FEBS News

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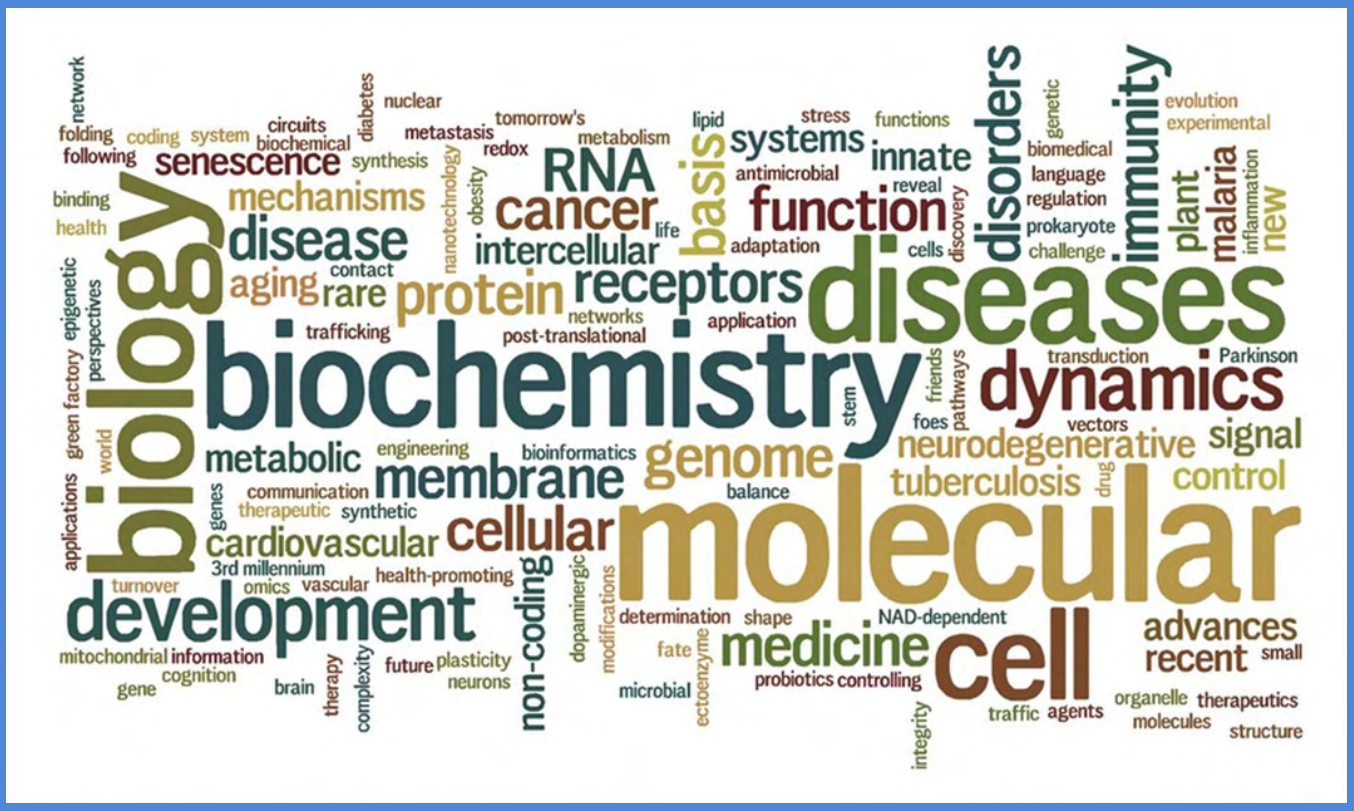

'Wordle' from 36th FEBS Congress symposia titles (http://www.wordle.net/create)

Inside this issue:

FEDERATION OF EUROPEAN BIOCHEMICAL SOCIETIES

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Dear colleagues and friends,

It is a great honour and pleasure for me to welcome you to our main scientific event of the year: the 36th Congress of FEBS, in Torino, northern Italy. Torino – sometimes referred to as 'the Capital of the Alps' or 'the Automobile Capital of Italy' – is a major business and cultural centre with a rich history. It became Italy's first capital 150 years ago in 1861, and is well known for its fine architecture, numerous galleries, churches, palaces, opera houses, museums, parks and gardens. The city also hosts some of Italy's best colleges, academies and universities.

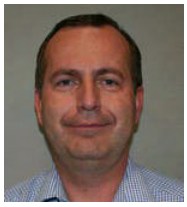
The Italian Biochemical Society (Società Italiana di Biochimica e Biologia Molecolare – SIB), a constituent society of FEBS from 1964, aims to promote research and teaching in biochemistry, to inform nonspecialists about relevant results, and to stimulate scientific collaborations of Italian laboratories with each other and with foreign institutions. During the Congress we will together celebrate the 60th aniversary of the Society, which was established on 28th June 1951.

Our Italian colleagues together with FEBS have prepared a very interesting programme for researchers and students from different biochemical and molecular biology areas. Under the theme of 'Biochemistry for Tomorrow's Medicine', the Congress will provide a global view on the important contribution of biochemistry and molecular biology to the advancement of biomedical research. The rich and multidisciplinary scientific programme includes plenary lectures, symposia, journal awards, workshops, poster sessions and other activities, with symposia topics including 'The genome in the 3rd millennium', 'Following the life of a protein', 'Membrane dynamics', 'Molecular engineering for medicine', 'Metabolic control and disorders' and 'Plant biochemistry for health and tomorrow's medicine'.

The Congress has been guided by a desire to cover a broad spectrum of biochemistry and molecular biology, from the cell nucleus to signalling cascades and receptors to the application of biochemistry to medicine. The programme not only focuses on research but also includes sessions on teaching, and on education of society about developments in biochemistry and molecular biology with wider relevance. An important part of the Congress is the Young Scientist Forum, which is a platform for young researchers to meet together with respected scientists and to discuss and present their first results.

I would like to thank the organizers, speakers and participants for their contribution to the 36th FEBS Congress, which is one of the most important biomedical conferences in Europe. We hope that the 36th FEBS Congress will be an outstanding experience for everybody. We are convinced that the Congress will contribute to further explanation of knowledge in biochemical and molecular biology and biomedical research and that you will find new colleagues and friends during your stay in Torino.

See you in Torino.



Prof. Tomáš Zima, MD, DSc.
Chair of Executive Committee of FEBS

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Questions and suggestions about *FEBS News* should be addressed to Carolyn Elliss (elliss@camfebs.co.uk).

The next issue is scheduled for **September 2011**. Deadline for entries (all types) is **12th September 2011.**

The Sir Hans Krebs Lecture & Medal

Sunday June 26, 11.30–12.30

Elena Conti
Max Planck Institute of Biochemistry, Munich, Germany

Molecular mechanisms of RNA degradation

The Sir Hans Krebs Lecture and Medal was endowed by a generous gift from the Lord Rank Centre for Research and is awarded for outstanding achievements in biochemistry and molecular biology or related sciences.

The Theodor Bücher Lecture & Medal

Sunday June 26, 17.45–18.45

Pier Giuseppe Pelicci
European Institute of Oncology, Milan, Italy

Regulation of self renewal in cancer stem cells

The Theodor Bücher Lecture and Medal was endowed by a generous capital gift from Frau Ingrid Bücher to the Gesellschaft für Biochemie und Molekularbiologie (GBM) and is awarded for outstanding achievements in biochemistry and molecular biology or related sciences.

The Datta Lecture & Medal

Monday June 27, 17.45–18.45

Sirpa Jalkanen
University of Turku, Turku, Finland

Homing-associated molecules as targets to prevent harmful inflammations and cancer spread

The Datta Lectureship Award is provided by generous capital gifts from Elsevier Science Publishers and is awarded for outstanding achievement in the field of biochemistry and molecular biology or a related area. The award is normally presented at each FEBS Congress to a plenary lecturer from one of the FEBS countries. S. Prakash Datta was the first Managing Editor of FEBS Letters (1968–1985) and Treasurer of FEBS (1964–1990). The Datta Medal is awarded in recognition of his many contributions.

The WISE Plenary Lecture & Statuette

Tuesday June 28, 17.45–18.45

Carol V. Robinson
University of Oxford, Oxford, UK

Finding the right balance: from rare gases to rotary motors

The FEBS/EMBO Women in Science Award rewards the exceptional achievements of a female researcher in the life sciences over the previous five years. Winners of the award are role models who inspire future generations of women in science.

FEBS education events

FEBS education events this year encompass three interesting sessions.

First, the Italian Society of Biochemistry and Molecular Biology has done an excellent job of putting together a high-school science teacher event, to which not only high-school teachers but all stakeholders in science education (university professors, administrators, PhD students, and so on) are invited. This session (only) will be conducted in Italian.

Second, an important workshop on 'PhD Training in Europe', planned by the FEBS Education Committee, will provide a European perspective on the latest developments in PhD education, with discussion by experts from academia and industry.

Third, given the fact that the main theme of this year's FEBS Congress is 'Biochemistry for Tomorrow's Medicine', an exciting workshop on the 'Integration of Molecular Biosciences with Medical Training' has been planned by the FEBS Education Committee. The workshop comprises talks by professors from three different countries, allowing different approaches to be considered.

We hope to see all FEBS members interested in these issues and are looking forward to your contribution to the panel discussions that will take place after the talks.

Gül Güner-Akdogan
Chair of FEBS Education Committee

'High School Scientific Education: a Bridge towards Medicine, Biology and Biotechnology University Courses' ('Educazione Scientifica nella Scuola Media superiore: un Ponte verso i Corsi Universitari di Medicina, Biologia e Biotecnologie')
Sunday June 26, 13:00–15:00, Londra 220
Organized by the Italian Society of Biochemistry and Molecular Biology

Workshop. PhD Training in Europe: Where Are We Heading?
Monday June 27, 13:00 –15:00, Sala 500
Organized by FEBS Education Committee

European vision in PhD Education
Michael J. Mulvany (Denmark)
Aarhus University Graduate School of Health Sciences, and Vice-President, ORPHEUS

What industry, in particular biotech industry, expects?
Detlef Riesner (Germany)
Düsseldorf University, Co-Founder and Chairman of the Supervisory Board Qiagen NV

Panel Discussion

Workshop. Integrating Molecular Bioscience Education with Medical Training
Wednesday June 29, 13:00–15:00, Sala 500
Organized by FEBS Education Committee

Why integrate? The evidence to support integration of scientific and clinical learning within undergraduate medical curricula
Karen Mattick (UK)
Peninsula College of Medicine and Dentistry, Universities of Exeter and Plymouth

Integrating molecular biosciences within the medical curriculum: the Maastricht approach
Jan F. C. Glatz (Netherlands)
Director of Education, Biomedical Sciences, Maastricht University

How to integrate molecular bioscience in medical training
Tomáš Zima (Czech Republic)
Dean of the 1st Medical Faculty, Charles University, Prague

Panel Discussion

FEBS Working Group on Women in Science

WISE FEBS/EMBO Workshop: Gender in Science
Sunday June 26, 14.00–15.30, Istanbul Room
Chairpersons: Lea Sistonen (Turku), Flavia Zucco (Roma)

'Future in science and science in future: ideas and expectations of women scientists'
Maria Laura Scarino, Roma, Italy. Secretary of the Italian Association of Women in Science "Donne e Scienza"

Panel Discussion

FEBS Science & Society session: Genetic Diseases

Organized by FEBS Science and Society Committee:
Jacques-Henry Weil (Chair), Marta Agostinho, Joan Guinovart and Lars Rask

As the theme of the FEBS Congress 2011 is 'Biochemistry for Tomorrow's Medicine', it was considered appropriate and timely to choose 'Genetic Diseases' as the topic for the Science & Society session of the Congress. The session comprises four talks (abstracts listed below) and takes place on Tuesday 28th June, 13.00–15.00, in the 'Sala 500'.

There are a very large number of genetic diseases, and at least 4500 single-gene disorders are currently known, which result from mutations (such as point mutation, gene deletion, trinucleotide repeat expansion, chromosomal aberration) in an identified gene. There are still many genes responsible for genetic diseases that remain to be identified (this is being speeded up by introduction of whole-exome sequencing). Meanwhile, important progress has recently been made in diagnosis and, thanks notably to advances in comparative genomics, in the treatment of a number of genetic diseases.

The molecular diagnosis of many genetic diseases is now possible (postnatally, or prenatally in families at risk) and has even become routine in many European countries. As far as treatment is concerned, for a small but growing number of diseases, conventional drugs or methods such as protein (enzymes, coagulation factors, peptide hormones) replacement therapies exist that can much improve the condition of the patients. An ultimate goal would be the replacement of the defective gene, or at least the correction of the consequences of the gene defect, by introducing a correct version of the gene, in order to restore the missing biochemical and cellular function. While the concept of gene therapy appears simple, it has proven very difficult to put into practice successfully, and it is only recently that it has become possible for a still small number of genetic diseases. On the other hand, the development of models of many genetic diseases in the mouse or even in *Drosophila* has allowed the identification of unexpected pathomechanisms that are good targets for conventional drugs. In the Science & Society session examples will be given to illustrate the scientific and medical advances that have allowed the identification of the defective gene and its mutations, the understanding of the mechanisms by which the gene defect causes the alteration of a particular biochemical and cellular pathway, and the development of innovative and successful gene therapy or drug therapy approaches.

But in addition to these scientific and medical aspects, there are other considerations important to society – for instance, ethical, social and legal aspects. Early diagnosis is a very important issue, including prenatal or even pre-implantation genetic diagnosis, now that in vitro fertilization methods are frequently used in human reproduction and that prospective parents want to choose an embryo free of a particular gene defect (when this defect is known to exist in the family). Genetic counselling is required for such applications. The last talk of this session, entitled 'Organization of care for genetic disease in a diverse Europe' will focus on these aspects, which are obviously important for society but are not easy to deal with, given the diversity of cultures and laws that exist in various countries, even within Europe.

Jacques-Henry Weil
Chair of FEBS Science and Society Committee

Science & Society abstracts

Gene therapy: acquired results, expected advances and obstacles

***Marina Cavazzana Calvo**, Dept of Biotherapy, Hospital Necker Enfants Malades, Université Paris Descartes, Paris, France. m.cavazzana@nck.aphp.fr*

Inherited and acquired diseases of the hematopoietic system can be cured by allogeneic hematopoietic stem cell transplantation. This treatment strategy is highly successful when an HLA-matched sibling donor is available, but if not, few therapeutic options exist. Gene-modified, autologous bone marrow transplantation can circumvent the severe immunological complications that occur when a related HLA-mismatched donor is used and thus represents an attractive alternative. In this presentation, we summarize the advantages and limitations associated with the use of gene therapy to cure these inherited diseases. Insertional mutagenesis and technological improvements aimed at increasing the safety of this strategy are also discussed.

Progress in exon skipping therapy for Duchenne muscular distrophy and the future of RNA-based genetic therapy

Gert-Jan B. van Ommen*#, Annemieke Aartsma-Rus#, Melvin Evers#, Willeke van Roon#, Peter-Bram 'tHoen#, Dwi Kemaladewi#, Sjef Verbeek#, Seda Yllmaz-Elis#, Hans Dauwerse¶, Saskia Lesnik-Oberstein¶, Johan T den Dunnen#, Nathalie Goemans†, Mar Tulinus‡, Jan Verschuuren§, Sjef de Kimpe*, Giles Campion* and Judith van Deutekom*. (#)Depts of Human Genetics, (¶)Clinical Genetics and (§)Neurology, Leiden University Medical Center, Leiden, the Netherlands; (†)Dept of Pediatric Neurology, University Hospitals Leuven, Belgium; (‡)Dept of Pediatrics, University of Gothenburg, Sweden; and (*)Prosensa Therapeutics, Leiden, the Netherlands. g.j.b.van_ommen@lumc.nl*

Twenty years after the first wave of Mendelian disease gene discoveries, their translation into therapeutic modalities begins to take hold, greatly aided by the increase in biological insights and advancement of technologies of the genomics era. A good example is the application of antisense-mediated exon skipping. This is presently the most promising therapeutic approach for Duchenne muscular dystrophy (DMD): a successful phase I/II systemic clinical trial has been published and a multicenter phase III placebo-controlled clinical trial is ongoing. Our preclinical further research now focuses on the next steps in developing and improving therapy: the development of more refined readouts for therapeutic success using transcriptomics and proteomics technology, and supporting treatments to increase myogenesis. In parallel, the success of the exon skipping in DMD has led us to explore applications to other Mendelian diseases, like Huntington disease and CADASIL, but also to a more common disease, rheumatoid arthritis. Thus, the current high-throughput tools and technology increasingly assist a beneficial convergence of the fields of common, multifactorial, and rare, Mendelian disease, classically seen as largely separate. This synergism has much to contribute to the unravelling of biological mechanisms, the improvement of predicting health outcomes and the monitoring of therapeutic development.

Connective tissue diseases and cytokines: a pathway to treatment

Bart Loeys*, Center for Medical Genetics, Antwerp University Hospital, Belgium. bart.loeys@uza.be*

The recent study of different connective tissue diseases and their homologous mouse models has dramatically altered our understanding of their pathogenesis. A major breakthrough was realized with the study of a mouse model of Marfan syndrome (MFS). The study of emphysema development in a fibrillin-1 *(FBN1)* deficient Marfan mouse model pinpointed altered TGFbeta signaling as the culprit in the pathogenesis. The role of the TGFbeta pathway was also proven in the study of aortic walls of fibrillin-1 mouse models. This central role of TGFbeta in aortic aneurysm formation was confirmed by the identification of mutations in the *TGFBR1/2* genes (transforming growth factor beta receptor 1 or 2) as the cause of a new aortic aneurysm syndrome (Loeys-Dietz syndrome, LDS). This syndrome is characterized by the triad of hypertelorism, cleft palate/bifid uvula and widespread aneurismal disease with arterial tortuosity. Increased TGFbeta activity was demonstrated in aortic walls of both LDS and MFS patients. Interestingly, in another rare autosomal recessive connective tissue disorder, the arterial tortuosity syndrome, caused by deficiency of a glucose transporter, GLUT10, and also complicated with arterial aneurysms, we also showed TGFbeta upregulation in vascular smooth muscle cells. It is notable in this context that mice lacking the extracellular protein fibulin-5 *(FBLN5)* have fragmented elastin and tortuous elongated aorta, but do not develop aortic aneurysms or dissections. This is also confirmed by our observations in patients with *FBLN5*-mutations, generating the hypothesis that fibulin-5 deficiency does not lead to altered TGFbeta activity, and does not progress to aneurismal changes. By contrast, in our experience patients with fibulin-4 deficiency have a marked vascular phenotype with arterial tortuosity and aneurysms. Similarly mutant mice that have lost the related fibulin-4 gene show a striking aortic rupture phenotype and perinatal lethality. We confirmed altered TGFbeta signaling in aortic wall tissues of fibulin-4 deficient patients. Finally, perhaps most intriguingly we identified domain specific *FBN1* mutations as the molecular cause of a congenital form of scleroderma, stiff skin syndrome (SSS). We demonstrated that altered cell-matrix interactions in SSS accompany excessive microfibrillar deposition, impaired elastogenesis, and increased TGFbeta concentration and signaling in the dermis.

As such, these human diseases and different mouse models have offered the opportunity to unravel the complex interaction between aortic integrity and extracellular matrix regulation of TGFbeta activity. There is increasing evidence indicating that misregulation of TGFbeta signaling owing to defects in extracellular proteins is centrally important to the development of aortic aneurysms. This view has now replaced the previous idea that aortic aneurysms were simply due to a structural deficiency of the elastin matrix in the aorta. Moreover, this new view offers excellent targets for therapeutic interventions.

Organization of care for genetic diseases in a diverse Europe

Ségolène Aymé, Orphanet (European Portal for Rare Diseases and Orphan Drugs) / Inserm SC 11, Plateforme Maladies Rares, 96 rue Didot, 75014, Paris, France. segolene.ayme@inserm.fr

***Milan Macek**, Institute of Biology and Medical Genetics, University Hospital Motol and 2nd School of Medicine, Charles University, V Uvalu 84, Praha 5, CZ 150 06, Czech Republic. milan.macek.jr@lfmotol.cuni.cz*

Member States' (MS') policies and actions in the field of rare disease (RD), which includes all genetic diseases, are rapidly evolving. Up till now, several countries have taken action to adapt their health care system to meet the needs of the RD patient community, or have planned to do so.

With regard to centres of expertise, there are three categories of countries in Europe: those which have a policy regarding RD and have established centres of expertise within this framework (Denmark, France, Italy, Norway and Sweden); those which have established centres of expertise, though not specifically for RD (Belgium, Croatia, Czech Republic, Finland, Greece, Ireland, Portugal and the UK) and those which have no centres with this denomination, although they have centres with all the characteristics of a centre of expertise (this is the case for almost all of the other countries). In addition, several research and/or public health networks have *de facto* identified centres of expertise in their own field. The Orphanet database lists 378 centres of expertise, mainly concentrated in Belgium, France, Germany, Italy, Spain and the UK. They cover very different realities as the qualifying criteria to define a centre as an expert centre differ from one country to another, both in terms of the mission and in terms of resources. Recently, some principles have been agreed on by the High Level Group of Health Services and Medical Care but various professional groups are not yet sufficiently aware of these principles, which were certainly not considered when designating the current expert centres. As a consequence, it is still difficult for health care users to understand what services they can obtain from these centres. In addition some experimental European reference networks of centres of expertise have been established and funded for a three year period only, a time period too short to allow any assessment of the added-value of these networks.

With regard to genetic tests, they are now offered internationally, through both public and private sector genetic testing services. Currently, 956 laboratories offering tests for 1,559 genes are registered with Orphanet in Europe at large. The test offer differs greatly from one large country to another: Germany (1,141 genes), France (874 genes), Italy (625 genes), Spain (582 genes), the UK (414 genes). The test offer in medium and small-sized countries ranges from 1 to 233 genes. According to available data, only testing for cystic fibrosis is provided by every country and 121 diseases are testable in only one country in Europe. This situation explains the large cross-border flow of specimens, highlighting the need to provide access to services in other countries when necessary, especially for very rare diseases. Legal and financial issues concerning cross-border testing are not yet fully addressed.

With regard to the provision of information to patients and professionals, several MS have established web-based information services (Sweden and France) and telephone help lines (Bulgaria, Denmark, France, Italy, The Netherlands, Norway, Spain, Sweden and the UK) although their resources vary considerably. Orphanet has expended its data collection on expert resources to almost all European countries. The difficulty is to maintain updated information about several thousands of diseases and to provide this information in languages understandable by the end users. So far information is only available in English, French, German, Italian, Portuguese and Spanish. Translation is planned for Flemmish/Dutch, Polish and Romanian.

With regard to funding for research on rare diseases, the multinational common calls for proposals E-Rare now covers Austria, France, Germany, Greece, Israel, Italy, Spain, Turkey, The Netherlands and Portugal.

Patient registries and databases constitute key instruments to develop clinical research in the field of rare diseases, to improve patient care and healthcare planning. They are the only way to pool data in order to achieve a sufficient sample size for epidemiological and/or clinical research. They are vital to assess the feasibility of clinical trials, to facilitate the planning of appropriate clinical trials and to support the enrolment of patients. Currently, 402 patient registries in the field of rare diseases are listed by Orphanet, of which 47 are regional, 295 national, 34 European and 26 global. The main problem faced by these registries is their sustainability as they are long term projects and most funding sources only support short term projects. The way forward is to establish a public/private partnership in this area with the support of regulatory agencies.

Among MS, major disparities in access to treatment are observed. Although all Orphan Medicinal Products (OMP) receive market authorisation at the EU level, their accessibility at MS level depends both on marketing decisions by the company and on the willingness of health authorities in each MS to quickly establish OMP prices and reimbursement rules.

Monitoring this situation is necessary to be able to assess the impact of measures taken at MS and EU level. An agreement on indicators is now necessary.

FEBS opportunities for young scientists

Young Scientist Forum

The FEBS Young Scientist Forum (YSF), a satellite meeting of FEBS Congresses, is an important event in the FEBS calendar. As Chair of the FEBS Working Group on the Career of Young Scientists from 2005 to 2007, it was a great pleasure to witness the enthusiasm and high intellectual standards at these events. At the last FEBS Council meeting, held in Gothenburg, Sweden (2010), I was elected again as Chair and I am very much looking forward to working with the next young generation of scientists over the coming three years.

Because the YSF is a satellite meeting of FEBS Congresses, students are able to attend both scientific events and therefore enjoy different experiences. The aim of the YSF is to provide young scientists with an informal yet highly stimulating environment in which to discuss ideas, exchange knowledge and acquire further information regarding the prospects of a career in science. The first YSF was organized in 2001 in Oeiras, Portugal, as a satellite meeting of the 27th FEBS Congress, after which successful workshops have taken place each year.

This year the YSF has been organized in Torino by Francesco Rua and his organizing committee, to whom I am addressing special thanks for all their efforts in arranging this event. Its venue, Villa Gualino, is surrounded by a wooded park, providing a relaxing atmosphere. We have invited two keynote speakers to deliver plenary lectures: Prof. Cathie Martin from the John Innes Centre, Norwich, UK, and Prof. Tiago Outeiro from the Institute of Molecular Medicine, Lisbon, Portugal. The symposia are organized based on the abstract submissions as follows: RNA biology; Signalling; Gene response/Gene regulation; Structure and function of proteins; Protein structure/ Development; and Diseases. A roundtable discussion with representatives from several organizations has also been arranged to cover issues related to scientific careers.

FEBS Fellowships

The 'FEBS Fellowship Follow-up Research Fund' is a programme launched by the FEBS Fellowships Committee to help young scientists who have been recipients of a 'FEBS Long-Term Fellowship' to start work on returning to their country of origin. FEBS is also collaborating with the EMBO laboratory management course by giving course grants for the recipients of the FEBS Long-Term Fellowships. In addition, the FEBS Fellowships Committee recently launched a new initiative: 'Return-To-Europe Fellowships'. These are awarded to support scientists who left the European area for post-doctoral training and wish to return to Europe for a second post-doctoral position. These Fellowships are granted for two years and are allocated once a year. For more on FEBS Fellowships see: http://www.febs.org/index.php?id=81

As Chair of the Working Group on the Career of Young Scientists, and with the help of FEBS Executive Committee members, I will do everything in my power to develop initiatives that will provide young scientists with the necessary tools to develop their own scientific careers. I will be very pleased to talk to you at the FEBS booth during the Congress.

Claudina Rodrigues-Pousada
Chair of FEBS Working Group on the Career of Young Scientists

A recent site visit to Sevilla, with Dr Miguel Ángel de la Rosa, Chair of the Organizing Committee, in the centre and Prof. Israel Pecht of FEBS to his left.

FEBS Congress 2012

The Spanish Society of Biochemistry and Molecular Biology (SEBBM) is organizing a joint FEBS and IUBMB (International Union of Biochemistry and Molecular Biology) Congress in Sevilla, Spain, in September 2012 with the theme 'From Single Molecules to Systems Biology'.

For further information see the meeting website at: http://www.iubmb-febs-2012.org/

FEBS help for Chilean scientists following the 2010 earthquake

Chile, one of the seismically most active countries in the world, was severely affected by an earthquake of magnitude 8.8 on 27th February 2010, which lasted between two and three minutes. It released the energy accumulated in the Concepción-Constitución seismic gap and the rupture area extended for approximately 450 km along the Pacific coast, with an average slip of about 10–12 m, which explains why the earthquake was so strong in Concepción and Talca. The hypocentre was located at a depth of about 30 km in the interface between the Nazca and South American plates. It was the second most intense earthquake ever recorded in Chile, and the sixth most intense worldwide. It changed the physiography of the coastal area near the epicentre, producing depressions and elevations ranging from –0.6 to +2.8 m.

The Chilean Society of Biochemistry and Molecular Biology nominated me as its 'Good Will Ambassador' and in this capacity I have been interacting with FEBS and other organizations. In this action I have had the help of several people, but I would like to highlight two of them: my husband Dr Athel Cornish-Bowden, and the Chairman of the Spanish Society of Biochemistry and Molecular Biology (SEBBM), Dr Miguel Ángel de la Rosa.

The help of FEBS has been reflected mainly in the award of seven short-term fellowships with follow-up grants. In this, Dr Jorge Allende (Pro-Rector of the University of Chile at the time) played a crucial role, as well as Dr Maciej Nalecz, Chair of the FEBS Fellowships Committee in 2010, and Dr Iain Mowbray, the FEBS Treasurer.

Important help with equipment was also given by FEBS through the Scientific Apparatus Recycling Programme (SARP). Drs Julio Celis (Denmark), Karel Wirtz (The Netherlands) and Iain Mowbray played crucial roles in this.

In addition, Prof. Giorgio Semenza, at the time Chair of the FEBS Science and Society Committee, donated books from his personal library.

In the name of the Chilean Society of Biochemistry and Molecular Biology, and of the Chilean scientific community as a whole, I would like to express to FEBS, and in particular to the Executive Committee and to Dr Israel Pecht, the General Secretary, the enormous gratitude of Chilean scientists for the great help given and, very importantly, for the moral support.

Earthquake damage in Concepción

Short-term fellowships for graduate students, with follow-up grants

A pre-selection was made in Chile by a Committee constituted by the Council of Presidents of Chilean Universities (Consejo de Rectores) under the chairmanship of Dr Jorge Allende, the interlocutor with FEBS. This committee pre-selected eight applicants from universities that were severely damaged by the earthquake.

Seven out of the eight applicants were awarded short-term fellowships by the Fellowships Committee of FEBS in the second half of 2010: three students from the University of Concepción (Soledad Chamorro, Carla Pacheco, José Sepúlveda), three from the University of Talca (Analia Espinoza, Sebastian González, María-Cecilia Opazo) and one from the Pontificia Universidad Católica de Valparaiso (Estela Tapia).

These fellowships were very well received by the Chilean community, as they allowed the young scientists who were starting their PhD work and whose labs have been destroyed or severely damaged to go to European centres to do some experiments, learn new techniques and, very importantly, to feel that there were people who cared about them.

In addition to the fellowships there were also follow-up grants, as suggested by Dr Jorge Allende, to allow the possibility of establishing collaborative projects between the European and Chilean centres. This has been very successful, as illustrated by the following cases.

Jose Sepúlveda (U. of Concepción) went to Grenoble (France) to the Institute of Structural Biology to work with Dr Juan Carlos Fontecilla, where he expressed, purified and crystallized a cytosolic domain of the glycine receptor. Afterwards, in April 2011, Dr Fontecilla went to Concepción, a visit that helped to renew links between Dr Fontecilla and the group of Dr José

Martínez, José Sepúlveda's supervisor. They were able to discuss a research project that they are preparing to present to CONICYT (the Chilean national research agency).

Sebastian González (U. of Talca) went to Barcelona (Spain) to the Department of Biochemistry in the Chemistry Faculty of the University of Barcelona, to work with Dr Albert Boronat. According to his supervisor, Dr Simon Ruiz, Sebastian made considerable progress in his doctoral work. Dr Ruiz also went to Barcelona and his visit helped to renew links with Dr Boronat. They have presented a joint project to CONYCIT to enable short visits to Talca of foreign scientists, which will allow the incorporation of Dr Boronat in the PhD program in Plant Genetic Engineering of the University of Talca. Furthermore, Dr Ruiz took advantage of his visit to Barcelona to contact Dr Pere Puigdomenech, Director of the Research Centre on Agrogenomics of Barcelona (CRAG), with the idea of signing an agreement of scientific and technical collaboration between CRAG and the University of Talca. This project is developing and will soon be officially approved. Dr Boronat is moving from the University of Barcelona to CRAG.

The last of the students to travel was Analía Espinoza (U. of Talca), who went in March to Castellón (Spain). Before going she had to re-prepare some biological material that she had lost because of the earthquake. I met her last November in Talca. Her stay in Castellón has been very successful and her tutor, Dr Jose Casaretto, will be travelling to Spain at the end of June.

Equipment donation

Thanks to the action of Dr Julio Celis, equipment was collected from four different European institutions: two institutes in Paris (Institut Curie and Institut Cochin), one in Milan (Fondazione IRCCS "Istituto Nazionale dei Tumori") and one in Copenhagen (Institute of Cancer Biology).

The FEBS Scientific Apparatus Recycling Programme supported this collection and transfer of the equipment to The Netherlands, and afterwards Dr Karel Wirtz sent it to Chile with a shipping company. Dr Jorge Allende and I took the decision of sharing these instruments between two different institutions, one in Talca and the other in Concepción, that were severely damaged by the earthquake.

The Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción received a patch clamp set up, a spectrophotometer, a pneumatic suspension system and two fluorescence microscopes. These instruments are also available for researchers of other departments and were received with great enthusiasm. I have been in contact with Dr Nelson Carvajal, Dean of the Facultad de Ciencias Biológicas, Dr Juan Olate, President from the Chilean Society of Biochemistry and Molecular Biology up to December 2010, and Dr José Martínez. All of them have expressed their gratitude to FEBS for the equipment received and for all the help.

The Laboratorio de Biología Molecular y Bioquímica, Instituto de Biología Vegetal y Biotecnología, Universidad de Talca received two table centrifuges, a microcentrifuge, a refrigerated centrifuge, an automatic environmental speedvac, a thermostatic bath, an electroporator, a transilluminator, five light microscopes, and a fluorescence upright microscope plus camera. As soon as the instruments were received, Dr Simón Ruiz sent me a very moving email on behalf of group leaders at the University of Talca expressing their happiness and gratitude to FEBS for this donation. Further information can be found at a press release of the University of Talca (http://www.utalca.cl/link.cgi//SalaPrensa/Reconstruccion/2637). They emphasized how important, not just from a material point of view but also psychologically, the support of FEBS has been.

Group leaders in Talca. Left to right: José Casaretto, Alejandra Moya, (María Luz Cárdenas), Enrique González, Simón Ruiz and Raul Herrera

Books donation

During the FEBS meeting in Gothenburg, Sweden, last year, Prof. Giorgio Semenza, at the time Chair of the FEBS Science and Society Committee,

María Luz Cárdenas and Giorgio Semenza at the FEBS Congress in Gothenburg, 2010

expressed to me his desire to donate books of his personal library to help towards Chile's reconstruction. He sent, at my suggestion, 59 books to the Instituto de Biología Vegetal y Biotecnología, Universidad de Talca, for which the transport cost was covered by ETH Zurich (Switzerland). These books include some that, despite their age, are classics that remain important, such as *Catalysis in Chemistry and Enzymology* (W. P. Jencks) and the *Annual Reviews of Cell Biology* (several volumes). These books constituted a significant reinforcement for the university library and an important moral support, as they were the first help that the institute received.

Dr María Luz Cárdenas
Good Will Ambassador of the Chilean Society of Biochemistry and Molecular Biology; Corresponding Member of the Chilean Academy of Sciences; Senior Scientist BIP-IMM-CNRS, Marseille, France
email: cardenas@ifr88.cnrs-mrs.fr

FEBS Courses

The courses listed below are still open for applications in 2011. The first round of FEBS Advanced Courses for 2012 will be announced soon. Youth Travel Fund (YTF) grants are available for each course. Information on YTF and TransYTF grants and eligibility can be found on the FEBS website at: http://www.febs.org/index.php?id=106

Advanced Course
ALC11-034
Immune System: Genes, Receptors and Regulation
Hvar, Croatia, September 3–11, 2011
Organizer: Hans-Reimer Rodewald
Deadline for applications: July 1, 2011
email: hans-reimer.rodewald@uni-ulm.de
http://www.febs-hvar2011.org/

Practical Course
PLC11-022
Introduction into Systems Biology: Basics of Proteomics, Bioinformatics, Biostatistics & Integration of Data Generated by these Fields
Athens, Greece, September 26–30, 2011
Organizer: Sophia Kossida
Deadline for applications: June 30, 2011
http://www.bioacademy.gr/bioinformatics/courses/FEBS_2011/

Workshops
WS11-038
Cell Biology and Pharmacology of Mendelian Disorders
Napoli, Italy, October 7–11, 2011
Organizer: Daniela Corda
Deadline for applications: July 25, 2011
http://febs2011.ibp.cnr.it/

WS11-039
Plant Organellar Signaling – From Algae to Higher Plants
Primosten, Croatia, August 31 – September 3, 2011
Organizer: Ute Vothknecht
Deadline for applications: June 30, 2011
email: vothknecht@bio.lmu.de

Joint FEBS/EMBO Lecture Course
EFLC11-032
Actin-Based Motility: from Molecules to Model Organisms
Stresa, Italy, October 29 – November 2, 2011
Organizer: Giorgio Scita
Deadline for applications: August 31, 2011
http://events.embo.org/11-actin-motility/

In Memoriam

Georgi D. Efremov 1932–2011

After a long battle with cancer, Prof. Georgi D. Efremov died on 6th May 2011. Prof. Efremov was the founder and head of the Research Center for Genetic Engineering and Biotechnology (RCGEB), Macedonian Academy of Sciences and Arts; a world-renowned expert in the field of hemoglobin research; and a very prominent scientist in the field of biomedicine and biomolecular sciences in Macedonia and in the region. He was instrumental in the characterization of polymorphic protein variants in domestic animals and published hundreds of papers on detection and characterization of different hemoglobin variants and thalassemia alleles. Prof. Efremov was the founder of molecular genetic research and diagnostics in the Republic of Macedonia and made a major contribution in the molecular detection and characterization of many monogenic diseases, such as hemoglobinopathies, cystic fibrosis, muscular dystrophy and hemophilias, as well as infectious and inherited malignant diseases.

Prof. Georgi D. Efremov was born in Kratovo, Republic of Macedonia, in 1932 and graduated from the Faculty of Veterinary Medicine, University of Zagreb, Croatia, in 1956. In 1959 he was appointed as a junior assistant in the physiology of domestic animals at the Faculty of Agriculture, University "St Cyril and Methodius", Skopje, Macedonia, from where he retired in 2001 as Professor of Biochemistry and Physiology. In 1963 he defended his doctoral thesis on fetal and adult animal hemoglobins at the University of Belgrade, Serbia. He received a fellowship from the Royal Norwegian Council for Science and spent two years at the Department of Internal Medicine, Veterinary College of Norway in Oslo, headed by Prof. M. Braent. During this time, he made the discovery of the first abnormal hemoglobin in domestic animals, which was published in *Nature* in 1964. In 1968 he was invited by Prof. Titus H. J. Huisman from the Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, USA, to join his group, which was studying the structure, function, synthesis and expression of normal and abnormal human hemoglobins. This productive relationship lasted for 30 years and resulted in numerous publications on new hemoglobin variants and thalassemias. In the last 25 years he expanded his research interest into the molecular basis of human monogenic diseases and establishment of a basis for detection and characterization, including prenatal diagnosis, of the most common monogenic diseases in Macedonia. His rich scientific career included publication of over 500 peer-reviewed reports in international and national journals and several chapters in books and monographs. He was co-Editor of the journals *Hemoglobin* and *Balkan Journal of Medical Genetics* and a member of the editorial boards of many journals in the field of biomolecular sciences. Prof. Efremov had held visiting professorships at the Universities of Belgrade, Sofia, Zagreb, Novi Sad, Augusta, Havana and many others, where he taught subjects related to his expertise.

Prof. Efremov became a Member of the Macedonian Academy of Sciences and Arts in 1978 and served as its President from 2000 to 2001. He was Minister for Science in the first government of the independent Republic of Macedonia (1991–1992) and Ambassador to the People's Republic of China (2002–2004). He was the President of the Macedonian Society for Biochemistry and the Macedonian Society for Human Genetics, and a member of numerous professional societies and associations. His accomplishments were acknowledged with the highest honors by the governments of the former Yugoslavia and the Republic of Macedonia.

Prof. Efremov was the founder and driving force of the Research Center for Genetic Engineering and Biotechnology, which was established as a scientific unit of the Macedonian Academy of Sciences and Arts in 1986. Under his guidance, the RCGEB became a hub for research in the field of

biomolecular sciences in the Republic of Macedonia, being one of the first institutions in the region that applied these new technologies in molecular diagnostics of human diseases and becoming an international center for training in basic and advanced methods in these sciences. Immediately after the death of Prof. Efremov, the Presidency of the Macedonian Academy of Sciences and Arts re-named the Center in his honor as the Research Center for Genetic Engineering and Biotechnology "Georgi D. Efremov".

We had the privilege of working with Prof. Efremov for almost 25 years from the very beginning of our careers. He was an extremely hard working, dedicated and intuitive scientist with enormous passion for science and new discoveries. Up to his last days, and even with advanced disease, he directed the running of projects and planning of new programs at the Center. As our professor, mentor, valuable supporter and advisor he will be missed greatly, but we are convinced that his legacy of devotion to science will live long after his time through the work of his many students.

Prof. Dijana Plaseska-Karanfilska, MD, PhD, Research Centre for Genetic Engineering and Biotechnology "Georgi D. Efremov", Macedonian Academy of Sciences and Arts, Skopje, Republic of Macedonia
Prof. Aleksandar Dimovski, MD, PhD, Faculty of Pharmacy, University "St Cyril and Methodius", Skopje, Republic of Macedonia

FEBS National Lecture

Johannes Herrmann (Technical University Kaiserslautern, Division of Cell Biology, Germany) received a FEBS National Lecture award during the recent 'Redox Mechanisms' meeting of the Belgian Society of Biochemistry and Molecular Biology. Johannes gave an outstanding presentation entitled 'The mitochondrial disulfide relay: a role in protein import and mitochondrial translation?'

The meeting took place on 6th May 2011 at the Free University of Brussels. 'The quality of the talks and keynote speakers was really impressive, even for people not completely in the field,' said Thierry Arnould of the Belgian Society of Biochemistry and Molecular Biology.

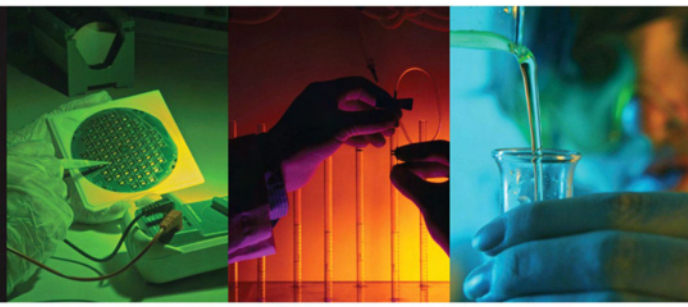
For more details on this event, including links to the abstract book and photos see:
http://redox.vub.ac.be/BCRB/Redox_Mechanism_meeting_2011.html

Joris Messens
Local Organizer. Head of the Redox Regulation group of the Structural Biology Department at the VIB-VUB and of the Brussels Center for Redox Biology
http://redox.vub.ac.be/BCRB/home.html

Presentation of FEBS National Lecture award to Johannes Herrmann (right) by Joris Messens

The FEBS National Lectures awards are intended to support Plenary Lectures that significantly enhance the quality of a scientific meeting, symposium or annual national scientific meeting of a Constituent Society.
For more details see:
http://www.febs.org/index.php?id=460

Molecular Oncology



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  - *Protein Structure and Genomics*
- **FEBS Journal Prize for Young Scientists**

FEBS

Dear Fellow Scientists,

FEBS Journal has been particularly busy this year with a number of new initiatives. Among those already in place are illustrated (graphical) abstracts in the table of contents, immediate publication of accepted but not yet edited papers online, and increased hyperlinking to relevant databases. In the pipeline, and coming shortly, we will be publishing Special Issues: an issue on *Engineering Toxins for 21st Century Therapies*, based on a Royal Society Discussion meeting; another on *Structure of Proteins and Genomics*, based on work presented at the MPSA conference in Uppsala last year; and a third one based on the forthcoming *International Conference on Cytochrome P450* to be held in Manchester in July 2011. We look forward to our publications on these exciting topics with more to come.

Another new feature coming soon are *FEBS Journal* podcasts. Podcasts are being recorded by the coordinators of minireview series published in the journal this year. We hope the availability of podcasts will increase the accessibility of our minireview series, which cover a wide range of topics by international experts.

In addition to publication of Structured Digital Abstracts in the journal, we are also expanding the number of databases to which we hyperlink in the online version of the journal. We currently link to entries in the following databases: nucleotide data in GenBank/EMBL/DDBJ databases; structural data in the Worldwide Protein Data Bank; and Enzyme Commission (EC) number. We shall be linking to further databases as the year goes on.

Please keep in touch with our website http://www.febsjournal.org to find out more.

Winner of *FEBS Journal* Prize for Young Scientists

The *FEBS Journal* Prize of €10,000, awarded annually, is intended for a graduate student or young postdoctoral research worker (no more than 3 years from the award of the PhD Degree) who is the first author of a paper judged by the Editorial Board to be the best published in *FEBS Journal* during the calendar year.

The *FEBS Journal* Prize 2010 is awarded to Karen van Eunen from the Department of Pediatrics, Center for Liver, Digestive and Metabolic Disease, University Medical Center Groningen, Groningen, The Netherlands for her outstanding paper *Measuring enzyme activities under standardized* in vivo-*like conditions for systems biology*, which can be found at http://onlinelibrary.wiley.com/doi/10.1111/j.1742-4658.2009.07524.x/abstract

Karen van Eunen

Karen van Eunen will receive the award in June at the FEBS Congress in Torino and we are looking forward to a presentation of her work there.

Latest Virtual Issue

Did you see the new virtual issue of *FEBS Journal* entitled *Membrane Trafficking* published in April 2011? This can be viewed at: http://www.febsjournal.org/vi_242.asp#242

In this virtual issue we have collected some recent papers that cover two main topics in degradative membrane trafficking: endolysosomal trafficking and autophagy. We also provide examples of papers that describe how pathogens traverse the endolysosomal and autophagic pathways in order to infect cells.

Reviews and Minireview Series

Recent reviews and minireview series published in *FEBS Journal* in 2011 are listed below. Reviews and minireviews can be read online and downloaded free of charge from the time of publication.
Go to the *FEBS Journal* online website:
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1742-4658/issues
or use the hotlink from the *FEBS Journal* website:
http://www.febsjournal.org

We hope you will join us at the FEBS Congress in Torino in late June and look forward to seeing you there.

With best wishes from us all at *FEBS Journal*,

Richard Perham, Editor-in-Chief
Vanessa Wilkinson, Editorial Manager
Ann-Marie Bruyns, Deputy Editorial Manager
Judith Madeley, Acting Deputy Editorial Manager
Giannina Bartlett, Editorial Assistant
Juanita Goossens-Roach, Editorial Assistant

Recent Reviews published in *FEBS Journal* in 2011:

Engineering toxins for 21st century therapies, J.A. Chaddock & K.R. Acharya (Vol. 278/6)

Trypanosoma brucei*: a model microorganism to study eukaryotic phospholipid homeostasis*, P. Bütikofer & M. Serricchio (Vol. 278/7)

Oxylipins in pathogenic fungi, I. Feussner & F. Brodhun (Vol. 278/7)

α-enolase: *a promising therapeutic and diagnostic tumor target*, M. Capello, S. Ferri-Borgogno, P. Cappello & F. Novelli (Vol. 278/7)

Transient RNA–protein interactions in RNA folding, M. Doetsch, R. Schroeder, B. Fürtig (Vol. 278/10)

Transient DNA/RNA-protein interactions, F.J. Blanco & G. Montoya (Vol. 278/10)

Recent Minireview Series published in *FEBS Journal* in 2011:

Increasing complexity in TNFR1 signaling coordinated and introduced by Harald Wajant (Vol. 278/6)

Vertebrate sex determination: questioning the hierarchy coordinated and introduced by Amaury Herpin & Manfred Schartl (Vol. 278/7)

Molecular aspects of Helicobacter pylori cag-pathogenicity island coordinated and introduced by Giuseppe Zanotti (Vol. 278/8)

Transient interactions in metalloproteins coordinated and introduced by Irene Díaz-Moreno & Miguel Á. De la Rosa (Vol. 278/9)

Regulatory roles of hyaluronan in health and disease coordinated and introduced by Vincent Hascall & Nikos Karamanos (Vol. 278/9)

MicroRNAs, regulatory networks and diseases coordinated and introduced by Gozoh Tsujimoto (Vol. 278/10)

Natriuretic peptides and their receptors coordinated and introduced by Kunio S. Misono (Vol. 278/11)

FEBS Letters* and *FEBS Journal

would like to invite you to

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Wednesday 29 June

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in the Plenary Lecture Hall

FEBS Letters Award Winner

Shiro Suetsugu (Tokyo, Japan)

for his manuscript:

Mapping of the basic amino-acid residues responsible for tubulation and cellular protrusion by the EFC/F-BAR domain of pacsin2/Syndapin II

FEBS Journal Prize Winner

Karen van Eunen (Groningen, The Netherlands)

for her manuscript:

Measuring enzyme activities under standardized *in vivo*-like conditions for systems biology

Congratulate the prize winners on their awards and find out more about our annual prizes for young scientists!

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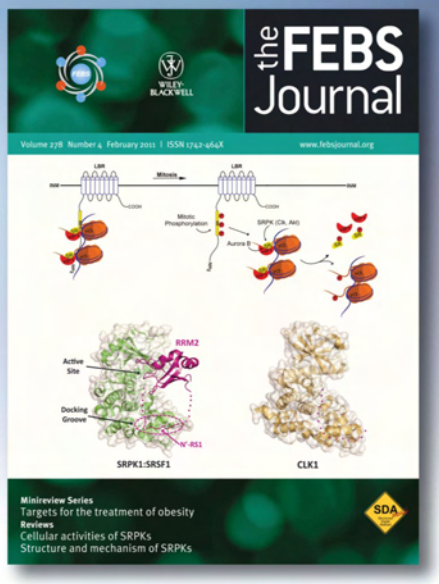

FEBS Letters Young Group Leader Award

The *FEBS Letters* prize is given to a **young group leader** who is the author of the most outstanding research letter published in the previous calendar year. The awardee must be the corresponding author of the letter and be aged 40 years or younger at the time of manuscript acceptance.

Details at:

www.febsletters.org/content/younggroupleader

FEBS Journal Prize for Young Scientists

The prize is awarded to the **graduate student or young post-doctoral research worker** (no more than 3 years from the time of award of the PhD degree when the paper is submitted) who is the first author of a paper that is judged to be the best in *FEBS Journal* during the calendar year.

Details at:

www.febsjournal.org/young.asp

FEBS Letters

Featuring…
Shiro Suetsugu

Winner of the 2011 *FEBS Letters* Young Group Leader Award

This article is taken from
***FEBS Letters* 585 (2011) 1504–1505**

Shiro Suetsugu

Once again the FEBS Letters Award Committee was able to identify and select a remarkable young Group Leader, who published an outstanding article in *FEBS Letters*, for the 2011 *FEBS Letters* Young Group Leader Award. Though several other studies of great interest and scientific quality competed closely for the prize, the final decision was unanimous. The 10,000€ award was assigned to Dr. Shiro Suetsugu from the University of Tokyo, Japan, for the article entitled "Mapping of the basic amino-acid residues responsible for tubulation and cellular protrusion by the EFC/F-BAR domain of Pacsin2/Syndapin II" [1]. The committee praised the manuscript for its multidisciplinary approaches bridging structural biology and functional studies while embracing the atomic and cellular level. Dr. Suetsugu and his team provided fundamental new insights into the molecular mechanisms governing the plasticity of biological membranes and specifically into the formation of cellular microspikes and tubules.

We have interviewed Dr. Suetsugu in order to offer you a more personal perspective of his work and life in Tokyo.

Dr. Suetsugu, what is the key finding of your study?

We propose a novel function for the concave surface of the EFC/ F-BAR domain of Pacsin2/ Syndapin II. BAR domain proteins are membrane adapters that are able to shape membranes into tubules or protrusions. We solved the structure of Pacsin2, which has the typical banana shape of F-BAR domain proteins, whereby the positively charged concave surface of the protein binds to the negatively charged inner surface of the membrane. Pacsin2 is known to wrap around the emerging tubule, bending and shaping the membrane as the tubule forms. However, our localization analyses showed that Pacsin2 also adhered to the neck of membrane protrusions (or microspikes), where the curvature of the membrane is convex. This implies that Pacsin2 has a role in promoting microspike formation by bending the membrane at the neck (Fig. 1). We mapped the basic amino acids and hydrophobic loops that are essential for tubulation and microspike formation. We also show that treatment with latrunculin (an actin depolymerising agent) suppresses formation of microspikes, while it promotes tubulation. We concluded that actin polymerization is necessary for the elongation of the microspike, while Pacsin2 bends the membrane at the neck. Tubules, on the other hand, do not protrude and do not need (or may even be suppressed by) actin filaments, though they require Pacsin2 for invagination.

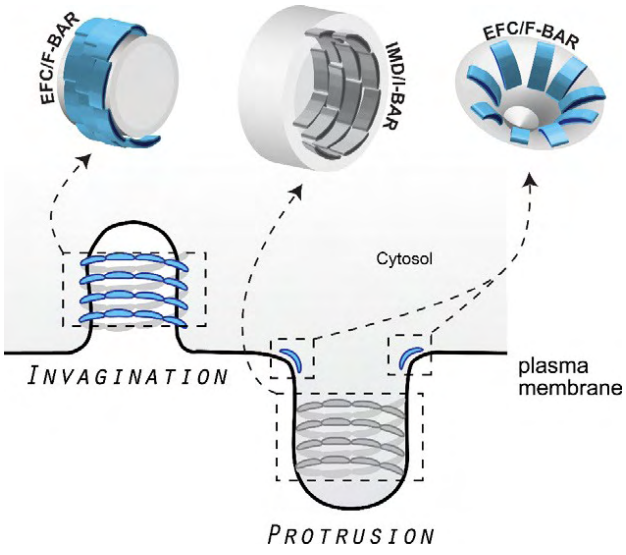

Fig. 1

Where are your studies taking you now?
Right now we are exploring the role of Pacsin in the formation of caveolae during endocytosis. On the whole, BAR-domain proteins are involved in a variety of cellular functions that involve membrane deformation.

Why did you choose to submit your manuscript to *FEBS Letters*?
The structural aspect of the F-BAR domain had just been published in two different studies [2,3]. However, we had novel functional insights that went beyond these two publications. We needed to publish our findings rapidly due to competition with other labs, so we chose *FEBS Letters*. An additional advantage was that publication is completely free of charge in *FEBS Letters*.

How did the recent calamities in Japan affect you and your work?
Thankfully, my family and neighbours are all well. However, in the areas struck by the tsunami, approximately 200-400 Km north of Tokyo, people are struggling to recover. I visited those areas and couldn't help feeling in low spirits. Once the roads were cleared, my friends and I travelled to the house of the parents of friends that had been damaged by the tsunami. We all helped to clean up and fix what we could. Many people are helping this way, and the good side is that this brings us closer together and creates stronger bonds between us. We know that we can count on each other.

The earthquake and tsunami affected our daily lives in many ways. All the transport connections were blocked and the delivery of goods was delayed. However, from that point of view the situation is gradually improving.

Our main concern at the moment is the trouble with the nuclear power plant in Fukushima, which is likely to produce long-term effects. The contaminated territories are out of bounds, and they may not recover as easily. The area will probably not be repopulated, and we are waiting for the government to decide what to do with it.

In March, we suffered scheduled power cuts in Tokyo, especially during the cold days immediately after the accident, when more energy was necessary for heating. At the institute and at home we adopted a power-saving plan. This has taught us to use less energy and to live more ecologically.

What is the general opinion about nuclear power plants in Japan?
People here, including me, are worried about the potential risk of the contamination, though it seems that in some parts of Europe people are protesting against nuclear energy a lot more than we do in Japan. Before the earthquake, nuclear energy was strongly promoted to cut CO_2 emissions, but I doubt that new nuclear power plants will be built in Japan in the future. Novel resources will have to be discussed now. Hopefully, we will switch to cleaner sources of energy.

Despite your young age, you have an impressive collection of publications. What is the secret of your success?
Above all, I try to look at experimental data without a bias. When we plan an experiment and have a hypothesis in mind, we should always ask ourselves what the phenotype should be if the hypothesis is correct. Only then we can notice unexpected differences. For example, in my former lab, we came across BAR domain proteins through a protein interaction study in which we were looking for proteins interacting with N-WASP, which is known to mediate actin polymerization. At the time, the function of BAR domain proteins was unknown. However, when expressing the proteins in cells for the interaction study, we realized that the star-like localization of F-BAR was actually membrane invagination induced by F-BAR via direct protein-phospholipid interaction [4]. In a similar way, we noticed that the membrane protrusions induced by I-BAR overexpression could be due to membrane deformation [5]. Needless to say, discussions with colleagues and with supervisors or experts in the field were crucial to this regard. The core of research may be a significantly personalized affair, but we are always grateful to people who helped us in various ways.

In a nutshell, it is essential to be open-minded and not to dismiss any detail.

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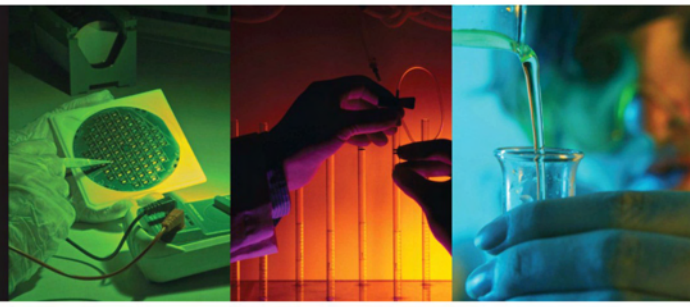
[1] A. Shimada et al. (2010). FEBS Lett. 584 (6), 1111–1118.
[2] M.A. Edeling et al. (2009). PLoS One 4, e8150.
[3] Q. Wang et al. (2009). PNAS 106, 12700–12705.
[4] K. Tsujita et al. (2006). JCB 172 (2), 269–279.
[5] S. Suetsugu et al. (2006). JBC 281 (46), 35347–35358.

Contact information
Email address: suetsugu@iam.u-tokyo.ac.jp
Interview by Daniela Ruffell
***FEBS Letters* 585 (2011) 1504–1505**

FEBS Letters



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WWW of Upcoming Events

What: Computational Biology: from Data to Hypotheses
When: July 10–15, 2011
Where: Bilbao, Spain
Further information:
http://www.fundacionbiofisicabizkaia.org/bilbaobiophysics/

What: Europhosphatases 2011. Protein Phosphatases: from Molecules to Networks
When: July 18–23, 2011
Where: Baden, near Vienna, Austria
Further information:
http://events.embo.org/11-europhosphatase/

What: 12th International Congress on Amino Acids, Peptides and Proteins
When: August 1–5, 2011
Where: Beijing, China
Further information:
http://www.meduniwien.ac.at/icaap/

What: VIII Parnas Conference (organized by the Polish Biochemical Society, Ukrainian Biochemical Society and Israel Society for Biochemistry and Molecular Biology)
When: August 27–31, 2011
Where: Warsaw, Poland
Further information:
http://www.parnas2011.pl

What: 9th NCCR Symposium on New Trends in Structural Biology
When: September 1–2, 2011
Where: University of Zürich, Switzerland
Further information:
http://www.structuralbiology.uzh.ch/symposium2011

What: 21st Polish Peptide Symposium
When: September 4–8, 2011
Where: Suprasl, near Bialystok, Poland
Further information:
http://21pps.umb.edu.pl/

What: Glutathione and Related Thiols in Living Cells
When: September 4–9, 2011
Where: Sant Feliu de Guixols, Spain
Further information:
http://www.esf.org/conferences/11356

What: SFRR-Europe 2011 Meeting. Redox Biology and Micronutrients: from signaling to translation and back
When: September 7–10, 2011
Where: Istanbul, Turkey
Further information:
http://www.sfrr-europe2011.org

What: EMBO Conference Series: Protein Synthesis and Translational Control
When: September 7–11, 2011
Where: EMBL Heidelberg, Germany
Further information:
http://www.embl.de/training/events/2011/TCR11-01/index.html

What: EMBO|EMBL Symposium: Cancer Genomics
When: September 17–19, 2011
Where: EMBL Heidelberg, Germany
Further information:
http://www.embo-embl-symposia.org/symposia/2011/EES11-02/index.html

What: EMBO|EMBL Symposium: Structure and Dynamics of Protein Networks
When: October 13–15, 2011
Where: EMBL Heidelberg, Germany
Further information:
http://www.embo-embl-symposia.org/symposia/2011/EES11-03/index.html

What: Joint Meeting European Society of Microcirculation and German Society of Microcirculation and Vascular Biology (GfMVB) 2011
When: October 13–16, 2011
Where: Munich, Germany
Further information:
http://www.microcirculation2011.de

What: 12th EMBO/EMBL Science and Society Conference: Making Sense of Mental Illness: Biology, Medicine and Society
When: November 4–5, 2011
Where: EMBL Heidelberg, Germany
Further information:
http://www.embl.de/training/events/2011/SNS11-01/index.html

What: 22nd Annual Meeting of the Society for Virology
When: March 14–17, 2012
Where: Essen, Germany
Further information:
http://www.conventus.de/virology2012/

What: 4th International Congress on Cell Membranes and Oxidative Stress: Focus on Calcium Signaling and TRP Channels
When: June 26–29, 2012
Where: Isparta, Turkey
Further information:
http://www.cmos.org.tr/2012

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