EMBL &cetera

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EMBL appoints heads for Hinxton and Monterotondo

EMBLhas appointed new heads of the EBI in Hinxton and the Mouse Biology Programme in Monterotondo. Nadia Rosenthal, Associate Professor at Harvard and consulting editor at the New England Journal of Medicine, has taken charge of the Mouse Biology Programme, assuming the post vacated by Klaus Rajewsky in June. Janet Thornton, Professor at the University College of London and Fellow of the Royal Society, will direct activities at the EBI, especially research. She succeeds Michael Ashburner, who has served as Co-Head of the Institute alongside Graham Cameron since the EBI was launched five years ago.

"The new five-year scientific plan at EMBL stresses functional genomics and foresees substantial expansion of the EBI and the Mouse Biology Programme at Monterotondo," says Director General Fotis C. Kafatos. "We are delighted to have attracted outstanding women scientists to lead both units in this new, dynamic era that EMBL has entered."

A priority for both scientists will be to boost research activities at their units. Past funding limitations have prevented the EBI from developing a full research programme, although there have been a few very active groups since the site was opened. New funds from the EMBL member states will permit the addition of a full complement of research teams, just as Cameron and his colleagues have been extremely successful in obtaining major funding from the EC and the Wellcome Trust to bolster the EBI databases and related services.

Monterotondo, which opened in 1999, has been waiting for the green light from EMBL's Council to reach critical mass. Rosenthal's appointment comes at a time when a partner on the Monterotondo campus, the European Mutant Mouse Archive (EMMA), has also been buttressed by funds from the EC.

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Funding boost for EBI

The EC will award the EBI and 25 collaborators nearly 20 million Euro over the next three years. The funds support four proposals including the Macromolecular Structures Database, the Microarray Database, protein-protein interaction data, and Integr8, an integrated platform for these and other EBI databases.

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Annual report

You can get a look into the major events and science at the Laboratory over the past year in EMBL's 2000-2001 Annual Report. Write to info@embl-heidelberg.de for a hard copy, or download a pdf version from www.embl-heidelberg.de/info

Science and Society goes to town

EMBL, the DKFZ, the ZMBH and the Medical Faculty of the University of Heidelberg have combined forces in a new science communication initiative, the Heidelberg Forum on the Biosciences and Society. The first event, a talk on prions, BSE and transgenic mice, was given by Professor Charles Weissmann on June 15 in the Print Media Academy in Heidelberg.

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New administrative director for EMBL

Bernd-Uwe Jahn will take over from Barton Dodd as Administrative Director of the EMBL in August. Jahn is the former Director of the Office of European Research Organisations under the German BMBF. He has also served as German delegate to the EMBLCouncil.

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German Science Minister to visit EMBL

The German Minister for Science, Edelgard Bulmahn, will be at EMBLon September 6, 2001. As part of her visit she will inaugurate the newly completed first phase of the International Technology Transfer Center and get a first-hand look at EMBL's new core facilities.

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Linking mice and medicine in Monterotondo

photo by Nubar Alexanian

Nadia Rosenthal, newly-appointed Coordinator of the EMBL Research Programme on Mouse Biology has already expanded the number of research groups in Monterotondo – the unit will see an immediate jump from three to six groups, with more projected to join soon. "A specific focus for the EMBL-Monterotondo programme will be regenerative biology and biomedical applications," she says. "The integration of mouse developmental genetics, functional genomics, high-throughput screening and molecular physiology promises to uncover new principles of healing and rejuvenation in the adult. The mouse offers the best current model for effective application of basic research discoveries to clinical strategies."

Rosenthal's own research has focused on heart and muscle development, aging and disease. Her background includes studies on transcriptional regulation, vertebrate development, mouse genetics and gene therapy. She received her PhD in Biochemistry from Harvard Medical School in 1981, and for the past eight years has headed a basic research laboratory in the Cardiovascular Research Center at Massachusetts General Hospital. After a decade of editorial experience at the New England Journal of Medicine, she also brings to the post a deep appreciation of clinical research.

"Studies of human variation are teaching geneticists where we should be looking at in the mouse," she says. "Working with clinicians, we can identify particular genes whose function we think we understand in mice and then investigate them in humans. When several different genes are involved in a disease, the mouse can be enormously helpful. You recreate the disease, try to cure it in the mouse in a number of different ways, and then develop strategies to apply what you have learned to humans."

The consolidation and systemization of mouse resources in Monterotondo, she says, will make the center a valuable resource to academic and biomedical researchers alike. She has concrete plans to build stronger ties with the other partners on the campus, such as the Italian National Research Council (CNR) and the European Mutant Mouse Archive (EMMA), which has also received significant new funding from the EC.

Rosenthal already has established links to basic scientists and clinicians working in Rome. "Combining our close contacts in other EMBL units with the wealth of local resources can make EMBL, EMMA and CNR centers at Monterotondo a paradigm for interactive science in Italy."

The EMBL Mouse Biology Programme is part of a pan-European initiative to coordinate screens for developmental and physiological perturbations related to gene mutations in mice. Rosenthal plans to involve the international mouse research community in this effort.

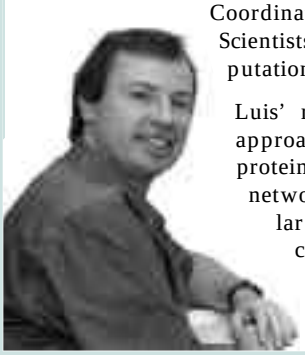
"Researchers all over the world are producing new strains of mice at a very high rate, and these animals are a potential gold mine of information about the influence of genes on mammalian development and genetic disease," Rosenthal says. "We routinely analyze mutant mice that reportedly have no phenotype, but when we take a closer look at them, we often discover an unexpected array of defects in heart, nerve and muscle. What you see in these animals depends upon your focus. We need to draw upon the collective expertise of the community."

Research at Monterotondo will also exploit and improve existing methods and techniques for manipulating the mouse genome. "Young scientists starting their laboratories now are not afraid of applying every possible technology to answer a question," she says. "You no longer ask, 'What can I do with the techniques I already have under my belt?' Instead, you ask, 'do techniques exist that will allow me to answer a particular question, and if not, how do I get them?' It is a wonderful time to be a scientist."

New heads for Structural and Computational Biology Programme

Luis Serrano and Peer Bork have been appointed Programme Coordinator and Associate Coordinator of EMBL's Structural and Computational Biology Programme. Both are Senior Scientists and have been actively working to bridge the gap between experimental and computational approaches to biology.

Luis' research has focused on structural biology with an intensive biocomputing approach, including designing artificial molecules, creating programs to predict protein folding patterns, and finding new mathematical ways to describe gene networks. Peer has closely linked computational predictions about molecular functions to structural and experimental data, and has had numerous close collaborations with many experimentally-oriented EMBLgroups.



Peer Bork

Luis Serrano

...and expanding research at the EBI

"Bioinformatics research is about answering biological questions," says Janet Thornton, newly-appointed Head of the EBI. "It is about discovering new biological information – not just providing new tools for people. The EBI has got the major critical resources together; the new funding is already allowing us to develop our five major databases and make them truly interactive. I envisage a circle of research groups around them – each linking rather closely to one or more of the core resources. It should be a very symbiotic relationship that will allow us to push farther forward than anyone else can."

Janet Thornton

Expansion will begin with the recruitment of new research group leaders in the fall. "I am looking for world-class, ambitious young bioinformaticists who want to establish their own groups to take forward computational biology in novel areas, in a superb environment with all the best links into new biological data."

For the last eleven years, Thornton has been Professor of Biomolecular Structure and Modeling at the University College London. Since 1996 she has headed the Birbeck/UCL Joint Research School in Biomolecular Sciences. "She has developed a large and valuable collection of software programs and databases that are used widely in the field," says Director General Kafatos. "While making such tools freely available to the academic community, she has also played a substantial role in a biocomputational start-up company."

"Structural data are beautiful and reveal how proteins work at the molecular level," Thornton says, "but it will be in the integration of this information with biochemical, cell biology and expression data that the major advances are made."

Alongside the new funds from EMBL, major grants from the European Commission and the Wellcome Trust have put the EBI core services on much more stable footing. Wellcome funding has flowed into Ensembl, a joint project between the EBI and its neighbor, the Sanger Centre. Ensembl has assembled the human genome sequence and added on an immense amount of knowledge gleaned from research. The EC funds are providing basic funding to help support and develop four of the core data services, a set of activities which Graham Cameron and his colleagues have worked hard to build over the last two decades. "Our vision is one of an enduring need for resources to carry out a task that is going to be with science for centuries, not just for a few years," Cameron says.

One of these resources is a database of molecular structures, a topic which has been at the center of much of Thornton's own research. Thornton says she is keen to strengthen the area of "chemoinformatics" and to reinforce links between the EBI and the pharmaceuticals industry. "Biology is an intricate interplay between small and large molecules and bioinformatics must provide the links." Existing collaborations have already been enormously helpful in molding the EBI's databases to fit the needs of its ultimate users.

ArrayExpress, a database for results of microarray experiments which Cameron and his colleagues began planning in 1997, will come on-line later this year. "This is an obvious area around which we will build extensive research activities," Thornton says. "There is a great need to develop models that move beyond interactions between single molecules – up to systems, metabolic pathways, and even developmental processes. We're seeing new ways of linking the levels of biological systems from genes to cells to organisms, and how well we are able to make those links in the next period will absolutely depend on bioinformatics."

An augmented research programme will also strengthen the EBI's ties to other academic institutions throughout the United Kingdom and Europe. Around the institute's own research groups, Thornton hopes to build an extensive circle of training and visitors programmes. Such activities are already highly developed around the service units.

Dr. Mike Dexter, Director of the Wellcome Trust, said: "Professor Thornton is an esteemed member of the scientific community. She is a world-class scientist with a wide range of scientific interests, whose research we have supported for many years. Her appointment at the EBI is a timely one, as her leadership skills, expertise and vast knowledge of the relationship of protein structure and function will be invaluable in the post-genomic era. She will be a great asset to the EBI, Wellcome Trust Genome Campus and the scientific world."

– Russ Hodge

from the Director-General

Briefing on the EMBL Council meeting, summer 2001

SAC Reviews and DG Report to Council

On the scientific side, the main items were the Council discussions of the recent SAC reviews and the Director-General's report. The report informed the delegates about the recent developments in the Laboratory, emphasising the renewed dynamism and enthusiasm at EMBL resulting from the funding decisions of Council (November 2000), the success of the EBI applications for EU funding, the development of new Core Facilities in Heidelberg, and a very successful recruitment season. The reviews of the Grenoble Outstation and the Cell Biology and Biophysics Programme in Heidelberg were exceptionally positive. The responses of the DG to the review reports can be found in the Director-General's report in the EMBL Annual Report 2000/2001, which you can download from www.embl-heidelberg.de/info/ann2000/ contents.pdf.

Salary adjustment 2001

As they have done every year since 1998, Council adjusted salaries by the same percentages applied by the Co-ordinated Organisations; they are implemented in the July 2001 salaries:

	% increase
France	1.4%
Germany	1.6%
Italy	2.4%
United Kingdom	3.0%

Staff Rules and Regulations

Council agreed to a comprehensive review of all of the Staff Rules and Regulations. This will be carried out over the next three years through a number of tripartite Working Groups; Council, Management and the Staff Association will be represented.

New Scientific Recruitments

The Laboratory has succeeded in recruiting a number of Group Leaders, Team Leaders and Staff Scientists at EMBL. A complete list appears in the table below.

In addition, EMBLwas very fortunate to attract two outstanding scientists to the leadership of over two most recent Units:

Nadia Rosenthal has been appointed as Coordinator of the EMBL Mouse Biology Programme at Monterotondo, and Janet Thornton as Director of the EBI (see pages 2-3 of this issue). Their appointments have been greeted enthusiastically by the staff at these Units and by the scientific community at large. The fact that two exceptional women scientists have been appointed purely by merit in these key positions underscores EMBL's commitment and record as an inclusive organisation.

I wish to give special thanks to Graham Cameron and Michael Ashburner who, as Joint Heads, led ably and successfully the EBI in very difficult circumstances in the last two years. The current bright prospects of the Institute would have been impossible without them, and EMBL is grateful to them. Graham will remain in the leadership team as Associate Director, and Michael will return to his primary appointment at Cambridge University but will continue important contributions to the EBI through a consultancy.

Changes in the Senior Administrative ranks

Barton Dodd will retire as Administrative Director in August, but will remain in our employment until the end of the year, continuing to contribute on several important projects, as well as to assure a smooth transition for his successor. Barton has been a very efficient Administrative Director who has managed the Administration with enormous dedication, great skills, exceptional intelligence, but also with good humour and wit that all of us have appreciated through these years. He has been the best collaborator I have had in a life-time in science. He will be a major loss to EMBL.

The new Administrative Director as of 16 August will be Bernd-Uwe Jahn who until his appointment was a delegate from Germany to the EMBLCouncil. He comes with excellent credentials and a great commitment to EMBL.

We have also been fortunate to make an excellent new appointment of a new Head of Personnel, Keith Williamson, and to promote Stefan Bäckman to Head of Finance.

I am confident that with the recruitment of Jahn and Williamson and the internal promotion of Bäckman, we have established an integrated and professional team who will successfully lead the Administration in the coming years, maintaining and developing the high quality and delivery of services that Council and the Laboratory have enjoyed under Barton Dodd.

– Fotis C. Kafatos

EMBL faculty recruitments made in 2000 and 2001

Name (nationality)	EMBL position, programme	Previous post (country)
Janet Thornton (UK)	Director, EBI	Head of Research, School Biomolecular Sciences, Birbeck College/University College London (UK)
*Nadia Rosenthal (US)	Coordinator, Monterotondo	Assoc. Professor of Medicine, Harvard Medical School/ Massachusetts General Hospital (USA)
*Asifa Akhtar (Pakistani)	Group Leader, Gene Expression	Postdoctoral Research Scientist, Adolf-Butenandt-Institut, Munich (D)
*Christopher Hellen (UK)	Co-Group Leader, Gene Expression	Assistant Professor, State University of New York, Brooklyn (USA)
*Michael Knop (CH)	Group Leader, Cell Biology & Biophysics	Independent research position, MPI for Biochemistry, Martinsried (D)
*Jürg Müller (CH)	Group Leader, Joint Gene Expression & Developmental Biology	Junior Group Leader, MPI for Developmental Biology, Tübingen (D)
*Claus Nerlov (DK)	Group Leader, Monterotondo	Head of Laboratory of Gene Therapy Research, Copenhagen University Hospital (DK)
*Carl Neumann (D)	Group Leader, Developmental Biology	Postdoctoral Fellow, MPI for Developmental Biology, Tübingen (D)
*Manolis Pasparakis (GR)	Group Leader, Monterotondo	Postdoctoral Fellow, University of Cologne (D)
*Tatyana Pestova (Russian)	Co-Group Leader, Gene Expression	Research Assistant Professor, State University New York, Brooklyn (USA)

** indicates recruitments made in 2001*

A brief history of ILO cases concerning salary adjustments

Between 1992 and 1995, EMBLCouncil decided on annual salary adjustments that deviated from the recommendations of the Coordinated Organisations (six international organisations including NATO, ESA, OECD and WEU). It has been Council's position that according to their 1981 pay policy resolution, the Co-Org recommendations were only a guide and were not binding. To clarify the situation, Council passed in 1995 a new and more explicit pay policy resolution. Since then this policy has remained in force, has been accepted by the ILO, and Council has based its annual salary adjustments on it.

Individual staff members and, in several cases, the Staff Association appealed to the ILO against several of the Council decisions. Some of these cases were won by Council (Judgements 1798, 1812, 1912 and 1913), and others by the appellants (Judgements 1682 and 1887). Two such cases remained to be decided until recently. One of these was decided on 12 July 2001 (Judgement 2057); the final one remains unfinished, but its claim overlaps with the matters decided by Judgement 2057, which thus has direct applicability to the final case.

To understand this new Judgement, some background is necessary. In response to Judgement 1887 concerning the 1995 pay award, Council implemented in full the recommended salary adjustments for that year. However, because the salary scales resulting from the 1996 and 1997 pay awards had been judged already as adequate by the ILO (Judgements 1912 and 1913), Council followed legal advice and chose to apply the 1995 adjustments to that year only. An appeal submitted by the Staff Association on behalf of the staff sought consolidation of the 1995 salary adjustments into the baseline, i.e. for all subsequent years as well. A separate appeal submitted by three individuals also sought consolidation, but in addition sought alignment of the EMBL salary scales with the Co-Org salaries from 1995 onwards (in effect reversing decisions taken by EMBL Council before 1995). It is the latter double appeal that was decided by Judgement 2057.

In Judgement 2057, the ILO affirmed that Council was "undoubtedly right" not to align EMBL salaries retrospectively with those of the Coordinated Organisations, and thus decided against the appellants in the matter of alignment. On the matter of consolidation it found that "the issue is less clear-cut" but that applying the 1995 salary adjustments to that year only had impaired the rights of the staff; thus it decided against Council on this matter. The last pending (Staff Association) case appeals for consolidation, and therefore will be directly affected by Judgement 2057.

Council has made perfectly clear on previous occasions that it will implement legal decisions. The ILO decisions are not subject to appeal. Thus, there is no question that consolidation will be implemented. A related consideration is the long-standing commitment of Management and Council to purchase power parity (according to official statistics) for the staff appointed in the four host countries. The 1996 and 1997 salary adjustments were carefully crafted to achieve this parity (for which they received favourable comments from the ILO), and parity has been maintained in all subsequent pay awards. The Laboratory will wish to ensure (within any applicable constraints) that this parity will not be prejudiced by execution of Judgement 2057. Furthermore, a decision on funding the implementation will be required. Thus, the Council will need to make implementation decisions at the November meeting, when the final details of execution of the Judgement and the associated funding are agreed.

On that basis, we would expect to make payments to existing staff in January 2002 and other payments over the next few months thereafter.

As we draw close to the end of a period of long and sometimes divisive disputes about pay awards, it is worth making some key points. First, occasional disagreements cannot be avoided, but they must be dealt with in the spirit of mutual understanding and civility, commitment to the established rules and procedures, and ultimate reliance in the rule of law, if litigation is essential. Second, we should never forget that the long-term interests of the staff as a whole and the Laboratory are interwoven, not contradictory. Third, that the quality of work of the personnel, the collegial planning efforts of the senior staff and the budgetary agreement between Council and Management for the next five years have brought the Laboratory to a phase of renewed opportunities, confidence and dynamism. Let us work together as a community towards even greater success in the future.

Fotis C. Kafatos
Director-General
July 2001

Name (nationality)	EMBL position, programme	Previous post (country) *continued*
Carsten Schultz (D)	Interdisciplinary Group Leader, Gene Expression	Group Leader, Max-Planck-Institute for Molecular Physiology, Dortmund (D)
*Isabelle Vernos (E/F)	Team Leader, Cell Biology & Biophysics	Staff Scientist, Cell Biology & Biophysics (D-EMBL)
* Manfred Weiss (D)	Team Leader, Hamburg	Senior Research Assistant, Institute of Molecular Biotechnology, Jena (D)
*Hassan Belrhali (F/Moroccan)	Staff Scientist, Grenoble	Beamline Scientist, ESRF Grenoble (F)
* Jean-Pierre Guilloteau (F)	Staff Scientist, Grenoble	Team Leader, Aventis Pharma, Paris (F)
* Andrew McCarthy (Irish)	Staff Scientist, Grenoble	Postdoctoral Fellow, University of Auckland, Auckland (NZ)
François Nédélec (F)	Staff Scientist, Cell Biology & Biophysics	Postdoctoral Fellow, EMBL Heidelberg (D-EMBL)
*Carlo Petosa (I/CAN)	Staff Scientist, Grenoble	Postdoctoral Fellow, EMBL Grenoble (F-EMBL)
*Andrea Schmidt (A)	Staff Scientist, Hamburg	Postdoctoral Fellow, EMBL, Hamburg (D-EMBL)
*Young-Hwa Song (D)	Staff Scientist, Hamburg	Research Assistant, Max-Planck-Unit of Structural Molecular Biology, Hamburg (D)
Thomas Surrey (D)	Staff Scientist, Cell Biology & Biophysics	Postdoctoral Fellow, EMBL Heidelberg (D-EMBL)

a meeting report by Halldór Stefánsson

Totipotency, pluripotency and the origins of personhood

EMBL Symposium on Stem Cells and Therapeutic Cloning – June 16, 2001

Stem cell research and therapeutic cloning have become the objects of heated debate around the world. In its most basic form, proponents argue that advances within these fields of science could eventually provide cures for a range of diseases, while opponents say it is unethical to exploit and destroy potential human life as such research requires. Fotis Kafatos, the Director General of EMBL, opened the symposium and pointed out that opposition to stem cell research and therapeutic cloning, if charted out, would appear to be an extremely composite phenomenon. First of all, it has got a remarkably unequal distribution, not only within and among the populations of Europe, but also between the different parts of the world. He proposed to the audience that rather than getting stuck in a fruitless polemic this symposium was organised to discuss publicly the progress that has been made within the science of stem cells and to debate the objections that can be made to applying this new knowledge in biomedicine.

The morning session was organised around three speakers who together took on the enormous task of relating and assessing the state of the art and future prospects of stem cell research and cloning technology. Robin Lovell-Badge (NIMR, London), opened the session reporting that, at least in the case of mouse research, many different kinds of stem cells show a great potential for therapeutic use. In spite of much effort, for a long time ES cells could not be isolated from any other species, i.e. until about three years ago. An extraordinary breakthrough finally came when James Thomson at the University of Wisconsin, managed to make ES cells lines from human embryonic blastocysts. "These are still early days", Lovell-Badge said, "but people have already managed to derive a variety of differentiated stem cells from these totipotent ES cells. There are many obstacles ahead before we can master the biological processes of ES cells, but the enormous potential for their uses is undeniable." As an example of problems that need to be tackled before this science can be applied for human therapeutics, he pointed out that since the use of ES cells implies "artificial" re-programming of cells, we need to know much better to what extent this re-programming is complete.

Alan Colman (PPL Therapeutics, Edinburgh) presented many arguments for and against therapeutic cloning. His point of departure was: "If it's unsafe, we shouldn't do it." Using admirably simple and transparent language he explained the principles behind therapeutic cloning. The precursor of the cloning technology can be traced back to frog experiments done by John Gurdon at Oxford in 1962. The basic techniques he used were amplified and used for nuclear transfer to clone mammals. Hence, the birth of the historical sheep, Dolly. Other kinds of animals were subsequently cloned and success stories have been reported every now and then with great fanfare by the mass media -- but behind those glamorous science tales were hidden an enormous number of failed attempts. In the case of all species experimented with, the success rate has remained lamentably low. While cloning by nuclear transfer has been done successfully in sheep, cows, mice, goats, and pigs, scientists have tried but failed to apply it to rabbits, rats, cats, and dogs. Colman suggested a number of factors that cause cloning techniques to remain so inefficient. Among those are imprinting defects, inadequate re-programming (genes fatally getting turned on and off where they shouldn't), chromosome changes (e.g. telomere repeats), and the fact that embryos created *in vitro* give rise to abnormally large offspring.

Nadia Rosenthal (EMBL, Monterotondo) pointed out that a lot can be learned from looking at stem cells in their natural context, from the point of view of developmental biology. "Can we learn how to harness the biological process underlying stem cell generation in our bodies, learn how to intervene and repair where these processes have gone astray?" Reflecting on this basic question in her talk Rosenthal used examples from her own work on muscle and heart biology. Cells of an aged individual are likely to "remember" how they went about maintaining the potency of their earlier stages in life. If only we could capture the capacity of relatively young organisms for regeneration, we might be able to help increase regenerative capacity in ageing and aged organisms. Can muscle-ageing at least be attenuated? Here's where stem cell research may provide some answers. Rosenthal presented some fascinating reflections on whether the processes of metastasis in cancer patients may be driven by similar mechanisms as those underlying healthier forms of stem cell migrations. In a certain sense, stem cells act like metastatic cancer cells in the body. But instead of destroying it, they are roaming the body, repairing worn and damaged tissues.

Iain Mattaj (EMBL, Heidelberg) skillfully mediated the lively open discussion that followed the morning's presentations. Many important comments were made and pertinent questions raised. As for the bottom line of the experts' assessment: The body uses stem cells to regenerate. Our knowledge and ability to imitate and harness those natural processes are still rudimentary. What *is* being done constitutes extremely important first steps with tremendous potential (Rosenthal). The experiments that are being done these days are exciting, but that's it (Lovell-Badge).

The symposium's afternoon session was about clinical, social and ethical implications of stem cell research and therapeutic cloning. Odile Cohen-Hagenauer (Hôpital Saint-Louis, Paris) reviewed the different areas of clinical practice where stem cells may offer an effective response to therapeutic needs. She presented the audience with insights into the complexity of the details that have to be taken into account when considering the application of stem cells science and cloning technology in any given clinical context.

Donald Bruce (Church of Scotland, Edinburgh) succinctly explained that his organization got its hands full with Dolly's unorthodox appearance on the world stage. "Dolly ended up incarnating a fair amount of post-modern ambivalence. She simultaneously embodies the hopes, as well as the fears of people in our societies. For most people, Dolly showed how the biological sciences are now capable of defining their own laws, resulting in a feeling of affront to people's more conventional views of the world." Examples of areas that Bruce suggested are being subjected to a re-definition: the nature of human beings, the nature of the embryo, the nature of reproduction, the limitation of our bodies and of bodily decay, as well as our relationship towards God's creation and other creatures. The Church raises the question of whether the

embryo can be defined, such that it can lend itself as a raw material for research? And if there was a consensus for such a definition, how is embryo research to be regulated? Either this line of research is to be off-limits (because the human embryo cannot be treated as a means to an end), or some *ad hoc* time limit has to be drawn, beyond which the embryo can no longer be used for such purposes. The churches of the world tend to take the former position. The defenders of the latter position are the ones who regard being human as an emergent quality, rather than an inherent one.

Alex Mauron (University of Geneva), who gave the last talk of the day, focused on how ethical arguments regarding stem cells relate to public policy. With regard to stem cells, three situations have to be taken into account: the first of the so-called supernumerary embryos, the second concerning embryos created *ad hoc* by *vitro* fertilisation for research purposes, and the third involving embryos created with the technique of therapeutic cloning. In this last instance, in which fertilisation is replaced by nuclear transfer, the ethical question arises whether the product should be regarded as identical to "normal" embryos? Mauron reviewed how the three above situations are being handled and regarded by the law in different national contexts, revealing an extremely varied moral landscape within the Western world. The question then is how science, as an international endeavour, can cope with the disparities of these diverse moral contexts. All parties seem to agree that the embryo is worthy of some form of respect. What that means, however, remains extremely controversial. For some, particularly those inspired by the teachings of different religions, the embryo, at whatever stage of its development, is invested with all the qualities of a human person. The proponents of scientific research, on the other hand, argue that the early embryo cannot in any meaningful way be called "an uncontroversial person," meaning a person "like us." In addition to these two positions on the status of the embryo, there is a third one, mostly a central-European one, that Mauron calls "embryological Kantianism." This presupposes the application of the Kantian moral imperative (i.e. a human person should never be used as means to an end but always as end in and by itself) to embryos. The result is a categorical refusal of "instrumentalisation" of persons, in whatever form they may exist, and for whatever purposes. Most briefly stated, according to Mauron, these co-existing notions regarding stem cells and therapeutic cloning make up "a minefield of semantic and conceptual obscurities." A very common example is encountered in statements like: "we should never be allowed to pass judgements on the worth of human life!" This sounds perfectly fine, until you realise, says Mauron, that it begs the question of nature of human life you are talking about. Mauron used the last part of his talk to effect a bio-philosophical deconstruction of the notion of "the individual," to see how far people are reasonably entitled to make use of it when they infuse the early embryo with personhood. The central question is when does a human "self" begin? Of course, the answer is extremely difficult. Against a background of seeming continuity are various individualising events. What is the ethical relevance of such events? In what sense can the zygote be regarded as an individual person? For Mauron it's a logical fallacy to associate zygotes, or a unique genomic constitution for the same reasons, with human individuality, be it only since both can give rise to monozygotic twins.

The afternoon panel discussion clearly echoed the polarisation of views that continues to divide the public. Justine Burley, a philosopher (Oxford University), argued for two kinds of claims: first, that governments have the duty towards those who suffer from various diseases to promote research on stem cells, and, second, that there is no reason to accord a special status to the foetus. She asked why on earth, having entered the twenty-first century, are we still turning to religious leaders when recruiting for bioethics committees? Isn't bioethics a branch of moral philosophy?" Rüdiger Wolfrum (Max Planck Institute for Comparative Law, Heidelberg University), pointed out a number of contradictions that characterise the debate about the use of embryos for research in Germany. First of all, the first article of the German constitution stipulates the protection of "human dignity," without defining either term. As a consequence, this particular article can be used for all sorts of rhetorical purposes and has been very effectively employed in the past in the German debate for the protection of embryos. The outcome is that, as far as German jurisdiction applies, obtention of embryos for research purposes has been made illegal. They can however be imported from other geographical areas where German law does not apply. Wolfrum drew the audience's attention to the fact that at the moment there is an initiative in the German parliament to pass a law that would make the import of stem cells illegal. He predicted that a law banning all research on ES cells in Germany will be passed. What has gone wrong in the German situation? Why is there a political majority making such an uncompromising judgement? Opinions in society are formed through a relentless confrontation of arguments engendered and presented by various interest groups. "Somehow, at least in Germany, with very few exceptions, scientists have been conspicuously absent from the debate on stem cell research", he said. "They should not be surprised to see how politicians are voting in parliament if they have allowed them to be unilaterally influenced by the advocates of prohibition!"

– Halldór Stefánsson

From Genomes to Cures - November 16-18, 2001, EMBL Heidelberg

Hot on the heels of last year's successful science and society conference "Developing a new Dialogue," EMBO and EMBL have announced a second joint event. "From Genomes to Cures" will examine the scientific and social impact of genomics research on the treatment and cure of human diseases. "The conference aims to provide a real platform for dialogue and discussion between the stakeholders involved," says Andrew Moore, Chair of the Organizing Committee. "We hope to achieve a wide ranging, engaging and all-inclusive debate."

Representatives from the science, ethics, sociology, journalism and consumer sectors will be on hand to present their views and debate their positions. Speakers include Craig Venter, Jonathan Knowles, Barbara Jasny, Leena Peltonen, Alain Fischer, Felix Thiele, Roman Kolar, Erwin Wagner, Nadia Rosenthal and Izchak Parnas. Sessions will focus on reassessing the implications of genomics for biomedicine - public perception and reality, personalised medicine - state of the art, gene therapy - progress and prospects; use of animals in biomedical research; and the public and the genome. A special final session will be devoted to education and communication.

For a full programme and on-line registration, visit www.embo.org/SS_2001.html

EMBL appoints new administrative director

Bernd-Uwe Jahn has been appointed to succeed Barton Dodd as Administrative Director of the EMBL. Jahn's last post was as Bonn Director of the Office of European Research Organisations under the German Federal Ministry of Education and Research (BMBF). He is beginning in mid-August to provide some overlap time with Dodd, whose last official day on the job was August 15, 2001.

Jahn, who holds a doctoral degree in law from Cologne University, has been involved in research administration for more than two decades. He began his career in the Federal Ministry for Research and Technology (BMFT), moving up to become Director of the Office of Central Services in 1992. Along the way he served as Science Counselor at the German Embassy in Washington D.C. for four years.

He is no stranger to research institutes or to EMBL. From 1994 to 2000 he was Director of Administration and Technical Infrastructure at the Hahn-Meitner Institute, in Berlin. He has served as German Delegate to the EMBL Council and to other councils in Europe such as CERN, ESO, ILL and ESRF.


Bernd-Uwe Jahn

Barton Dodd announced his intentions to leave the Laboratory in 1999, after weathering a period in EMBL's history that any Administrative Director would have found challenging. The Laboratory faced budget constraints which required a great deal of juggling of personnel and resources; it also had to contend with a number of challenges in court at the Tribunal of the International Labour Organization (ILO). Most of the ILO issues have been resolved, and approval of the 2001-2005 Scientific Programme and Indicative Scheme by EMBL's Council have eased the pressure on the overall budget.

– Russ Hodge

EBI receives major funding boost from the European Commission

The Commission of the European Union will award the EBI and a group of twenty-five collaborators nearly 20 million Euro over the next three years. The funds come in support of a group of four related proposals, and 12.9 million Euro are directed specifically to the EBI. Announced at a press conference in London on May 16, the award represents the biggest ever single injection of funds into bioinformatics infrastructure in Europe.

The four projects will enhance and build upon core data services that the EBI provides to the EMBL member states and the rest of the world. The workplan is being finalised by Graham Cameron, Co-Head of the EBI following the success of proposals written by Rolf Apweiler, Geoff Barton and Alvis Brazma, Team Leaders at the EBI.

According to Peter Kind, acting Director of Health Research at the European Commission, this is the first tangible result of Commissioner Philippe Busquin's initiative on "Genomes for Human Health," less than half a year after its launch. Kind says the award recognizes the need for European investment in a "vigorous bioinformatics sector" on a comparable scale with that of the United States.

Database projects to be funded are: the Macromolecular Structure Database (EMSD); DESPRAD, the microarray database; and INTACT, a repository for protein-protein interaction data. The final project, INTEGR8, will give an integrated, gene-centric view of these and other EBI databases.

Geoff Barton has steered the EMSD through its pilot phase and says the EC grant will permit a launch of the full-scale project. "The data come from several different sources: X-ray and nuclear magnetic resonance (NMR) and increasingly from cryo-electron microscopy," he says. "Each of these techniques requires specialized software and support. What we have to do now is to create models that will integrate all the data from these sources and then link it with other sources of information." The EC grant will permit a launch of the full-scale project.

Alvis Brazma and Alan Robinson have been working with laboratories around the world to create the first public resource for data from microarrays such as DNA chips. "Potentially, information from an experiment with yeast cells can tell you something important about human tissue samples from a cancer study," Brazma says. "But that will work only if we can agree on clear and universal ways of recording what the chips tell us." The new support comes just as Brazma and his colleagues plan to launch a prototype of the database.

INTACT is a new, collaborative project focusing on the interactions of molecules such as metabolic enzymes. Several databases exist which aim to keep track of protein-protein interactions, but they are so different that it will be a challenge to integrate them.

"Although biological data are stored in a range of databases, researchers want to access all the information as a seamless whole, reflecting the true interconnected nature of biomolecular processes," Rolf Apweiler says. "Integr8 will create an integrated layer for the exploitation of genomic and proteomic data." It will draw on both the databases funded in this project and on other resources at the EBI.

"Today we are engaging in a new kind of high-throughput science," says Graham Cameron. "In molecular biology, the electronic record is now as important as the printed scientific record. There is a need for secure custodians such as the EBI to preserve and make available that electronic record. The EBI's improved funding situation, with increases from EMBL's Member States, new EC funding, and significant support from the Wellcome Trust, secures some key projects, and creates optimism for the immediate future."

– Russ Hodge

the EMBO corner

Although EMBO is involved in many new activities (see the Annual Report on http://www.embo.org/Ann_Report2000/Report2000.html), it is important to recall the very firm foundations on which the EMBO reputation was built. One of the first actions of the founders of EMBO almost 40 years ago was to establish a programme of Courses and Workshops. The Practical Courses are selected in different areas of Molecular Biology (as usual Molecular Biology means all of modern biology for EMBO) such that the latest techniques can be transferred to scientists throughout Europe. The practical courses are provided by experts and the participants are those who have shown in their application that they have a particular need for the methodologies which they would learn on the course. The practical courses are held in laboratories throughout Europe and frequently are an excellent way for a younger scientist or one who is located in an "unusual location" to highlight and promote the quality of their institute or research team.

The Workshops fulfill a slightly different function. In this case the general aim is to bring together those who are expert in an area such that they can have a useful discussion on their topic of mutual interest. Those who are at an early stage of their career but already engaged in research in the area of the topic, are particularly welcome. The numbers at the EMBO workshops are generally less than 100. EMBO likes a to bring together groups who do not normally meet and to identify topics which may not yet be mainstream and which would particularly benefit from bringing together the players from different areas.

A third and relatively new instrument is Lecture Courses. The prototype for this is the Spetses meetings that EMBO has supported for very many years. This concept has now been extended to focus particularly on the needs of peripheral countries. It is possible, for instance, that a new member state may have a deficit in a particular area of molecular biology which means that the PhD students and postdoctoral fellows in that and neighbouring countries are not fully up to date on the possibilities of today's research. This could be remedied in part by bringing a group of experts on that topic to the country. In this way a lecture course can bridge gaps and of course allow new connections to be made between scientists in the different countries.

All decisions on the practical and lecture courses and workshops are made by the EMBO Course Committee. It meets twice annually and that means that the applications should be submitted close to the 1st of February and the 1st of August. Gitta Bourke is responsible for administering the Courses and Workshops activities and will be happy to provide assistance at any stage in the process. (gitta.bourke@embo.org) (for application forms see www.embo.org)

The courses and workshops section is presented as an EMBO activity but it is obviously dependent on the generosity and willingness of scientists throughout Europe to participate. In this respect, EMBL is a fantastic example for many other institutions with a very generous response being received annually from the EMBL group leaders as is reflected in their presence in the list of courses and workshops. Those who have left EMBL are strongly invited to consider this as an opportunity for them also. It carries with it the burden of delivery, but it is both a useful service to the scientific community and a way of notifying people of your continued high level activity in your new location. We look forward to your involvement or to that of your students.

– Frank Gannon

from the Staff Association

Updated web site The EMBL Staff Association has updated and expanded its web site, which can also be reached from the Outstations and outside. See us at www.embl-heidelberg.de/~staff/. New features include a "breaking news" banner on the home page; links to pages within the site; pdf documents of interest to all staff members (e.g., the official wording on the most recent judgment in the ILO salary case); and a page with links to other useful web sites, (e.g., the Staff Rules and Regulations).

Many thanks to Arthur Bullard and the Computer Group, who quickly converted our ideas into reality. Updated pages include the chart of clubs and equipment at EMBL, with a link to the reservations page for the video camera; the committee page, with photos of the Staff Association representatives; and the rules for funding clubs and events. If you don't use a computer, there is a bulletin board, suggestion box and printed information outside the Staff Association office (Room 330) to help keep you informed.

Judgment 2057 on the ILO salary case In July, the Administrative Tribunal of the International Labour Organisation (ILOAT) handed down its judgment No. 2057 in a case filed by two private individuals from EMBL. In its decision, the Tribunal supported the arguments of the complainants for back pay from 1995 through the present, including their claim that the salary increase for 1995 would in effect raise the level of basic salaries for each subsequent year through the present. Quashed was their argument that these levels must also take into the account the lost salary increases from 1992-1994, bringing EMBL salaries up to parity with the salary levels at other Co-ordinated Organizations (upon which EMBL in the past had based its annual salary increases).

Still pending is a similar case filed by the Staff Association, which will probably be decided by the Tribunal in November. Our case is substantially the same as the private case above, which was won by the staff. The difference is that we did not claim parity for the years 1992 to 1994.

For the exact wording of Judgment 2057, see our new website at http://www.embl-heidelberg.de/LocalInfo/staffAssociation/ILO-judgement-2057.pdf. A direct link to the ILOAT provides current and past judgments in English or French: www.ilo.org/public/english/tribunal/guidefj.htm.

– Ann Thüringer

Promoting public understanding of science

The Heidelberg Forum on the Biosciences and Society

Four leading research institutions in Heidelberg, the EMBL, the German Cancer Research Center (DKFZ), the Center for Molecular Biology (ZMBH), and the Medical Faculty of the University of Heidelberg, have launched a joint science communication initiative under the name: "Heidelberg Forum on the Biosciences and Society". It consists of a series of public lectures organized for the benefit of a variety of audiences. Researchers working within diverse sub-fields of the life sciences recognize the need to communicate across their own narrowly-defined professional boundaries. Diverse applications of modern biology are now crossing paths and converging in frontier territories. One of these interdisciplinary fields is commonly known as "molecular medicine." The Heidelberg Forum is meant to become a locus where leading experts form within the life sciences will be invited to come to accomplish a two-fold task. On the one hand they will be invited to communicate their science directly to peers, and on the other hand they will reflect openly in a public auditorium on how their scientific work relates to societal interests.

The first distinguished speaker, who came to inaugurate the Heidelberg Forum, was Professor Charles Weissmann from the Imperial College School of Medicine in London. A leading expert on prion diseases, his lecture was entitled, "Prionen, Rinderwahnsinn und transgene Maeuse," and took place in the Print Media Academy in downtown Heidelberg on Sunday, July 15. The event was very well attended and proved to many that scientists can communicate complex issues to the public in admirably simple terms. The remarkably lively discussion that followed the talk was a manifestation of the genuine interest it provoked among the public. Evidently, Bovine Spongiform Encephalitis (BSE) and related diseases have excited concerns and fears among the general public throughout Europe; they are also a topic of intense scientific research and debate. The following day, Professor Weissmann delivered a scientific talk, "Molecular biology of prion disease," in the Operon at the EMBL.

The opening events of the Heidelberg Forum was sponsored by the Boehringer Ingelheim Stiftung. The second event, sponsored by Cellzome GmbH, will take place on Wednesday, October 31, 2001. On that day, Professor Hubert Markl, President of the Max Planck Society, will deliver two lectures ("Man's Place in Nature - Evolutionary Past and Genomic Future" in the Large Operon of the EMBLat 10:00 a.m., and "Entgrenzte Wissenschaft: der Irrweg von Evolutionsbiologie und Genetik zu Rassismus und Mord" at 5:00 p.m. in the Print Media Academy in Heidelberg).

Charles Weissmann

– Halldór Stefánsson

For more information about the Forum and future events see www.embl-heidelberg.de/ExternalInfo/stefanss/hdforumpost.html

obituary

Matti Saraste, Programme Coordinator for Structural and Computational Biology at the European Molecular Biology Laboratory, died in Heidelberg on May 21, 2001.

Matti came to EMBLin 1990 to lead an independent research group and was promoted to the very senior post of Programme Coordinator in 1996. He was highly respected at in the fields of molecular and structural biology and served as managing editor of the scientific journal FEBS Letters. One of his latest projects at the EMBL was to establish a facility for advanced electron microscopy. This facility will be dedicated to his memory.

Matti will be deeply missed by his friends and colleagues at EMBL. He is survived by a wife and children.

Matti Saraste
(1949-2001)

Doors open at genomics and proteomics core facilities

Operations are getting underway at two new EMBL "core facilities," designed to provide important services to groups at the Laboratory, EMBL visitors and collaborators. The Genomics Core Facility, headed by Vladimir Benes, is already performing limited DNA sequencing, SAGE, and DNA chip-making services. The Proteomics Facility is overseen by Matthias Wilm; Thomas Franz is in charge of day-to-day operations. Here researchers will use a complete, state-of-the-art proteomics line called ProteomeWorks, provided by the companies Micromass and Bio-Rad.

One reason that EMBLhas developed the facilities is the desire to draw a cleaner line between research and service activities. "In order to pursue our strong focus on functional genomics, the Laboratory needs some very powerful services, able to cope with high demand and high throughput," says Christian Boulin, Coordinator of Scientific Facilities. "In the instrumentation groups, distinguishing these from research will enable us to give each type of activity adequate support and to manage them professionally."

Micromass and Bio-Rad are sponsoring a complete suite of equipment for a Visitor Proteomics Facility," Boulin says. "The set-up they have installed is unique in the world: it includes two mass spectrometry machines, all the robotics and all the computing facilities needed to handle the work of protein analysis. We hope this will be a prototype for partnerships with other companies."

Thomas Franz and Matthias Wilm

Vladimir Benes

The Proteomics Facility follows in the footsteps of the Advanced Light Microscopy Facility (ALMF), managed by Rainer Pepperkok and his team, in that the equipment has been contributed by industry. According to John Rontree, Sales and Marketing Director of Micromass, such arrangements benefit both partners.

"Gaining direct access to leading scientists working with a proteomics line is strategically important to us," Rontree says. "By listening to their needs, we can gain the knowledge necessary to maintain a position at the forefront in providing total proteomics solutions."

Benes says that the Genomics Facility will become fully operational when it moves to its permanent home on the fourth floor in October. It, too, is relying on industrial partnerships, including support from Amersham Pharmacia and Packard Biosciences.

"The concept is similar to what is being done in some of the other facilities," Benes says. "The new lab will have space for visitors who can use the equipment and receive training; we'll provide support to the Young Investigators programme, and will be open to scientists in the EMBL member states via collaborations and our visitors programme. We also want to serve as a beta-testing site where companies can put new methods and equipment into place and have them tested by scientists working on very interesting problems."

– Russ Hodge

EMBL athletes blitz Heidelberg triathlon and raise funds for kids with cancer

Citius, fortius, altius! On Sunday, August 5, EMBL athletes donned their swim suits, cycling shorts and running shoes (in some cases simultaneously) and took the Heidelbergman triathlon by storm. The ironman test of strength and endurance saw participants contend with a grueling 1.7 km swim in the Neckar river, a 36 km bicycle ride up to the Königstuhl and down -- *twice!* -- and a 10 km jog *up* the Philosophenweg.

Praiseworthily, all EMBL participants crossed the finish line with flying colours. Uli Weihe, and the team of Maj Britt Hansen, Simon Sheldon and Claudia Blass deserve special mention for being the first EMBL teams to finish in their categories. Honorable mention (and a wooden spoon) also goes to Alan "Hobblealong" Sawyer.

EMBL staff and friends sponsored their intrepid colleagues, and succeeded in raising a total of 1,782 DM, which was donated to the "Die Waldpiraten" summer camp located near the Lab, for children with or recovering from cancer.

Wilhelm, Lønstrup and Sawyer in training.

Special thanks go to Heike Wilhelm, to all those who gave their support, and to everyone who came out on Sunday to cheer the athletes on.

– Sarah Sherwood

Singing and dancing in the rain

The Staff Association organized a big party for the entire EMBL staff on July 14, which was a huge success. We hope to make this an annual event, ideally on the weekend following Lab Day. This would give the people from the outstations a chance to attend as well.

The afternoon focused on entertainment for the children, which will be continued in the future. Eva Puhm and her colleagues in the Kinderhaus were a great help in organizing the many children's events. We had ponies, a puppeteer, a bouncing castle, and lots of homemade entertainment, which included a vintage magic performance by EMBL special entertainers, Ernst Stelzer and Russ Hodge.

A lot more people pitched in: Mustafa Uyguner, Andreas Schlecht, Thomas Heinzmann, and Ernst Heinmoeller and his team. They were able to overcome many difficult problems, such as building a stage for the bands, the Contenders and the Freddy Wonder Combo. Doros Panayi, Udo Ringeisen and Marietta Schupp provided audio visual support and Katrin Bergmann took zillions of pictures. Christian Heinzmann and his father, Thomas, spent all evening providing the partygoers with music, outside in the courtyard and also in the canteen after the bands had finished playing.

photos by Katrin Bergmann

letter

Sir,

I must admit some perplexity at recent pronouncements by the administration of George "W." Bush regarding stem cell research. I confess that I am no expert on the subject; my own studies in Genetics lie far in the past, when words had meanings and leaders were expected to have deep thoughts about the consequences of their actions, so I am no creature of these times. Neither have I had anything to do with stem cells, except perhaps with my own.

Quite recently, the American public was informed that "W." would be retreating for a weekend to meditate on stem cell research. Many of us felt a twinge of alarm, hoping only that he was not doing so alone.

In fact, he emerged from his ruminations with an official Republican policy on stem cells. I confess that I don't understand his policy, or why stances on scientific issues like global warming or stem cells should become part of party platforms, but hopefully the President knows what he's doing. Unfortunately, I fear that "W." has opened a rather large can of worms that is going to cause him a bushel-full of trouble.

The American people have been told that there exist sixty lines of stem cells, originating from sixty embryos, now happily propegating themselves in culture dishes somewhere. These cells may be used for research; others may not. Let us suppose that scientists someday unlock the secrets of these cells, and even use them in therapeutic cloning. This possibility means that any of these cells could be transformed into a full human embryo, implying that great dignity must be accorded to each of the billions of cells in these cultures, all the rights and privileges accorded every fully-matured American. It should be issued a Social Security number; there must be provisions in the current Republican budget for giving it an education, medicaid, and social security. I have a bit of difficulty understanding why billions of cells descended from sixty ancestors should receive such special treatment, far above that accorded the stem cells in any other *in-vitro* fertilized embryo, which will simply be allowed to die, but I presume that "W." has some deep thoughts about this which he would share with us if he had time.

Naturally, other types of therapies will arise from this research. I hope I am closely related to these cells, very closely indeed, perhaps even to the point of having donated the sperm. (I don't remember having done so, but it wouldn't be the strangest thing I ever did; we had some rather wild weekends in the 1980s.) Therapies arising from stem-cell research will presumably most readily benefit the nearest genetic matches, just as other types of transplantation do, and I fully intend to make personal use of all of those benefits.

"W." pronounced that the sixty lines come from genetically diverse embryos. I presume he means "diverse enough to be of scientific interest." Sixty doesn't seem enough, somehow. Does this also mean racially and politically diverse? Are both males and females of a large number of ethnic groups represented? I suspect that certain ethnic and social groups are more likely to have visited fertilization clinics. Is there a Native American in the bunch? Or Europeans and Asians and Africans and Australians, who at one point or another contributed all of America's stem cells? Will those nations have to fend for themselves? Or does diversity, in this context, mean diverse embryos from economically-advantaged but fertility-challenged Republican Texans in the oil industry?

"W." might as well draw a big "bull's-eye" on his administration, because few things are more fun than uncovering racist and sexist policies among the Republicans when they arise out of naïveté. There have to be strong biases in those cell lines, because if memory serves me correctly, we don't have a genetic definition of race yet. What is a race and how many are there? A hundred? A million? Some claim the term is wholly arbitrary. Our immune systems seem to think that each of us is a race unto him or herself.

My suggestion is, we permit the President to steam ahead with his sixty cells, on the condition that he prove they give a complete and proper representation of the American people. Perhaps he can. Perhaps this policy was well thought-out with tables and statistics, targeting sixty people with precisely the right profiles, who were grabbed with a net or something and respectfully asked for a donation. (This could, actually, explain all of those risqué UFO abductions: the government is behind it. If not, it certainly suggests that the aliens are much farther along with their stem cell research than we are.)

Honestly, I really don't care, just so long as I'm represented in the cell lines. If that doesn't happen to be the case, just tell me where to go so that I can make my donation. I will even be willing to mail it in, provided someone sends me the proper instructions.

Sincerely and cheerfully,

Prof. emer. Wilford Terris
Currently residing near Rome

Summer fun from the Staff Association

Anne Walter, Tamara Marinkovic and many other helpers too numerous to be named here also deserve a lot of thanks for their help. Last but not least, Claus Himburg and his food service team did a tremendous job in providing the food and drinks. Everyone put in a lot of extra work and without it, the party would not have been such a success. We really appreciate all your efforts!

We look forward to seeing you at next year's party in 2002!

– Gareth Griffiths
Co-Chair, Staff Association

recipe

awful falafel

500 g chickpeas
2 tsp baking soda
2 slices bread
4 cloves garlic, peeled
1/4 cup parsley, finely chopped
1/4 cup bulgar wheat
2 tsp salt
1 tsp cumin seeds, crushed
1 tsp coriander seeds, crushed

Soak chickpeas overnight in 10 cups of water and baking soda. Drain and mash finely with meat grinder or mixer. Soak bread in water, squeeze out excess, and purée together with garlic and parsley. Mix with chickpeas. Soak bulgar wheat in hot water for 20 minutes, and then drain. Add chickpeas, bread and spices. Mix well and leave to set for 15 min. Form patties, approximately 1 inch in diameter, and set on wax paper. Heat 3 inches of oil in a deep heavy skillet to 180°C and fry patties on both sides until crisp. Place on paper to drain excess oil. Incubation time 30 minutes or so depending on individual sensitivity. Inadvertent omission of any of the above steps could lead to sudden unplanned trips.

– Claus Himburg

news & events

More than 30 familiar faces at EMBL gathered on July 31 to celebrate over 20 years of service at the Laboratory. Director-General Fotis C. Kafatos presented each long-time staff member with a special certificate of gratitude, and acknowledged their contributions to the Laboratory over the past two decades.

Halldór Stefánsson traveled to the Hamburg Outstation on July 6 to give a lecture as part of the Forum on Science and Society. He spoke about public perceptions of biotechnology (and some attempts at influencing them). Will Stanley, a predoctoral student at the Outstation, hosted the event.

The scaffolding has come down and the EMBO logo has been hoisted into place. In May, Frank Gannon and Fotis Kafatos, together with several EMBO members and invited guests, inaugurated the spacious new EMBO building with a celebration and symposium on the theme of EMBO through time. Max Perutz was on hand to cut the tape, and reminisced on EMBO's early history.

The EMBO building is not the only change to the EMBL landscape. The campus now houses a multistorey parking garage and a new modular building: a temporary residence for EMBL start-up companies until the International Technology Transfer Complex is completed in Spring 2003.

Fifteen students received a rolled up certificate, a rose and a kiss from Anne Ephrussi and/or Matthias Hentze June 8, as they left their graduate student days behind and earned their doctoral wings. Among the graduates was the first student to have completed a PhD in Monterotondo, Alessia Di Nardo. The graduation ceremony was part of EMBL's annual Lab Day events, which featured a minisymposium on "Genomics and Bioinformatics", and included talks by Piotr Slonimski, Martijn Huynen, Liisa Holm, Matthias Wilm, Thomas Preiss, Martina Muckenthaler, Alan Robinson, Ewan Birney, and Irmi Sinning.

On May 18, a delegation of the European Parliament's Temporary Committee on Human Genetics visited the EMBL. This was part of a series of visits to prominent European research institutes to collect information and discuss topical issues with leading scientists *in situ*. In addition to hearing about the research conducted at the Laboratory, the delegation also met and discussed with members of the EMBL Science and Society Committee.

people @EMBL

At the Hamburg Outstation

Andrea Schmidt, staff scientist in biocrystallography. She received her PhD in 1998 with Christoph Kratky at the University of Graz (Austria). After a two years postdoc with Myrek Cygler at the Biotechnology Research Institute, Montreal (Canada), she started working with Victor Lamzin in Hamburg by the end of 2000. Her research will focus on exploiting the limits of available synchrotron radiation sources for structural biology and combining quantum chemical approaches with experimental results from X-ray crystallography. Initially she will work on beam lines X11 and BW7A.

Yong-Hwa Song, staff scientist in molecular biology and biochemistry. She received her PhD in 1993 from the University of Hamburg. She has carried out structural studies on kinesin / tubulin complexes under the supervision of Eckhard Mandelkow from the Max-Planck groups, Hamburg, worked as a postdoc with Emil Pai at the University of Toronto, Canada, and returned to Hamburg as a research associate with the Max-Planck groups. She will head the wet lab facilities at the Hamburg Outstation, and will conduct research with the Wilmanns group.

Manfred Weiss, team leader in biocrystallography. He received his PhD in 1992 from the University of Freiburg (Germany), with Georg Schulz, determining the first X-ray structure of the integral membrane protein porin. He then did a post-doctoral fellowship with David Eisenberg at UCLA(USA), and then became a senior research associate with Rolf Hilgenfeld at the IMB Jena (Germany). Manfred plans to further develop experimental phasing methods, taking advantage of the special properties of synchrotron radiation, and perform structural studies from proteins from mycobacteria and garlic. Manfred will lead the future MAD line X12 at EMBL Hamburg.

errata, corrigenda & whoops!

Further and *ad corrigendum* to the people@EMBL section in the March issue of EMBL&*cetera*, **Rob Russell** did indeed join the Structural and Computational Biology Programme as a Team Leader in February, but he did not do his PhD at the University of Zürich and postdoctoral research in the lab of Paul Nurse at the Imperial Cancer Research Fund in London. That was Damian Brunner in the Cell Biology and Biophysics Programme. Rob did his PhD at the University of Oxford with Geoff Barton, post-doctoral work with Mike Sternberg at the Imperial Cancer Research Fund, London, and spent three years at SmithKline Beecham Pharmaceuticals R&D in the UK before coming to EMBL. And yes, he has had several cups of coffee since his arrival.

Who's new?

In the Biochemical Instrumentation Programme: Daniel Forler (Wilm); in the Cell Biology and Cell Biophysics Programme: Fengzhi Jiang (Hörber), Brigitte Joggerst-Thomalla (Pepperkok), Irena Niebling (Programme Secretary), Philipp Niethammer (Karsenti and Bastiaens), Sabrina Rüggeberg (Boulin), Masatoshi Takagi (Vernos), Ferran Valderrama (Way), Joanne Young (Pepperkok); in the Developmental Biology Programme: Julius Brennecke (Cohen), Marina Chekulaeva (Ephrussi), Russell Collins (Cohen); Stefanie Diehl (Klein); in the Gene Expression Programme: Vincent Galy (Mattaj); Jose Maria Izquierdo (Valcárcel), Mayka Sanchez (Hentze); in the Structural and Computational Biology Programme: Sophie Chabanis-Davidson (Gibson), Gregorio Ferandez (Serrano), Alexander Gasch (Sattler), Jan Korbel (Bork), Tamara Marinkovic (Programme Secretary), Christian Marx (Böttcher), Feng Qiu (Leonard), Alexander Stark (Russell); at the EBI:Martin Aslett, Giovanni Asproni, Daniel Barrell, Harry Boutselakis, Michael Darsow, Midori Harris, Kati Laiho, Quan Lin, Craig Melsopp, Francesco Nardone, Jorge Pineda-Castillo, Alistair Gibson Rust, Assunta Sansone, Mohammadreza Shojatalab, John-Graham Tate, Imre Vastrik; at the Grenoble Outstation: Hassan Belrhali, François Fihman, Florence Noel; at the Hamburg Outstation: Brenda Kostelecky, Jan-Preben Morth, Marc Niebuhr, Johan Nissen, Elzbieta Nowak, Santosh Panjikar, Rosario Recacha, Uwe Ristau; at the Monterotondo Research Programme: Mark Carter, Markus Müller, Angelika Paul, Nadia Rosenthal, Esfir Slonimsky, Serafima Zaltsman; elsewhere at EMBL: Richard Paul Carmouche (Core Facilities), Jos de Graaf (Core Facilities), Sabrina Rueggeberg (Core Facilities), Alan Sawyer (Core Facilities), William Mansfield (Scientific Facilities), Louise Coulter (Personnel), Karen Thompson (Personnel), Jörg Graf (General Services), Roswitha Lenhardt (General Services), Rainer Menzel (General Services), Susan Summerfield (General Services), Li-Jung Hoefer-Wu (Finance), Marion Pfoser (Finance), Laura Vinti-Glaeser (Courses and Conferences Office), Julia Perry (Courses and Conferences Office), Jesus Trabazo-Carmona (ISG), Gabi Schuster (ISG), Ulrike Vogel (Kindergarten), Lena Reunis (OIPA), Erika Mattikau(Invoice and Inventory Control); at EMBO: Liselott Ahlgren, Alessandra Bendiscioli, Tina Kunit, Astrid Lunkes, Kathy Oswald, Ellen Peerenboom

Would you like to contribute to the next issue of EMBL&*cetera*? Just send a message to info@embl-heidelberg.de. Deadline for submissions is October 4, 2001.

False Positives

Here are this month's contributions in our continuing search for the "Best of PubMed." Have a look at these PMID numbers...

11191000
10731910
3189688
10645297

Send contributions to
info@embl-heidelberg.de

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e-mail: info@embl-heidelberg.de

Editor:Russ Hodge; Associate Editor: Sarah Sherwood; Design: Sarah Sherwood, Russ Hodge

Contributors: Barton Dodd, Frank Gannon, Gareth Griffiths, Claus Himburg, Sylke Helbing, Ann Thüringer, Halldór Stefánsson, Matthias Wilmanns

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