southern Denmark Odense, Denmark	Regulators of kinesin motor proteins
Serge Gravel	Canadian	University of Cambridge, UK	Dept of Microbiology, University of Sherbrooke, Canada	Identification of the DNA damage check point targets in yeast by proteomics approaches
Robbie Loewith	Canadian	University of Basel, Switzerland	University of Basel, Switzerland	Purification of TOR complexes from yeast and mammalian cells
Antoine Ramjaun	Canadian	ICRF, London,UK	Montreal Neurological Institute, Canada	The molecular characterisation of RASSF1
Paola Deprez	Chilean	ETH Zürich, Switzerland	ETH Zürich, Switzerland	Co-translational folding in the ER
Rafael Carazo-Salas	Costa Rican	Imperial Cancer Research Fund,London,UK	EMBL Heidelberg, Germany	*In vitro* assays for the study of microtubule assembly and organisation in *Schizosaccharomyces pombe*

country & name	nationality	guest laboratory	home laboratory	research interest
Fumiko Esashi	Japanese	Imperial Cancer Research Fund, Herts, UK	Imperial Cancer Research Fund, Herts, UK	Analysis of the role of BRCA2 in genome stability
Fujihiko Matsunaga	Japanese	Institute for Genetics & Microbiology, Orsay, France	Institut de Genetique et Microbiologie, Microbiologie, Orsay, France	Analysis of regulatory mechanism of DNA replication in hyperthermophilic Archaea
Ken-ichi Nishiyama	Japanese	University of Freiburg,Germany	University of Tokyo, Japan	Molecular mechanisms of protein integration into the cytoplasmic membrane of *E.coli*

number and percentage of long-term fellowship applications and awards from 1997 – 2001

country of origin	number of applications	% of total	number of awards	% of total awards
Austria	54	1.42	17	2.13
Belgium	74	1.95	12	1.50
Croatia*	11	0.29	2	0.25
Czech Republic	25	0.66	4	0.50
Denmark	40	1.05	11	1.38
Finland	39	1.03	11	1.38
France	861	22.64	161	20.18
Germany	477	12.54	118	14.79
Greece	74	1.95	15	1.88
Hungary	30	0.79	13	1.63
Iceland	1	0.03	0	0
Ireland	36	0.95	6	0.75
Israel	179	4.71	47	5.89
Italy	255	6.71	55	6.89
Netherlands	176	4.63	57	7.14
Norway	13	0.34	1	0.13
Portugal	28	0.74	11	1.38
Slovenia*	9	0.24	0	0
Spain	464	12.20	84	10.53
Sweden	112	2.95	17	2.13
Switzerland	78	2.05	19	2.38
Turkey	9	0.24	1	0.13
United Kingdom	273	7.18	41	5.14
East Europe	108	2.84	15	1.88
USA/Canada	155	4.08	44	5.51
Others	222	5.84	36	4.51
Total	**3803**	**100**	**798**	**100**

* not member for the full-time period

geographical | distribution for long-term fellowships 2001

applications

To																													
Austria	1								1						1								1						2	6
Belgium		2						4	1																			1		8
Croatia			1																											1
Cyprus																													1	1
Czech Rep.																														0
Denmark	1							1																				1		3
Finland									1												1									2
France			1			2		5	7		1			2	5	3		2	3		11	2	3	2	1		3	12	4	69
Germany	1	2			1			11	5	3				2	3	2					6	1			2			1	5	45
Greece										1															1					2
Hungary																														0
Iceland																														0
Ireland																														0
Israel								1	1												1			1				2	1	7
Italy							2	1	1		1				3	2		1			2	1			1		1		1	17
Netherlands								2	2	1					2	1					5	1	1		2			2		19
Norway									1												2									3
Poland																														0
Portugal								1	1												1									3
Slovenia																														0
Spain								1													2	1			1				2	7
Sweden								1	1						1	1					2	1			1			2	1	11
Switzerland	1				1			25	8	2			1		3						4		1		1			1	3	51
Turkey																														0
U.K.	1	1					2	28	8	1	1			7	11	7			5		18	6			2		2	11	15	126
EMBL		1						4	1												1				3			1		11
E. Europe																														0
USA/Can	2	2			4	2	4	54	30	1	1	1	2	30	12	12	1	1	2		32	13	9	1	27					243
Others	1							1	3							1					1	2			1					10
Total	8	8	2	0	6	4	8	140	72	9	4	1	3	41	41	29	1	4	10	0	89	28	15	4	43	0	6	34	35	645

awards

To																										
Austria	1						1																			2
Belgium						2																				2
Croatia																										0
Czech Rep.																										0
Denmark																								1		1
Finland																										0
France						1	1		1			1	1	1			2		3	1		1			2	1	16
Germany						3	4	1						2					1	1			1			1	14
Greece																										0
Hungary																										0
Iceland																										0
Ireland																										0
Israel							1																			1
Italy									1											1				1		3
Netherlands						1	1						1	1					1		1		1		1	8
Norway																										0
Poland																										0
Portugal																										0
Slovenia																										0
Spain																										0
Sweden																										0
Switzerland			1			6	1						1												1	1	11
Turkey																										0
U.K.					1	7	2	1	1			2	1	3			3		4	1					4	3	33
EMBL						1	1	1												1			1				5
E. Europe																										0
USA/Can	1	1		1	1	9	7			1	6	3	7				1		6	1	3		3				51
Others																										0
Total	2	1	0	2	0	2	30	19	3	3	0	1	9	7	14	0	0	6	0	15	6	4	1	6	0	1	9	6	147

country & name	nationality	guest laboratory	home laboratory	research interest
Belgium				
Sophie Vanwetswinkel	Belgian	University of Aarhus, Denmark	University of Leiden, Netherlands	Structural study of the eukaryotic elongation factor eEF1
Linda Vermeulen	Belgian	University of Dundee, UK	University of Gent, Belgium	Investigation of the physiological relevance of MSK1 and MSK2 in p65 phosphorylation and the IL6 enhanceosome
Croatia				
Martina Niksic	Croatian	EMBL Heidelberg, Germany	MRC-HGU Edinburgh, UK	To determine the molecular function of WTAP – a novel protein conserved from fly and men
Czech Republic				
Jiri Libus	Czech	Max Planck Institute for Plant Breeding Research, Cologne, Germany	Institute of Experimental Botany, Prague, Czech Republic	Expression profiling in Arabidopsis
Denmark				
Kristian Raaby-Poulsen	Danish	University of Bern, Switzerland	Aalborg University, Denmark	Copy a copper dependent repressor structure and metal-dependent DNA-binding investigated by NMR spectroscopy
Peter Redder	Danish	University of Naples, Italy	University of Copenhagen, Denmark	Crenarchaeal molecular biology: a vector–host system for Sulfolobus
Sannah Zoffmann	Danish	UPE CNRS 9050, Illkirch, France	The Panum Institute, Copenhagen,Denmark	Topology of the complex formed between neurokinin A and the NK2 tachykinin receptor
Netherlands				
Derick Wansink	Dutch	Friedrich Miescher Institute, Basel,Switzerland	UMC Nijmegen Netherlands	Activation and substrate specificity of different myotonic dystrophy protein kinase isoforms
Finland				
Camilla Krogerus	Finnish	University of Basel, Switzerland	Haartman Institute, Helsinki, Finland	Replication of human parechovirus 1
Vilja Pietiäinen	Finnish	Swiss Federal Institute of Technology, Zürich,Switzerland	Haartman Institute, Helsinki, Finland	Entry and replication of echovirus 1
France				
Bertrand Aigle	French	John Innes Centre, Norwich,UK	University Nancy 1, Vandoeuvre-les-Nancy, France	Building of a comprehensive transposon mutant library of *Streptomyces ambofaciens*
Claude Antony	French	ICRF, London, UK	Institut Curie UMR 144-CNRS, Paris, France	EM 3-D reconstruction of the cytoplasmic microtubule network in *S. pombe*

country & name	nationality	guest laboratory	home laboratory	research interest
Herve Capiaux	French	University of Oxford, UK	IBCG-CNRS, Toulouse, France	Control of chromosome dimers resolution in *Escherichia coli*: implication of chromosome organisation
Pierre Frendo	French	University of Oxford, UK	CNRS FRE 2294, Nice, France	The roles of glutathione and homoglutathione in the establishment of the *Medicago truncatula – Sinorhizobium meliloti* symbiosis
Sebastien Guiral	French	University of Glasgow, UK	CNRS IBCG, Toulouse, France	Characterisation of the competence-induced putative bacteriocins CibA/B of *S. pneumoniae*. A function in pneumolysin release
Carine Huard	French	University of Sheffield, UK	INRA,Jouy-en-Josas, France	Identification of the cleavage specificity of three peptidoglycans
Stephan Lacourx	French	Institut Pasteur, Paris, France	EAWAG, Dübendorf, Switzerland	Involvement of TG motifs in unusual locations for promoter recognition by the sigmaS subunit of bacterial RNA polymerase
Germany				
Frauke Baymann	German	University of Oxford, UK	CNRS, Marseille, France	Characterisation of electron transfer reactions in mobile cytochromes by voltametry studies on the electrode surface
Susanne Gola	German	University of Aberdeen,UK	Friedrich-Schiller-University, Jena,Germany	Characterisation of Hsp30 orthologues in *Candida albicans*
Oliver Hantschel	German	Rockefeller University, New York,USA	EMBL Heidelberg, Germany	Expression, purification and crystallisation of the regulated form of the non-receptor tyrosine kinase c-Abl1
Klaus Hentrich	German	University College London, UK	Max Planck Institute for Experimental Medicine, Göttingen,Germany	BkaP – a novel protein that interacts with mammalian large conductance calcium potassium channels
Oliver Kretz	German	CNRS College, Paris, France	DKFZ,Heidelberg, Germany	Analysis of neurogenesis in the adult mouse brain by gene targeting strategies
Florian Otto	German	Weizmann Institute, Rehovot, Israel	University of Freiburg, Germany	Skeletal phenotype of Runx3 deficient mice
Brigitte Schmitz	German	King's College Hospital, London,UK	University of Bonn, Germany	Regulation of neural competence: the role of fucosyltransferases
Sarah Schwarzer	German	SBE/DBCM,Gif-Sur-Yvette, France	University of Bonn, Germany	Heterologous expression of Fe-hydrogenases in cyanobacteria

country & name	nationality	guest laboratory	home laboratory	research interest
Markus Seeliger	German	Technion,Haifa,Israel	Medical Research Centre, Cambridge, UK	Role of human cks in Skp1/Skp2 mediated degradation of p27
Claudia Temme	German	CNRS, Gif-sur-Yvette, France	University of Halle, Germany	The role of Pop2p in the Pop2p/Ccr4p complex
Ulrich Zachariae	German	Karolinska Institut, Huddinge, Sweden	Max Planck Institute for Biochemistry, Martinsried, Germany	Implementation of Three-Dimensional Poisson-Nernst-Planck Theory for the computational treatment of ion channels
Greece				
Magdalini Polymenidou	Greek	University Hospital, Zürich, Switzerland	University of Thessaloniki, Greece	Identification of candidate PrP-relating proteins by a chemical cross-linking approach and proteomics
Athina Pyrpasopoulou	Greek	University of Bonn, Germany	University of Thessaloniki, Greece	Telomerase component expression in microdissected tissue elements
Athanasia Varsaki	Greek	University of Cantabria, Santander, Spain	University of Ioannina, Greece	*In vitro* reactions of MbeA – an atypical relaxase
Alexandros Zafiropoulos	Greek	MRC, Glasgow, UK	University of Crete, Greece	Investigation of the effects of PML nuclear body proteins on the efficiency of HSV-1 infection
Hungary				
Mihaly Kovacs	Hungarian	University of Leicester, UK	Eotvos University, Budapest, Hungary	Myosin reactive lysine region mutants
Kornelia Szabo	Hungarian	Max Delbrück Centre, Berlin, Germany	Hungarian Academy of Sciences, Szeged,Hungary	*In vitro* activational mutagenesis of mammalian cell lines using transposable elements
Laszlo Tirian	Hungarian	University of Dundee, UK	University of Szeged, Hungary	The role of importin beta and its dominant negative alleles in nuclear envelope assembly
Ireland				
Barry Heavey	Irish	Ludwig Institute for Cancer Research,Lausanne, Switzerland	IMP, Vienna,Austria	Lentiviral-medicated rescue of *in vivo* T cell development in Pax5 (-/-) Notch1 (-/-) pro B cells
Israel				
Orit Dagan	Israeli	St James University Hospital, Leeds, UK	Tel Aviv University, Israel	Identification of genes and modifiers for hereditary hearing loss
Iris Eisenberg	Israeli	University of Berlin, Germany	Hebrew University,	Biochemical analysis of UDP-Glc NAc 2 epimerase/MenNAc kinase in hereditary

country & name	nationality	guest laboratory	home laboratory	research interest
			Jerusalem,Israel	inclusion body myopathy (HIBM)
Alex Levine	Israeli	Universita Cattolica S.C, Piacenza, Italy	Hebrew University, Jerusalem,Israel	Isolation of genes that regulate programmed cell death in Arabidopsis
Oded Lewinson	Israeli	University of Groningen, Haren,Netherlands	Weizmann Institute, Rehovot,Israel	Transport bioenergetics of the multidrug transporter MdfA
Marianna Tcherpakov	Israeli	Karolinska Institute, Stockholm, Sweden	Weizmann Institute, Rehovot,Israel	MAGE proteins as p75NTR intracellular interactors
Assaf Vardi	Israeli	Stazione Zoologica, Napoli,Italy	Hebrew University Jerusalem,Israel	The cross talk between Ca^{2+} homeostasis and redox state under stress in diatom
Yuval Yarkoni	Israeli	German Center for Rheumatology Research, Berlin, Germany	Hebrew University Jerusalem,Israel	Autoreactive B cell selection in CD22-deficient anti-DNA heavy chain transgenic mice
Italy				
Daniele Bano	Italian	University of Leicester, UK	University of Padova,Italy	Modifications of the calcium extruding systems during programmed cell death
Riccardo Brambilla	Italian	University Pompeu Fabra, Barcelona,Spain	San Raffaele Institute, Milano, Italy	Behavioural analysis of Ras-GRF1 and ERK1-/- mice treated with cocaine and morphine
Antonella Caivano	Italian	University of Cambridge, UK	CNR,Naples, Italy	Multiple display of entire HIV-1 reverse transcriptase on a macromolecular scaffold derived from a multienzyme complex
Laura Casalino	Italian	Pasteur Institute, Paris, France	International Institute of Genetics and Biophysics, Naples, Italy	Analysis of the role of Fra-1 in cell cycle regulation of thyroid cells
Andrea Colombari	Italian	Institute of Marine Biology of Crete, Greece	Laboratory of Marine Biology & Fishery, Fano, Italy	Developing of a microsatellite DNA assay for a rapid identification of the distribution of the swordfish by individual assignment
Francesca Fallarino	Italian	Medical College of Georgia, USA	University of Perugia, Italy	Role of IGO in T cell suppression
Elisabetta Ferretti	Italian	Stower Institute, Missouri, USA	University Vita-Salute S. Raffale, Milan,Italy	*In vivo* analysis of ternary complex formation on r4-Hox enhancers
Silvia Galardi	Italian	University of Edinburgh, UK	University of Rome, Italy	Characterisation of snRNA modifications in yeast: role of 2'O-methylation in

country & name	nationality	guest laboratory	home laboratory	research interest
				U6 snRNA assembly and function
Laura Gatti	Italian	The Sanger Centre, Cambridge, UK	National Cancer Institute, Milan,Italy	Global mechanisms in response to cis-platin in fission yeast
Lucia Gullotti	Italian	University of Bonn, Germany	University of Palermo, Italy	Detection of mutations and polymorphisms in the thymidylate synthase gene by SSCP-based capillary electrophoresis
Alessandro Ieraci	Italian	INSERM Unit 382, Marseille, France	University of Turin, Italy	Characterisation of signalling networks involved in HGF-mediated hepatocyte survival during liver development
Giovanna Liguori	Italian	CSIC - UMH, Alicante, Spain	CNR,Naples, Italy	Analysis of anterior neuroectoderm patterning in cripto-/- embryos
Maddalena Malerba	Italian	DKFZ, Heidelberg,Germany	ISREC, Epalinges, Switzerland	Purification and characterization of recombinant parvoviruses
Paola Menichini	Italian	CNRS, Paris, France	National Cancer Research Institute, Genova,Italy	An *in vivo* immuno precipitation (ChIP) approach to study the binding of p53 protein to native chromatin in human cells
Alessia Para	Italian	University of Oxford, UK	University College, Huddinge, Sweden	Primordium initiation in *Arabidopsis thaliana*
Massimo Pasqualetti	Italian	University of Oslo, Norway	IGBM Illkirch, France	Developmental analysis of pre-cerebellar, vestibular, and serotonergic neurons in the hindbrain of wt and Hoxa2 mutant mice
Paolo Pinton	Italian	University of Bristol, UK	University of Padova,Italy	Dynamic imaging of PKC isoform translocation in the pancreatic islet B cells: a study by adenovirus-mediated expression of GFP
Maria Pia Postiglione	Italian	IMP, Vienna,Austria	Stazione Zoologica, Napoli,Italy	Establishment of an *in vitro* system to study early thyroid development
Jerneja Tomsic	Italian	University of Witten, Germany	University of Camerino, Italy	Functional role of GTP hydrolysis in bacterial translation initiation factor 2
Raffaella Ugolini	Italian`	Oxford Centre for Molecular Sciences, UK	University of Verona,Italy	Preparation and characterisation of 15N labelled proteins for NMR studies of molten globule
Mario Ventura	Italian	Institute of Human Genetics, Newcastle upon Tyne, UK	University of Bari, Italy	Evolutionary plasticity of pericentromeric region

country & name	nationality	guest laboratory	home laboratory	research interest
Giuliana Verdone	Italian	Oxford Centre for Molecular Sciences, UK	University of Udine, Italy	NMR solution structure of gC1q domain of emilin-1
Paola Vittorioso	Italian	INRA, Versailles, France	University of Rome, Italy	Identification of a knock out mutation in AtBBF1 a Dof protein involved in the regulation of ro1B expression in Arabidopsis
Norway				
Lone Aanerud Omtvedt	Norwegian	University of Oxford, UK	The Centre of Biotechnology, Oslo, Norway	Involvement of glycosylation in immunoglobulin deposition disorders
Poland				
Aneta Bartosik	Polish	University of Birmingham, UK	Polish Academy of Science, Warsaw, Poland	Subcellular localisation of the ParB protein in *Pseudomonas aeruginosa* cells
Marzanna Deniziak	Polish	CNRS UPR 9002, Strasbourg, France	Polish Academy of Sciences, Poznan,Poland	Study of peculiarities of the enzymes involved in the primitive pathway of tRNA asparaginylation in *Thermus thermophilus*
Dorota Lachowska	Polish	Universitat de les Illes Balears, Mallorca, Spain	Polish Academy of Sciences, Krakow, Poland	Genetic relationships among bisexual and parthenogenetic species of Brachyderini (Coleoptera:Curculionidae)
Michal Minczuk	Polish	MCR-LMB, Cambridge, UK	University of Warsaw, Poland	Inhibition of HSV-1 infection by designed zinc finger transcription factors
Monika Puzianowska-Kuznicka	Polish	University of Geneva, Switzerland	Polish Academy of Sciences, Warsaw, Poland	Specification of retinal ganglion cells during retina ontogenesis
Portugal				
Joao Bettencourt-Relvas	Portuguese	ETH Zürich, Switzerland	University of Cambridge, UK	A conditional knock-out analysis of beta 1 integrin function in oligodendrocytes
Slovenia				
Marjanca Starcic	Slovenian	Utrecht University, Netherlands	University of Ljubljana, Slovenia	Molecular analysis of CRP regulation of traJ expression
Natasa Debeljak	Slovenian	INSERM Unite 470, Nice, France	University of Ljubljana, Slovenia	Mouse as a model to study the *in vivo* role of gene Cyp51 and meiosis activating terols in spermatogenesis
Spain				
Susana Alemany	Spanish	Medical Sciences Institute, Dundee, UK	CSIC, Madrid,Spain	Regulation of Cot kinase activity
Aurora Brox-Alarcon	Spanish	Netherlands Institute for Developmental Biology, Utrecht,Netherlands	University of Murcia, Spain	Role of PAX-6 in patterning and morphogenesis of the amphibian forebrain

country & name	nationality	guest laboratory	home laboratory	research interest
Arturo Calzada	Spanish	Paterson Institute of Cancer Research,Manchester, UK	University of Salamanca, Spain	Genomic footprinting of a eukaryotic DNA replication fork
Silvia Canudas	Spanish	University of Rome, Italy	CSIC Barcelona, Spain	Analysis of the contribution of GAGA-dSAP18 interaction to the regulation of the Fab-7 element of the bithorax complex
Araceli Castillo-Garriga	Spanish	North Carolina State University, Raleigh,USA	Universidad de Malaga, Malaga,Spain	Characterization of the interaction between plant proteins and Geminivirus proteins involved in viral replication
Senena Corbalan-Garcia	Spanish	University College London, UK	University of Murcia, Spain	Role of the C2 domain in the biological function kinase C alpha
Jose Corcelles	Spanish	University of Aberdeen,UK	Universidad Pablo de Olavide, Sevilla, Spain	Cloning and deletion of MNN6 and SSD1 genes in *Cadida albicans*
Veronica Esteban-Martin	Spanish	ISREC, Epalinges, Switzerland	Centro de Investigacion del Cancer, Salamanca,Spain	Characterization of the F1p1 protein phosphatase function in fission yeast
Ainhoa Etxeberria	Spanish	Hamburg University, Germany	Instituto Cajal CSIC, Madrid, Spain	Molecular determinants for KCNQ/M-channel potentiation
Manuel Garcia Medina	Spanish	Cavalieri Ottolenghi Scientific Institute, Torino, Italy	Institut Municipal Investigacio Medica, Barcelona,Spain	Characterisation of the role of the plasminogen system in A-beta generation using hippocampal neurons from knock-out mice
Santiago Garcia Vallve	Spanish	EBI, EMBL Hinxton, UK	Rovira i Virgili University, Tarragona,Spain	Bioinformatics analysis of complete genomes from species that are phylogenetically very related
Pilar Hernandez-Acosta	Spanish	University of Tübingen, Germany	University of Valencia,Spain	Biochemical characterization of the 4'-phospho-pan tothenoylcysteine decarboxylase AtHAL3a from *Arabidopsis thaliana*
Rosario Hernandez-Dominguez	Spanish	University of Cambridge, UK	Universidad Complutense, Madrid,Spain	Role of ceramides as mediators of TNF-alpha effects on SREBP1 expression and translocation
Maria Jose-Blanco	Spanish	University College London, UK	Cajal Institute CSIC, Madrid, Spain	Functional analysis of snail genes in zebrafish
Marian Llamas Lorente	Spanish	Utrecht University, Netherlands	Estacion Experimental del Zaidin, Granada,Spain	The pseudomonas putida Tol-OprL proteins are essential for the uptakes of solutes
Maria Martin-Bermudo	Spanish	University of Cambridge, UK	Insituto de Parasitologia -	Role of the PS integrins in regulating the

country & name	nationality	guest laboratory	home laboratory	research interest
			CSIC, Granada,Spain	migration and survival of the midline glia during Drosophila CNS development
Pedro Martinez	Spanish	Stazione Zoologica A Dohrn, Napoli,Italy	Bergen University, Norway	Left right axis specification in echinoderms
Juan Ramon Martinez-Morales	Spanish	Institut Curie, Orsay, France	CSIC, Madrid,Spain	Molecular analysis of the Otx2 Mitf and Pax2 function in the establishment of eye territories
Eva Mendez	Spanish	University of Oslo, Norway	University of Barcelona, Spain	Specificity in the cAMP response – Manipulation of sperm motility by intervention of PKA C subunit function
Cecilia Mur Perez	Spanish	Imperial College, London, UK	UCM,Madrid,Spain	Role of IRS-1 and IRS-2 in cell proliferation analysis of cell cycle mechanisms
Antonio Prado	Spanish	University of Würzburg, Germany	Universidad Pablo de Olavide, Sevilla,Spain	Molecular characterisation of na gene
Aurelio Reyes	Spanish	Wellcome Trust/MRC, Cambridge, UK	CNR Bari, Italy	Analysis of the replication mechanism of chicken mitochondrial genome
Maria Sanchez Fernandez	Spanish	EMBL Heidelberg, Germany	University of Barcelona, Spain	Microarray study in non-HFE Hemochromatosis patients
Silvia Sanchez Munoz	Spanish	University of Torino, Orbassano, Italy	CSIC-UAM,Madrid,Spain	Study of axonal transport during neurite retraction
Norway				
Magnus Althage Axelsson	Swedish	CNRS, Gif-sur-Yvette, France	University of Göteborg, Sweden	Investigation of proton pumping ability of wild type and mutant nicotinamide nucleotide transhydrogenases using caged substrates
Linda Fröderberg	Swedish	Institute of Molecular Biological Sciences, Amsterdam,Netherlands	Stockholm University, Sweden	Life of a bacterial signal sequence
Katarina Gradin	Swedish	IGBMC, Strasbourg, France	Karolinska Institute, Stockholm,Sweden	Role of a novel bHLH/Pas protein in regulation of circadian rhythms
Ann-Kristin Östlund Farrants	Swedish	University College of London, UK	Stockholm University, Sweden	The function of the chromatin remodelling complex SWI/SNF in RhoA, Rac and cdc42 signal transduction pathways
UK				
Keith Firman	British	Delft University of Technology, Netherlands	University of Portsmouth, UK	Single-molecule analysis of DNA-based molecular motor

country & name	nationality	guest laboratory	home laboratory	research interest
Colette Anne Inkson	British	Hebrew University, Jerusalem,Israel	University of York,UK	Molecular characterisation of AChE expression and function in bone
Sonya Martin	British	Heidelberg University, Germany	MCR,London,UK	Application of spatially modulated illumination microscopy to determine the size of transcription factories in human cells
others				
Kristina Havas	American	ETH Zürich, Switzerland	Wellcome Trust Biocentre, Dundee, UK	*In vivo* high resolution mapping of the altered topology of the HO endonuclease promoter in response to SWI/SNF recruitment
Annette Salmeen	American	Louis Pasteur University, Strasbourg, France	Oxford University, UK	Molecular dynamics studies on the interactions between protein tyrosine phosphatase 1B and the insulin receptor
Cintia Roodveldt	Argentinian	MRC-LMB, Cambridge, UK	Weizmann Institute Rehovot, Israel	Directed evolution of a novel stereospecific phosphotriesterase
Cassandra Extavour	Canadian	IMBB - Forth,Iraklio, Greece	University of Cambridge, UK	Specification of primordial germ cells in crustaceans and chelicerates
Bose Kochupurakkal Skaria	Indian	University of Cambridge, UK	Weizmann Institute, Rehovot, Israel	Crystal struction of the ErbB3-NDF-beta complex
Saravanan Thangamani	Indian	Institute for Animal Health, Surrey, UK	Institute of Parasitology, Ceske Budejovice, Czech Republic	Molecular interaction between tick alpha-2-macroglobulin and African swine fever virus
Janis Klovins	Latvian	Uppsala University, Sweden	University of Latvia, Riga, Latvia	The structural requirements for ligand activation of peptide binding GPCRs
Ioan Ardelean	Romanian	University of Vienna,Austria	Institute of Biology, Bucharest, Romania	Investigations on the molecular biology of stress defence strategies in cyanobacteria
Stefan Eugen Szedlacsek	Romanian	Max Planck Institute for Molecular Physiology, Dortmund,Germany	Romanian Academy, Bucuresti,Romania	Structural study of the bilateral interaction between tyrosine phosphatase-SL (PTP-SL) and MAP kinase ERK2
Alexei Aravin	Russian	Max Planck Institute for Biophysical Chemistry, Göttingen, Germany	Russian Academy of Sciences, Moscow, Russia	Investigation of natural short RNAs in Drosophila
Stepan Belyakin	Russian	EMBL Heidelberg, Germany	Institute of Cytology and Genetics, Novosibirsk,Russia	Identification and analysis of late replicated genes in Drosophila using microarray technique

country & name	nationality	guest laboratory	home laboratory	research interest
Alexander Kamnev	Russian	University of Athens, Greece	Russian Academy of Sciences, Saratov, Russia	Study of cell surface biopolymers of wild-type and mutant *Azospirillum brasilense* strains using vibrational spectroscopy techniques
Vadim Mesyanzhinov	Russian	University of Geneva, Switzerland	Russian Academy of Sciences, Moscow, Russia	A genetic approach to obtain mutations influencing the folding pathway of bate-riophage T4 proteins
Viktor Tsyganov	Russian	University of Bonn, Germany	All-Russian Research Institute for Agricultural Microbiology, St Petersburg, Russia	Mutational approach to study the role of cytoskeleton in ethylene-dependent switch in cell polarity during thigmo-morphogenesis
Lidia Vasilieva	Russian	University of Cambridge, UK	University of Helsinki, Finland	Structure determination of the Semliki Forest virus protease pro39
Shin-Hong Shiao	Taiwan	EMBL Heidelberg, Germany	IGBMC, Strasbourg, France	Cellular and molecular responses to malaria parasites in mosquito *Anopheles gambiae*
Alexander Nikonenko	Ukrainian	Hamburg University, Germany	Bogomoletz Institute of Physiology, Kiev, Ukraine	Quantification of inhibitory synapses formed on somata of principal CA1 cells in the hippocampus of TN-R deficient mice
Marina Skok	Ukrainian	Pasteur Institute, Paris, France	Palladin Institute of Biochemistry, Kiev, Ukraine	Study of lymphocytes in nicotinic recep-tor alpha 7 and beta2 subunit-deficient mice

awards of short-term fellowships from 1997 – 2001

country of origin	number of applications	% of total	number of awards	% of total awards
Austria	10	0.74	6	0.78
Belgium	17	1.25	10	1.30
Croatia*	5	0.37	4	0.52
Czech Republic	19	1.40	12	1.56
Denmark	18	1.33	9	1.17
Finland	11	0.81	8	1.04
France	133	9.82	82	10.66
Germany	135	9.96	68	8.84
Greece	52	3.84	31	4.03
Hungary	31	2.29	16	2.08
Iceland	2	0.15	2	0.26
Ireland	17	1.25	12	1.56
Israel	59	4.35	36	4.68
Italy	192	14.17	113	14.69
Netherlands	50	3.69	38	4.94
Norway	13	0.96	8	1.04
Poland	0	0.00	0	-
Portugal	18	1.33	12	1.56
Slovenia*	3	0.22	2	0.26
Spain	171	12.62	95	12.35
Sweden	22	1.62	14	1.82
Switzerland	22	1.62	12	1.56
Turkey	19	1.40	10	1.30
United Kingdom	116	8.56	67	8.71
East Europe	150	11.07	65	8.45
USA/Canada/Others	70	5.17	37	ß4.81
Total	**1355**	**100**	**769**	**100**

* not member for the full-time period

short term fellowships 1977 – 2001

year	applications	awards
2001	233	124 (53%)
2000	274	176 (64%)
1999	230	138 (60%)
1998	279	143 (51%)
1997	339	188 (55%)
1996	316	180 (57%)
1995	325	187 (57%)
1994	369	203 (55%)
1993	376	209 (55%)
1992	351	213 (61%)
1991	344	194 (56%)
1990	346	211 (61%)
1989	331	199 (60%)
1988	351	211 (60%)
1987	301	212 (70%)
1986	309	215 (70%)
1985	304	221 (73%)
1984	320	226 (71%)
1983	335	223 (67%)
1982	321	213 (66%)
1981	339	235 (69%)
1980	357	242 (68%)
1979	344	243 (71%)
1978	349	244 (70%)
1977	294	213 (72%)

long term fellowships 1977 – 2001

year	applications	awards
2001	645	147 (23%)
2000	707	155 (22%)
1999	830	167 (20%)
1998	790	144 (18%)
1997	831	185 (22%)
1996	898	160 (18%)
1995	877	147 (17%)
1994	806	176 (22%)
1993	739	199 (27%)
1992	626	142 (23%)
1991	571	139 (24%)
1990	526	123 (23%)
1989	460	118 (26%)
1988	455	141 (31%)
1987	383	120 (31%)
1986	333	90 (27%)
1985	340	92 (27%)
1984	305	112 (37%)
1983	294	103 (35%)
1982	276	91 (33%)
1981	274	111 (41%)
1980	242	108 (45%)
1979	254	101 (40%)
1978	235	101 (43%)
1977	236	94 (40%)

applications

To																									
Austria													1										1		2
Belgium																									0
Croatia																									0
Czech Rep.																									0
Denmark		1									1							1				1	1	1	6
Finland							1												1						2
France					1		1	4	1			1	9			1	1	1	3	2			1	1	2	29
Germany			1	1			2	3	2	2		4	9			2			8				2	7	1	44
Greece													2											1	1	4
Hungary																										0
Iceland																										0
Ireland																										0
Israel								3								1							1		1	6
Italy					1		1					2						1	6					1		12
Netherlands		1			1							1						1	2	1			1	1	1	10
Norway													1						2							3
Poland																										0
Portugal																										0
Slovenia																										0
Spain		1							1				4			1		1							1	9
Sweden								1				1							1					3		6
Switzerland					1	2			1			1	3	1		1	1		1				1	1	3	17
Turkey																										0
U.K.		1		2			8	7	1	3			1	17		1	2			15	1		1		6	2	68
EMBL																										0
East Europe																										0
Others				1				3					1	3			1			1		3	1	1			15
Total	0	4	1	4	4	2	13	21	6	5	0	2	11	49	1	1	9	2	4	40	5	3	2	8	23	13	233

awards

To																									
Austria													1										1		2
Belgium																									0
Croatia																									0
Czech Rep.																									0
Denmark	1																								1
Finland																									0
France				1		1	3						4			1		1	1	2			1	1	16
Germany		1	1					1	1			2	3						4				1	4	2	20
Greece													1											1	1	3
Hungary																									0
Iceland																									0
Ireland																									0
Israel							2																1		3
Italy				1								2							4						7
Netherlands												1						1	2	1			1		6
Norway													1						1						2
Poland																									0
Portugal																									0
Slovenia																									0
Spain								1					2			1									4
Sweden							1					1											1		3
Switzerland				1	2			1			1			1		1	1		1				1	1	11
Turkey																									0
U.K.	1					6	4	1	2			1	9		1	2			10	1			1	3	42
EMBL																									0
E. Europe																									0
Others							1						2						1						4
Total 0	2	1	1	3	2	7	11	4	3	0	1	7	23	1	1	5	1	2	24	4	0	0	3	10	8	124

name	year selected	nationality	topic(s)	institute
Ralf Adams	2000	German	Vascular development	Imperial Cancer Research Fund, London,UK
Uri Alon	2000	Israeli	Engineering of genetic circuits	Weizmann Institute, Rehovot,Israel
Bruno Antonny	2001	France	Protein coated vesicles	CNRS, Valbonne, France
Silvia Arber	2000	Swiss	Development of the spinal cord	Biocentre Basel, Switzerland
Robert Arkowitz	2000	American	Polarized cell growth in yeast	CNRS University of Nice, France
Joaquin Arribas	2001	Spanish	Transmembrane protein processing	Hospital Universitari, Vall d'Hebron, Barcelona
Hilary Ashe	2000	British	Signaling in Drosophila	University of Sheffield, UK
Michalis Averof	2000	Greek	Hox genes and body plans	IMBB-FORTH,Heraklion, Greece
Naama Barkai	2000	Israeli	Biochemical networks	Weizmann Institute, Rehovot,Israel
Frederic Berger	2000	French	Arabidopsis syncytial endosperm polarity	Universite Lyon1, France
James Briscoe	2000	British	Development of the nervous system	NIMR,London,UK
Fernando Casares	2000	Spain	Organ growths in Drosophila	IBMC, Porto, Portugal
Savvas Christoforidis	2001	Greek	Membrane trafficking	University of Ioannina, Greece
Ian Collinson	2001	British	Structural biology of membrane proteins	Max Planck Institute for Biophysics, Frankfurt, Germany
Barbara Conradt	2000	German	Apoptosis in *C.elegans*	Max Planck Institute of Neurobiology, Munich, Germany
Patrick Cramer	2000	German	Structure of RNA Pol II	University of Munich, Germany
Peter Currie	2000	Australian	Molecular cell differentiation	MRC, Edinburgh,UK
Jan-Willem de Gier	2000	Dutch	Membrane protein assembly	Stockholm University, Sweden
Andrea Dessen	2000	Italian	Structure of cell wall components	Institute for Structural Biology, Grenoble, France
Barry Dickson	2000	Australian	Axon guidance	IMP, Vienna,Austria
Maria Dominguez	2000	Spanish	Drosophila eye development	CSIC y UMH, Alicante, Spain
Anne Donaldson	2000	British	Cell division in yeast	Wellcome Trust Biocentre, Dundee, UK
Christian Fankhauser	2000	Swiss	Light signaling in Arabidopsis	Geneva University, Switzerland
Rafael Fernandez-Chacon	2000	Spain	Synaptic vesicles	University of Seville, Spain
Michael Glotzer	2000	American	Cytokinesis	IMP, Vienna,Austria
Pierre Gönczy	2000	Swiss	Cell division in *C.elegans*	ISREC, Epalinges, Switzerland
Acaimo Gonzalez-Reyes	2000	Spanish	DNA repair in Drosophila	CSIC, Granada, Spain
Alex Hajnal	2001	Swiss	*C.elegans* development	University of Zürich, Switzerland

name	year selected	nationality	topic(s)	institute
Ykä Helariutta	2000	Finnish	Wood Development	Institute of Biotechnology, Helsinki, Finland
Volkhard Helms	2000	German	Simulation of protein complexes	Max Planck Institute for Biophysics, Frankfurt,Germany
Alicia Hidalgo	2000	Spanish	CNS development in Drosophila	University of Cambridge, UK
Judy Hirst	2000	British	Structure & function of proton-pumps	MRC Dunn Human Nutrition Unit, Cambridge, UK
Frank Holstege	2000	Dutch	Eukaryotic transcription regulation	UMC Utrecht, The Netherlands
Ralf Jansen	2000	German	The yeast RNP complex	ZMBH,Heidelberg, Germany
Baljit Khakh	2000	British	ATP signaling	MRC-LMB, Cambridge, UK
Juergen Knöblich	2000	German	Asymmetric cell division	IMP, Vienna,Austria
Igor Konieczny	2000	Polish	Plasmid DNA replication	University of Gdansk, Poland
Pekka Lappalainen	2000	Finnish	Cytoskeletal dynamics	Institute of Biotechnology, Helsinki,Finland
Bruno Lemaitre	2000	French	Drosophila immunity	CNRS, Gif-sur-Yvette, France
Malcolm Logan	2000	British	Vertebrate limb development	NIMR, London,UK
Jan Löwe	2000	German	Structure of the divisome	MRC-LMB, Cambridge, UK
Zoi Lygerou	2001	Greek	Cell cycle control	University of Patras, Greece
Isabelle Mansuy	2001	French	Biology of schizophrenia	ETH Hönggerberg, Switzerland
Andrea Mattevi	2001	Italian	Structural enzymology	University of Pavia,Italy
Patrick Mehlen	2000	France	Dependence receptors	University of Lyon 1, France
George Mosialos	2000	Greek	EBV induced oncogenesis	Biomedical Sciences Research Center, Vari,Greece
Andrea Musacchio	2000	Italian	Structure of protein complexes	European Institute of Oncology, Milan,Italy
Laszlo Nagy	2000	Hungarian	Nuclear hormone receptors	University of Debrecen, Hungary
Ulf Nehrbass	2001	German	Structural organisation of the nucleus	Institut Pasteur, Paris, France
Stephan Neuhauss	2001	German	Eye development in zebrafish	ETH Zürich, Switzerland
Poul Nissen	2000	Danish	Crystallography of the ribosome	Aarhus University, Denmark
Stephane Noselli	2001	French	Morphogenesis in Drosophila	CNRS, University of Nice, France
Tom Owen-Hughes	2000	British	Chromatin remodelling	Wellcome Trust Biocentre, Dundee, UK
Zdena Palkova	2001	Czech	Yeast colony development	Charles University, Prague, Czech Republic
Alessio Peracchi	2001	Italian	Catalytic DNA	University of Parma,Italy
Anastassis Perrakis	2000	Greek	Computational macromolecular crystallography	Netherlands Cancer Institute, Amsterdam, The Netherlands

name	year selected	nationality	topic(s)	institute
Jan-Michael Peters	2000	German	Cell cycle in Xenopus	IMP, Vienna,Austria
Francesc Posas	2000	Spanish	Osmosensory mechanisms	Universitat Pompeu Fabra,UPF, Barcelona,Spain
Freddy Radtke	2000	German	Notch receptor in hematopoiesis	Ludwig Institute for Cancer Research, Epalinges, Switzerland
Ziv Reich	2001	Israeli	Large molecular assemblies	Weizmann Institute of Science, Rehovot, Israel
Manuel Santos	2001	Portuguese	Genome evolution	University of Aveiro, Portugal
Orlando D. Schärer	2000	Swiss	Mammalian DNA repair	University of Zürich, Switzerland
Andreas Schedl	2000	German	Urogenital development	Max Delbrück Centre, Berlin,Germany
Christa Schleper	2000	German	Thermophilic archaea	Darmstadt University of Technology, Germany
Christian Schlötterer	2000	German	Identification of adaptive mutations	Institut für Tierzucht und Genetik, Vienna,Austria
Kay Schneitz	2001	German	Organogenesis in Arabidopsis	University of Zürich, Switzerland
Daniela Stock	2000	German	Structure of molecular machines	MRC-LMB, Cambridge, UK
Luca Tamagnone	2001	Italian	Plectins in neutral development	ICR, University of Torino, Italy
Tomoyuki Tanaka	2000	Japan	Sister chromatid cohesion	Wellcome Trust Biocentre, Dundee, UK
Maximilian Telford	2000	British	Animal evolution	Cambridge University, UK
Pascal Therond	2001	Fench	Signalling in Drosphila	CNRS, University of Nice, France
Thomas Tuschl	2000	German	RNA interference	Max Planck Institute for Biophysical Chemistry, Göttingen,Germany
Guido van den Ackerveken	2001	Dutch	Disease in Arabidopsis	University of Utrecht, The Netherlands
Gisou van der Goot	2000	Dutch	Toxin host-cell interactions	University of Geneva, Switzerland
Bas van Steensel	2001	Dutch	Human chromatin proteins	University of Amsterdam, The Netherlands
Uwe Vinkemeier	2001	German	Regulation of transcription	FU Berlin, Germany
Ernst Wimmer	2001	German	Evolutionary development of insects	University of Bayreuth, Germany
Magdalena Zernicka-Goetz	2001	Polish	Development of cell polarity in the mouse	Wellcome/CRC, Cambridge University, UK

geographical distribution for
EMBO young investigators

	2000			2001				
country								
Austria	9	2.2	5	8.9	3	2	0	0
Belgium	8	1.9	0	0	2	1.3	0	0
Croatia	2	0.5	0	0	1	0.7	0	0
Czech Rep.	2	0.5	0	0	0	0	1	4.3
Denmark	5	1.2	1	1.8	0	0	0	0
Finland	9	2.2	2	3.6	1	0.7	0	0
France	72	17.3	5	8.9	17	11.3	4	17.4
Germany	52	12.5	7	12.5	22	14.7	3	13
Greece	8	1.9	2	3.6	1	0.7	2	8.7
Hungary	2	0.5	1	1.8	1	0.7	0	0
Iceland	0	0	0	0	0	0	0	0
Ireland	6	1.4	0	0	3	2	0	0
Israel	13	3.1	2	3.6	7	4.7	1	4.3
Italy	22	5.3	1	1.8	6	4	3	13
Netherlands	10	2.4	2	3.6	6	4	2	8.7
Norway	2	0.5	0	0	1	0.7	0	0
Poland	13	3.1	1	1.8	2	1.3	0	0
Portugal	9	2.2	1	1.8	6	4	1	4.3
Slovenia	3	0.7	0	0	0	0	0	0
Spain	40	9.6	4	7.1	26	17.3	1	4.3
Sweden	23	5.5	1	1.8	3	2	0	0
Switzerland	21	5.1	6	10.7	11	7.3	4	17.4
Turkey	8	1.9	0	0	1	0.7	0	0
U.K.	75	18.1	14	25	30	20	1	4.3
Cyprus	1	0.2	0	0	0	0	0	0
Total	415		55		150		23	
female	94	22.7	13	23.2	44	29.3	4	17.4
male	321	77.3	42	75	106	70.7	19	82.6

EMBO young investigators 2000/2001 general statistics

	average	range
age	34	28 - 40
post doctoral years	4.9	2 - 9
number of labmembers	4.5	0 - 11
total number of papers	18.7	5 - 40
last author	2.9	0 - 16
first author	8.1	3 - 15p

pre- and/or post doctorate was spent in/at

	no.	%
USA	44	56%
EMBL	14	18%
MRC LMB	9	11.5%
MRC (all institutes)	12	15.4%
MPI (all institutes)	9	11.5%

post doctoral fellowship were received from the following international agencies

	no.	%
EMBO	23	29.5%
HFSP	16	20%
EU TMR	8	10%

participation of women in EMBO activities

EMBO membership

total number of members	% women
1049	13.1

EMBO courses & workshops in 2001 (based on data available)

	% female participants	% female speakers
practical courses	44	23
workshops	40	25
lecture courses	63	20

EMBO long-term fellowships (statistics for 1996 – 2001)

	applications	awarded	success rate
female applicants	1746 (40.3%)	594 (34.7%)	18.0%
male applicants	2584 (57.7%)	315 (65.3%)	22.9%

EMBO short-term fellowships (statistics for 2001)

	applications	awarded	Success rate
female applicants	130 (55,7%)	70 (56,4%)	54%
male applicants	103 (44,2%)	54 (43,5%)	57%

EMBO young investigator programme (statistics for 2000 – 2001)

	applications	awarded	success rate
female applicants	138 (24.4%)	17 (21.8%)	12.3%
male applicants	427 (75.6%)	61 (78.2%)	14.3%

practical courses

title	organaizers	place	date
Imaging and manipulation of biochemical reactions in living cells and organisms	P. Bastiaens, R.Pepperkok, G. E.Davies	EMBLHeidelberg	March 26 – April 6
Techniques in molecular medicine	A.-C. Syvänen, U. Landgren,M.Lagerström-Fermer, *et al.*	S – Uppsala	June 6 – 12
Microinjection and detection of probes in cells	W. Ansorge, G. Neuhaus, R.Pepperkok, *et al.*	EMBL Heidelberg	June 18 – 23
Advanced imaging techniques in living cells	S. Moss, S. Bolsover, M.Duchen, *et al.*	UK – London	June 18 – 29
Anomalous scattering in macro-molecular structure determination	G. Leonard,A.Thompson, S. McSweeney, *et al.*	F – Grenoble	June 19 – 23
Bioinformatic analysis of DNA and protein sequences:Evolution, structure and function	J. O. McInerney, T.M.Embley, Ken H. Wolfe, *et al.*	IRL – Maynooth	July 25 – June 1
Mouse transgenics and behaviour	D. P. Wolfer, R.G.M.Morris, H.-P. Lipp	CH – Zürich	July 9 – 21
Advanced bioinformatic techniques in genomics, transcriptomics and proteomics	S. Andersson, P.-A.Binz, C. Dehio, *et al.*	S – Uppsala	August 26 – September 1
Electron microscopy, immunocytochemistry and stereology for cell biology	G. Griffiths, H. Schwarz	EMBL Heidelberg	August 30 – September 8
Solution scattering from biological macromolecules	D. Svergun,R.Willumeit	EMBL Hamburg	September 5 – 14
Mouse genome engineering by site-specific recombinases	W. Müller, F. Edenhofer	D – Braunschweig	September 3 – 14
In vivo **DNA/protein interactions**	T. Grange, H.Thomassin, V. Orlando	F – Paris	September 10 – 20
Structure determination of biological macromolecules	M.Nilges, M.Sattler	EMBL Heidelberg	September 12 – 19
DNA microarrays: applications and data analysis	W. Ansorge, J. Quackenbush,A.Brazma	EMBL Heidelberg	Sep. 29 – October 6
Protein-protein interactions	M.Meisterernst, R.Grosschedl, F.-U. Hartl	D – Munich	October 22 – 29
Analysis and informatics of DNA-Array gene expression data	A.Brazma, W. Ansorge, A.Robinson, *et al.*	UK – Cambridge	October 29 – November 3
New plant model system Medicago	A. Kondorosi, J. Denarie	F – Gif-sur-Yvette	November 19 – 30

lecture courses

Molecular mechanisms in signal transduction (Joint FEBS/EMBO lecture course)	J.L.Bos, K.W.A.Wirtz,I.Pintzas, *et al.*	GR – Island of Spetses	August 19 – 29
Protein Biology: From synthesis to function and disease (Joint FEBS/EMBO lecture course)	B.F.C. Clark,A.R. Fersht, D. Rhodes, *et al.*	GR – Island of Spetses	September 4 – 14
Cellular signalling in development and disease	I.Dikic, O. Silvennoinen, G. Superti-Furga, *et al.*	HR – Split	September 21 – 27

workshops

title	organaizer(s)	place	date
Protein sorting and processing in the secretory pathway	S. Tooze, G. Seethaler, D. Shields	A – Goldegg	January 9 – 14
Pumps, channels, and transporters (Joint Juan March/EMBO workshop)	A.González, W. Kühlbrandt, D.R. Madden, *et al.*	E – Madrid	February 12 – 14
mRNA enigmas: transport,silencing, decay and their interplay with translation (Joint Jacques Monod/EMBO Conference)	M.Dreyfus, T. Hohn	F – Aussois	March 27 – April 1
Genetics of osteoporosis: from basic to clinical research	G. Levi,M.-C. de Vernejoul	I – Sestri Levante	March 31 – April 3
Comparative developmental biology	R. Di Lauro, E.Boncinelli, E.Davidson, *et al.*	I – Sant' Angelo d'Ischia (Naples)	April 17 – 23
Embryonic organizer signalling: the next frontiers	T. Bouwmeester, R.Zeller, S. Cohen	EMBL Heidelberg	April 28 – May 1
The structural biology of small DNA tumor viruses	P. Amati,R.Garcea, B. Griffin	I – Badia di Pontignano	May 1 – 6
Nuclear receptor structure and function	A.Maggi,M.Beato, P. Chambon, *et al.*	I – Erice	May 12 – 15
Mitochondrial (dys)function	L.A.Grivell,H.T. Jacobs, M.Bolotin-Fukuhara,	F – Aussois	May 13 – 16
Lipid rafts and caveolae (Joint ESF/EMBO workshop)	K.Fiedler, G. van Meer	E – San Feliu de Guixols	May 19 – 24
Frontiers of molecular biology: New EMBO members workshop (I)	G. Wallon,M.Gannon	D – Heidelberg/ Mannheim	May 19 – 22
Mechanisms and cellular functions of molecular chaperones (Joint EMBO workshop/EuroConference)	B. Bukau,I.Braakman	E – San Feliu de Guixols	May 26 – 31
Conference on protein phosphorylation and protein phosphatases	S. Klumpp, M.Bollen, J. Arino	D – Marburg	July 8 – 12
Molecular basis of the floral transition	C. Dean, G. Simpson, T. Gendall	UK – Norwich	July 11 – 14
Signal transduction – mediated regulation of nuclear transport	A.N. Malviya, P.J. Rogue, D. Aunis, *et al.*	F – Strasbourg	August 11 – 14
G2/M progression and associated checkpoints	A.Nebreda, T. Hunt, S. Moreno, P. Nurse	E – Salamanca	September 6 – 9
Role of microfilaments in cell polarity (Joint CNRS-Jacques Monod/EMBO Conference)	D. Louvard,A.Bretscher	F – Presqu'Ile de Giens	September 15 – 19
Cell biology of virus infection	J. Krijnse Locker, B. Sodeik,M.Suomalainen	EMBL Heidelberg	September 22 – 26
NMR and molecular recognition	A. Pastore, P. Temussi	I – Ravello	October 3 – 7
Membrane dynamics in endocytosis (Joint ESF/EMBO workshop)	A.Dautry-Varsat,M.Zerial	P – Tomar	October 6 – 11
Frontiers of molecular biology: New EMBO members workshop (II)	C. Louis	GR – Heraklion (Crete)	October 13 – 16

Scale of contributions based on net national income at factor cost
(in units of one million US Dollar)

	Scale of contribution for 2001 - 2003 %	for comparison for 1998-2000 %
Austria	2.2871	2.40
Belgium	2.8229	3.03
Croatia	0.2439	0.11
Czech Republic	0.6702	0.51
Denmark	1.6849	1.63
Finland	1.1880	1.10
France	15.7262	16.11
Germany	23.2163	25.00
Greece	1.3991	1.32
Hungary	0.4749	0.40
Iceland	0.0818	0.07
Ireland	0.7906	0.60
Israel	0.9649	0.87
Italy	12.3794	12.44
Netherlands	4.1564	4.32
Norway	1.4867	1.45
Portugal	1.2852	1.17
Slovenia	0.1765	0.16
Spain	6.4705	6.43
Sweden	2.4980	2.38
Switzerland	3.2272	3.74
Turkey	2.4351	2.16
United Kingdom	14.3340	12.36
special balancing contribution	0.0000	0.51
Poland *	1.1588	0.96

*factored at 2/3 for 2001 and 2002

upcoming events 2002

workshops
practical courses
lecture courses
plenary lectures
world programme activities

workshops 2002

Organizing the brain: genes, neurons and circuits (Joint FMI/EMBO workshop)	D. Monard, S. Arber, Y.-A.Barde, *et al.*	CH – Ascona	February 2 – 9
The invasive growth program: signals and effectors	P. Comoglio, K.Alitalo, S. Gammeltoft, *et al.*	I – Candiolo, Turin	February 21 – 24
Limb development (Joint Juan March Foundation/EMBO workshop)	D. Duboule, M.Ros	E – Madrid	April 8 – 10
The functional organization of the cell nucleus	I.Raska, U. Aebi, W. Earnshaw	CZ – Prague	April 18 – 21
Green and Heliobacteria Molecular biology, structure and function	A.R.Holzwarth,L.Overmann, M.Miller	D – Passau	April 19 – 24
Signalling and cancer (Joint EMBL/EMBO conference)	A.Nebreda, C. Marshall,M.Bienz, *et al.*	EMBL Heidelberg	April 20 – 23
Exocytosis	G. Warren, B. Dobberstein	P – Tomar	April 20 – 25
Conference on procaryotes in the third millennium: actions and effects of molecular machines	A. Toussaint, D. Holden	EMBL Heidelberg	April 26 – 30
Lymphocyte antigen receptor and coreceptor signalling) (Joint Serono Foundation/EMBO workshop	C. T. Baldari, O. Acuto, G. Koretzky *et al.*	I – Siena	May 4 – 8
Cell death across kingdoms (Joint CNRS Jacques Monod/EMBO workshop)	P. Golstein,A.Levine, D. Vaux	F – Roscoff	May 11 – 15
Translational control in development and neurobiology (Joint Serono Foundation/EMBO workshop)	A.Ephrussi, J. Richter, C. de Haro	E – Cala Blava, Mallorca	May 23 – 26
Genetic recombination and the maintenance of genome stability	S. West,A.Nicolas	F– Seillac	May 27 – 31
Molecular and developmental biology of Drosophila	T. Kaufman, V. Banergee, S. Bray, *et al.*	GR – Crete	June 23 – 29
Gut development and cancer (Joint ISREC/EMBO workshop)	J.-P. Kraehenbuhl,M.Aguet, D. Constam *et al.*	CH – Arolla	August 18 – 22
Ribozymes and RNA catalysis	D. Lilley, F. Eckstein	UK – Dundee	August 23 – 27
Molecular genetics of myogenesis and muscular diseases	P. Rigby, M.Buckingham, G. Cossu	UK – Cambridge	September 29 – Oct. 3
Frontiers of cellular microbiology: trafficking and signal transduction (Joint ESF/EMBO workshop)	J. Gruenberg, C. Montecucco	E – San Feliu de Guxiols	October 12 – 17

special workshops 2002

Genetics after the genome	K.Nasmyth, D. Schweizer	CZ – Brno	May 16 – 19
Centrosomes and spindle pole bodies (Joint EMBL/EMBO conference)	T. Gonzalez,E.Karsenti,K.Sluder, *et al.*	EMBL Heidelberg	September 14 – 17
Frontiers of molecular biology EMBO Members Workshop	E.Boye, E.Seeberg	N – Oslo	October 11 – 15
Functional genomics: the future of biology (Joint EMBL/EMBO conference)	I.Mattaj, W. Ansorge, P. Bork, *et al.*	EMBL Heidelberg	October 13 – 16

practical courses 2002

Electrical coupling in the retina	R. Weiler, A. Feigenspan, U. Janssen-Bienhold	D – Oldenburg	March 10 – 16
Plant development: molecular and cellular basis	J. Feijó,M. Oliveira	P – Oeiras	April 3 – 19
Crystallization of macromolecular complexes	C. W. Müller, S. Cusack, W. Weissenhorn, *et al.*	EMBL Grenoble	April 8 – 13
Gene vectors	M.Mezzina, F. Cosset, O. Danos, *et al.*	F – Evry	April 14 – 27
Light microscopy of live specimens	E.Stelzer, R.Pepperkok, B. Geiger, *et al.*	EMBL Heidelberg	May 5 – 18
Automated macromolecular structure solution	A.Perrakis, E.Conti,K.Scheffzek, *et al.*	EMBL Heidelberg	May 9 – 16
Electron microscopy, immunocytochemistry and stereology for cell biology	G. Griffiths, H.Schwarz, P. Webster	EMBL Heidelberg	May 22 – June 2
Advanced techniques in molecular medicine	A.-C. Syvänen, U. Landegren, H.Melhus, *et al.*	S – Uppsala	May 27 – June 4
Microarray technologies: from genome to proteome	W. Ansorge, J. Quackenbush,A.Brazma, *et al.*	EMBL Heidelberg	June 1 – 8
Digital image microscopy	I.T. Young,L.J. van Vliet,A.M. Vossepoel, *et al.*	NL – Delft	June 3 – 7
Molecular genetics with the fission yeast *Schizosaccharomyces pombe*	R.Egel, P. Nurse, O. Nielsen	DK – Copenhagen	June 9 – 21
Functional genomics using high-density oligonucleotide arrays	M.Kruhøffer, T. Ørntoft, T. Thykjaer, *et al.*	DK – Aarhus	June 15 – 21
Plant cell biology	A.Emons, A.Geitmann,A. van Lammeren,	NL – Wageningen	June 16 – 26
The application of transient kinetics methods to biological macromolecules	M.Geeves, R.S. Goody, J. Kuhlmann, *et al.*	UK – Canterbury	June 23 – 29
Molecular and genetic tools for the analysis of medaka and zebrafish development	J. Wittbrodt,M.Schartl,A.Shima, *et al.*	EMBL Heidelberg	July 21 – 31
Multidimensional NMR in structural biology	R.Kaptein, C. Griesinger, H.Oschkinat	I – Il Ciocco, Lucca	August 11 – 16
Cryo-electron microscopy and 3D image reconstruction	A.Hoenger, B. Boettcher, S. Fuller, *et al.*	EMBL Heidelberg	August 11 – 21
Fluorescence correlation spectroscopy and single molecule detection in biology	R.Rigler, J. Widengren,H. Vogel	S – Stockholm	August 12 – 16
Anatomy and embryology of the mouse	A.Marusic, S. Jonjic, S. Gajovic	HR – Zagreb	September 15 – 22
From mice to cells	L.Minichiello, C. Nerlov, R.Klein, *et al.*	EMBL Monterotondo	October 27 – Nov. 3
Protein expression, purification and crystallization	P. Tucker, Y.-H.Song,E. Pohl, *et al.*	EMBL Hamburg	December 4 – 11

lecture courses

Molecular basis of bacterial virulence and survival in infected hosts and the environment	P. Cossart,R. Kolter, E.Gonos	GR – Island of Spetses	September 3 – 13
The biology of heat shock proteins	M.Zylicz,A. Tramontano, M. Nalecz, *et al.*	P – Warsaw	September 25 – 29

world programme courses

Methods in medical genetics	W. Hennig	Chengdu/ Sichuan,China	June 16 – 30
Fluorescence microscopy of living cells (Joint A-IMBN/EMBO course)	R.Pepperkok, P. Bastiaens, K. Koike, S. Zhang	Kobe, Japan	November 17 – 23

joint ICRO/UNESCO/EMBO courses 2002

Mass spectrometry in proteomics	G.P. Palomares	Havana,Cuba	April 15 – 26
Cell motility, molecular motors and the cytoskeleton	L.C. Cameron	Rio de Janeiro, Brazil	May 27– June 7
Supramolecular complex formation in cellular signalling	A.Quest	Santiago, Chile	September 22 – Oct. 4
Cell signalling	Qi-shui Lin	Shanghai, China	October 14 – 26
Cell biology of neural development – molecular mechanisms of neurogenesis	N.G. Carri	Buenos Aires & La Plata, Argentina	November 4 – 14

EMBO plenary lectures 2002

Robert Huber
XIIth International Symposium on Calcium Binding Proteins and Calcium Function in Health and Disease
I – Cavalese
January 29 – February 3

Jürgen Soll
7th IUBMB Conference
N – Bergen
May 4 – 8

Claudio Scazzocchio
Symposium on Transcriptional Regulation in Eukaryotic Organisms
T – Ankara
May 6 – 8

Jean Massoulie
XIth International Symposium on Cholinergic Mechanisms – Function and Dysfunction
CH – St Moritz
May 5 – 9

Maria Blasco
ELSO Meeting 2002
F – Nice
June 29 – July 3

Christopher Marshall
Making Decisions in G1
I – Frascati
October 3 – 5

EMBO world programme plenary lectures 2002

Thomas Jovin
XIVth International Biophysics Congress
Buenos Aires, Argentina
April 27 – May 1

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