RESEARCHERS IN MOTION

2013
May
Issue 26

EURAXESS LINKS ASEAN

Dear Colleagues,

On Friday, 10 May 2013 Brazil became the newest member of the EURAXESS Links network. With the official launch at the National Council for Technological and Scientific Development (CNPq) in Brasilia, the EURAXESS Links has gained a sixth location in the world.

You can access the website of our newest member here.

As the international arm of the EURAXESS – Researchers in Motion initiative, the EURAXESS Links network provides information about research developments, research events and research-related policies in Europe and in its partner countries to its members. Its mission is to facilitate the mobility of researchers between Europe and the world.

This latest edition of our monthly newsletter contains the latest information on research funding opportunities, European research policies and research events.

We wish you a successful month ahead.

Your EURAXESS Links ASEAN Team

Contents

EURAXESS Links ASEAN Newsletter is a monthly electronic newsletter, edited by EURAXESS Links ASEAN, which provides information of specific interest to European and non-European researchers in ASEAN who are interested in the European research landscape and conducting research in Europe or with European partners.

Please email to **asean@euraxess.net** for any comments on this newsletter, contributions you would like to make, if you think any other colleagues would be interested in receiving this newsletter, or if you wish to unsubscribe.

Editor: Dr. Susanne Rentzow-Vasu, EURAXESS Links ASEAN, Regional Representative

1 EU Insight

European Research Infrastructures

Research infrastructures (RIs) play an increasingly important role in the advancement of knowledge and technology. They are a key instrument in bringing together a wide diversity of stakeholders to look for solutions to many of the problems society is facing today. RIs offer unique research services to users from different countries, attract young people to science, and help to shape scientific communities.

The European Commission has been supporting access to effective research infrastructures for researchers all over Europe for more than a decade. This action has been instrumental in enhancing European researchers' access to the infrastructures they require to conduct their research, irrespective of the location of the facility.

What are Research Infrastructures?

The term 'research infrastructures' refers to facilities, resources and related services used by the scientific community to conduct top-level research in their respective fields, ranging from social sciences to astronomy, genomics to nanotechnologies. Examples include singular large-scale research installations, collections, special habitats, libraries, databases, biological archives, clean rooms, high-capacity/high speed communication networks, highly distributed capacity and capability computing facilities, data infrastructure, research vessels, and so forth.

Research Infrastructures at EU Member State Level

RIs were originally seen as national endeavours and most RIs today are still funded and run at national level. Member States will retain a central role in the development and financing of infrastructures. They will need to maintain and develop their capacity to create and exploit new technologies, products and services in the context of global competition: RIs make an important contribution to economic growth, competitiveness, quality of life, a better environment and the creation of jobs in Europe.

Recently, most EU countries have begun the task of identifying their future national RI needs. National roadmaps articulate not only national priorities, but also stress the importance of participation in overseas facilities through bilateral agreements with host countries. A clear strategic view on how to guarantee and maintain access to research facilities is also set out in the national roadmaps.

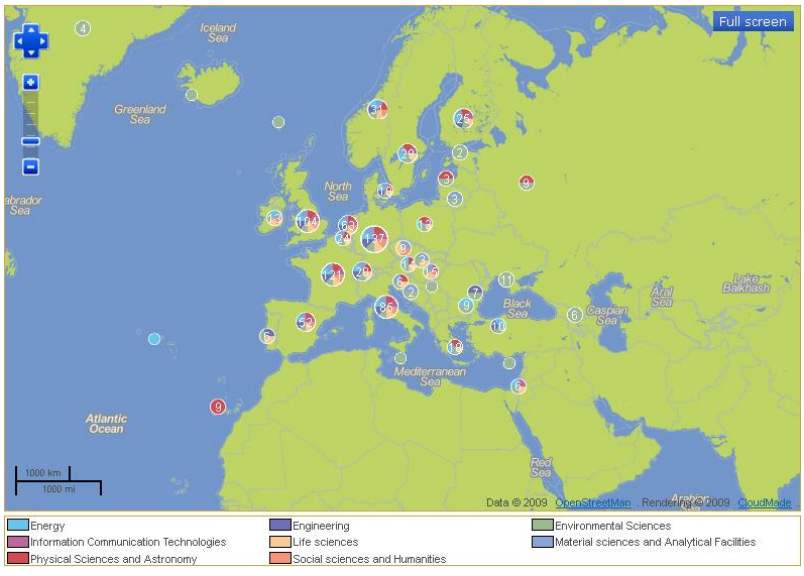
One example is the German national "Roadmap for Research Infrastructures" which was published in late April 2013 by the German Federal Ministry for Education and Research and is based on an evaluation performed by the Wissenschaftsrat (the German Council of Science and Humanities). The list entails 24 projects from a large range of scientific fields that are already under implementation and three new projects which the German federal government intends to fund in principle. In 17 of the 27 projects European and international partners are involved.

Another example is the "Netherlands' Roadmap for Large-Scale Research Facilities" which was published in February 2013 and is already an update of the first Roadmap (2008-2012) prepared in 2008.

European Research Infrastructure Initiatives

Although some countries invest heavily in RIs, none can provide all the required state-of-the-art facilities on a national basis. In addition, in the smaller European Member States, the high investment and operational costs against small local demand prevent the construction and operation of necessary RIs. Present limits on national and institutional budgets restrict the flexibility and capability of players to respond to the growing demand. Today, an EU-wide effort is needed to foster capacity-building in Europe. In 2011, the European Strategic Forum for Research Infrastructures (ESFRI) – established in 2002 – published the "Strategy Report on Research Infrastructures – Roadmap 2010" which identifies new Research Infrastructures (RI) of pan-European interest corresponding to the long term needs of the European research communities, covering all scientific areas, regardless of possible location.

The European Commission is supporting the development of a policy on research infrastructures at European level, providing added value by pooling talent, maximising resources, and helping to generate a strategic vision for the reinforcement of RIs in the European Research Area. Through the Framework Programmes, the EC has been funding a number of projects which contribute significantly to boosting Europe's research potential and reinforcing its research communities. For FP7 (2007-2013) the EC will spend €1.85 billion on RIs.



Interactive Map for Research Infrastructures: The European Commission's website for research infrastructures now also features a "Map of Research Infrastructures" which shows the location of the research infrastructures funded under FP7 that provide transnational access to researchers.

What's ahead?

The future EU activities under Horizon 2020 for integrating and opening national research infrastructures correspond to the follow-up of the successful FP7 actions named "Integrating Activities" (conditional to the approval of the European Commission proposal for the next Framework Programme for Research and Innovation, Horizon 2020, by the EU Parliament and Council).

The aim of these activities is to provide a wider and more efficient access to, and use of, the research infrastructures existing in EU Member States, Associated Countries, and at international level when appropriate.

Sources:

European Commission's Research Infrastructures website

"Roadmap for Research Infrastructures", April 2013, German Federal Ministry of Research and Education

"Uncharted Frontiers: the Netherlands' Roadmap for Large-Scale Research Facilities", February 2013, Dutch Ministry of Education, Culture and Science

2 News & Developments

2.1 European Union

2.1.1 Massive EU-funded study closes in on cancer risk markers

Cancer research has taken a huge leap forward with scientists now able to identify more than 80 genetic markers found to increase the risk of breast, ovarian and prostate cancer. The COGS international research initiative is believed to be the largest of its kind. Although the results have been widely reported, the cross-border efforts behind this monumental initiative have not. Neither has the EU-funding of EUR 12 million, which has played a significant part in making this global effort a tremendous success. The main findings of the project COGS ('Collaborative Oncological Gene-Environment Study') have been published in a special issue on genetic risk factors for cancer in the prestigious scientific journal Nature Genetics.

The research was led by scientists at the Karolinska Institutet in Sweden, the University of Cambridge and the Institute of Cancer Research (ICR) in the UK, with support from more than 160 research groups worldwide. This international network brought together five global studies on 100 000 patients with breast, ovarian or prostate cancer. Another 100 000 healthy volunteers comprised a control group. Scientists took DNA from all 200 000 subjects and compared those with cancer, and those without, to assess each individual's inherited risk. Overall, the study found that common genetic variation links all these cancers. This can be described as a genetic 'spelling mistake', where an A, G, C or T in the genetic code has been replaced with another letter. The spelling mistake is called Single Nucleotide Polymorphism (SNP). Each alteration was seen to raise the risk of ovarian, breast or prostate cancer by a small amount, although a small minority of men with several markers saw their risk of prostate cancer increase more than fourfold. Prostate cancer is the second most common cancer in men worldwide, contributing to 14 % of all new cancer cases. It is predicted that the number of cases will almost double to a figure of 1.7 million by 2030.

Source: CORDIS

2.1.2 New treatment may lead the way to fighting obesity and diabetes

Two professors believe they may have a promising lead from which to develop a new treatment for obesity and diabetes.

The project titled i2MOVE ('Intelligent implantable modulator of vagus nerve function for treatment of obesity') is being led by two Imperial College London Professors: Christofer Toumazou from the Department of Electrical and Electronic Engineering, and Sir Stephen Bloom from the Department of Medicine. The Professors' combined expertise in bioengineering and endocrinology is leading the way in creating a device that mimics the response of the vagus nerve, which connects the brain to everything from the tongue, pharynx, vocal chords, lungs, heart, stomach and intestines. Their device is designed to suppress the appetite of a patient.

With a starting grant from the European Research Council (ERC) of over EUR 7 million, the four-year project is already making headway. They have so far developed a hormone combination using glucagon and glucagon-like peptide 1 (GLP-1), which plays a key role in regulating blood sugar levels and helps reduce appetite. This may form the basis for a new treatment for obesity and diabetes in the future.

Source: European Commission

2.1.3 Nanostructures improve the efficiency of solar cells

Researchers have been able to improve the efficiency of solar cells by coating the cell surface with extremely small nanoscale structures. The new technology has been shown to nearly eliminate the reflection losses of solar radiation. Cost-effective solar photovoltaic materials are being developed within the Academy of Finland's research programme Photonics and Modern Imaging Techniques.

The nanostructured black silicon coating features very low reflectivity, meaning that a larger portion of the Sun's radiation can be exploited. At Aalto University, a research team led by Assistant Professor Hele Savin is conducting studies on crystalline silicon solar cells, which are the main type of solar cells that are currently on the market.

Source: Aalto University

2.1.4 SMEs a presence in the medical world in developing cancer treatment

Cancer treatment is one of the most important areas of research in the medical world today. With research predominately conducted in large pharmaceutical research organisations, it is rather significant to hear of small medium enterprises (SMEs) developing their own innovative treatment for cancer.

Two small research-based pharmaceutical companies, BioInvent (the primary coordinator) in Sweden and Thrombogenics in Belgium, joined together with

three other partners to form the ANGIOSTOP project, with EU-funding of nearly EUR 2 million. By forming a synergy between academic groups and SMEs a more focused streamlined development strategy, meant they avoided bureaucratic decision making that is an unavoidable handicap of large networks and pharmaceuticals.

Together they looked at the novel anti-angiogenic treatment for cancer, arthritis and ocular neovascularization based on the inhibition of placental growth factor (PlGF).

Their findings produced such a breakthrough, that the team gained the attention of Roche - the global pharmaceutical giant, and were subsequently able to sell their findings for EUR 50 million. Furthermore, this amount could be increased to EUR 450 million, if the project reaches certain development milestones.

Overall. the project has enabled the initiation of clinical development with the lead candidate anti-PlGF antibody as set out in the objectives. This, coupled with the advancement of our understanding of pathologic angiogenesis and development of new models and strategies, will be of more general utility for the development of new medicines aimed at increasing or reducing blood vessel formation.

Source: CORDIS

2.1.5 Methylation of genes has impact on development of dilated cardiomyopathy

Epigenetic mechanisms, along with gene mutations, have been proven to play important roles in the development of heart diseases. Researchers from Heidelberg have discovered that the methylation of two specific genes has an impact on the development of dilated cardiomyopathy. These epigenetic modifications have the potential to be used as molecular markers and improve the diagnosis and therapy of these particular heart diseases.

The Annual Meeting of the German Cardiac Society on 3 April 2013 specifically focussed on cardiomyopathies. Hugo Katus, medical director of the Department of Cardiology, Angiology and Pneumology at the Heidelberg University Hospital, discussed at the meeting which attracted upwards of 8,000 people and is the largest cardiology conference in Europe.

Katus reported that substantial progress has been made in recent years in the field of cardiomyopathies, especially with regard to the impact of genetic factors on the development of these heart muscle disorders. Cardiomyopathy literally means heart muscle disease, which indicates that the disease is not an indirect cause of damage resulting from cardiac infarction or cardiac valve defects. The course of the disease and its symptoms vary from individual to individual, which makes therapy and prognosis rather difficult.

Source: Reseach in Germany

2.1.6 All-optical broadband ... cheaper, faster and greener

A European team of researchers is exploring new ways of using fibre-optic technology to deliver ultra-high-speed internet access to even the remotest locations in Europe, at less cost and with less impact on the environment. It is ambitious, but innovative solutions are needed to strengthen Europe's digital economy and provide jobs.

In January, an EU-funded team of researchers announced their intention to transform future communications networks in Europe. After a period of analysis, the plan is to (re)design and later demonstrate a “complete end-to-end architecture and technologies for an economically viable, energy efficient and environmentally sustainable future-proof optical network”.

“Simply put, the plan is to save Europe billions in broadband infrastructure costs, and provide cheaper, faster and greener access to job-creating internet services in areas where they are most needed,” explains project leader Marco Ruffini of Trinity College Dublin’s Telecommunications Research Centre (CTVR).

The 36-month project, entitled ‘Distributed core for unlimited bandwidth supply for all users and services’ (DISCUS), involves consortium partners from academia and industry, including leading telecom operators and equipment vendors such as Telefónica, Telecom Italia, Alcatel-Lucent and Nokia-Siemens.

DISCUS tackles head-on the challenge of growing demand in Europe for better-quality data transmission and services – bandwidth-hungry video applications, telemedicine, etc. – across super-fast, always-on broadband networks.

Further information: **European Commission**

2.1.7 Understanding cell behaviour to help treat major diseases

The ability to measure concentrations of oxygen inside living human cells is a key requirement to help advance our understanding and treatment of a range of serious medical conditions. These include ischaemic stroke (where the stroke is caused by a blockage in the artery, preventing sufficient oxygen from reaching the brain), neurodegenerative disorders, and cancer.

Current treatments for stroke, for example, are limited by our lack of understanding of how neuronal injury develops within the brain and why neurons survive or die after a stroke. The same issues lie behind the lack of a cure for most fatal and progressive neurodegenerative disorders. Similarly, understanding what causes cells to survive or die could be of major significance in developing more effective cancer treatments.

However, while there is a clear need for more sensitive and specific sensors and testing systems to understand the world of cellular bioenergetics, the reality is that very few satisfactory technologies have been developed to monitor oxygen levels within cells. It was for this reason that the European Union (EU)-funded OXY-SENSE project began in 2009. Set up as a four-year Marie Curie Industry-Academia Partnership and Pathways programme, OXY-SENSE

brought together the Royal College of Surgeons in Ireland (RCSI) and the Ludwig-Maximilians University in Munich, together with two industrial partners, Siemens and Luxcel Biosciences, a company based in Cork, Ireland.

In bringing together academia and industry in a close working partnership, accelerating the technology transfer process and the commercial exploitation of research findings, the project will have also achieved another of its important goals, benefiting not just patients, but European competitiveness as a whole.

Source: **European Commission**

2.1.8 Innovative infrared testing device set to reduce aircraft development costs

To make modern aircraft ever lighter, faster and more fuel efficient, manufacturers are continually introducing new advanced materials, composites and super lightweight structures. Before using them on a plane, the integrity and performance of these materials have to be tested in a non-destructive way, to see how they would perform in the real-life pressure and temperature conditions of flight. Among the techniques aero-space testing facilities currently rely on are two important tests: one using laser beams and one using thermal imaging to see inside the material under stress and detect problems in structures caused by hidden defects. European researchers have found a way to replace these two with a single test.

Dr Marc Georges, head of the Non-Destructive Testing and Laser lab at the Space Centre in Liège, Belgium, saw an opportunity for a technology breakthrough that would save both time and cost in the aerospace testing process. "Leading aerospace companies traditionally use two separate measurement devices to gather the testing data. We found there was a stability problem with laser-based testing systems and I believed that this could be resolved by using infrared-based technology. That would even offer many additional benefits. Our suggestion that we would be better off using a single device generated considerable interest."

The basis of his idea was to create a more stable system that permits the simultaneous capture of both temperature and structural change information. That would offer the aerospace industry a quicker and less expensive testing process. "The real beauty of using holography in the infrared spectrum," Georges explains, "is that it allows you to capture a thermal image of the object as well as a spatial image."

At the hub of the project is the Centre Spatial de Liège (a leading space research centre at the University of Liège), which houses a specialist laboratory for non-destructive optical measuring methods. The Institut für Technische Optik at the University of Stuttgart specialises in holography, while the Dresden-based InfraTec GmbH is a producer of thermal imaging systems. Building on specialist infrared technology developed in the former East Germany, this young SME designed a new cooled camera, which could meet the exacting requirements of holography in term of resolution, frame rate and noise characteristics.

The finished prototype was put through its paces in real-life working conditions in the structural testing facilities of a group of potential end-users.

The technology is now being fine-tuned for aerospace applications and spin-offs of the innovation are already hitting the market: the German SME InfraTec has already taken derivatives of its new infrared cameras to the market and sold them to customers in a variety of industrial sectors.

Source: **European Commission**

2.2 ASEAN

2.2.1 Singapore: EU Centre Background Brief on Horizon 2020

The EU Centre has published a background brief on *A Roadmap for Strengthening International Collaboration in Research and Innovation under Horizon 2020*, by Dr Özgün Sarımehmet Duman (Associate, EU Centre; Assistant Professor, İpek University).

The brief looks into the new research and innovation strategy introduced by the EU embodied in the Horizon 2020 funding programme. It focuses on the prospect for international collaboration, and presents a roadmap for institutions in Europe and in third countries to prepare for the opportunities offer by the Horizon 2020 programme to embark on research and innovation.

Download the background brief **here.**

2.2.2 Singapore: German carmaker BMW has set up a joint research lab with Nanyang Technological University

German carmaker BMW has set up a joint research lab with Nanyang Technological University (NTU). For a start, the Future Mobility Research Lab will look into making longer lasting batteries for green cars.

The lab, located in NTU's Research Techno Plaza, is the carmaker's first joint lab in Southeast Asia.

The two sides are investing S$5.5 million over three years into the project.

Researchers will test new materials for the next generation of lithium-ion batteries used in electric vehicles, which will be able to charge faster, have greater resistance to heat, are less flammable and have a longer lifespan.

The lab is doing is experimenting with the use of nano-structures such as nanotubes, nanopowders and nanofibres to aid in conducting the flow of lithium ions within a lithium-ion battery when charging and discharging.

Source: **Channel NewsAsia**

2.2.3 Malaysia: Researchers make bricks from waste, desert sand

Malaysian researchers have designed cheap eco-friendly bricks that can be made from waste materials. Malaysian scientists at the Tenaga National University have produced prototype bricks using waste from the mining, coal and steel industries. They mixed the materials — including quarry dust, the iron oxide that forms on steel during production, and ash from furnaces — with cement and water. Traditional brick manufacturing uses high pressure or firing in a kiln to shape the bricks. But the scientist formed the bricks within moulds without applying pressure, reducing costs and simplifying the brick-making process, they say.

The researchers add that using waste materials rather than clay or shale conserves resources and maintains the soil quality needed for sustainable agriculture development.

According to the scientists, whose findings are published in the April edition of Construction and Building Materials, the new bricks have a variety of promising properties, including resistance to corrosion and compression.

Source: SciDev.Net

2.2.4 Singapore: Understanding Abnormal Proteins in Degenerative Diseases

Amyloids, or fibrous aggregates of abnormally folded proteins, are a common feature in degenerative diseases such as Alzheimer's, diabetes and cancer. Amyloids occur naturally in the body, but despite decades of research, their mechanism of formation remains unknown, hampering drug development efforts.

Now, a new class of ultrasmall peptides developed by the Institute of Bioengineering and Nanotechnology (IBN) offers scientists a platform for understanding this phenomenon, providing them with the insights required to design more effective treatments for these diseases. IBN Executive Director Professor Jackie Y. Ying said, "Our researchers have been focusing on creating biomimetic materials for nanomedicine and cell and tissue engineering applications. The novel ultrasmall peptides developed by IBN are not only highly effective as synthetic cell culture substrates, but also as a model for studying the mystery of amyloid formation. Such fundamental understanding could contribute towards advancing medical treatment of amyloid-related disorders."

First discovered in 2011 by IBN Team Leader and Principal Research Scientist Dr Charlotte Hauser, the peptides were formed from only 3-7 amino acids, making them the smallest ever reported class of self-assembling aliphatic compounds. Peptides perform a wide range of functions in the body, and are distinguished from proteins based on size. Building on this earlier research, IBN researchers have found a striking similarity between the structure of their synthetic peptides and the protein structure of naturally occurring amyloids in the latest study published in Proceedings of the National Academy of Sciences.

Source: A*STAR

2.2.5 Malaysia: Mutual recognition key to Europe-Asia student mobility

Mutual recognition of degrees in Europe and Asia would help balance the flow of students between the two regions, the fourth Asia-Europe education ministerial meeting, known as ASEMME4, ascertained. The conference was held held in Kuala Lumpur in Malaysia from 12-14 May with some 140 delegates – from 19 Asian and 27 European nations – attending. They were joined by delegates from Australia, New Zealand and Russia. Delegates said the feasibility of an Asia-Europe Convention on mutual recognition of degrees was one of the key discussions at the conference. Lack of credit transfer was an obstacle to student movement between Europe and Asia, said Abdul Rahim Bin Mohammed Nur, Secretary General of Malaysia's Ministry of Higher Education, in a keynote speech on 13 May. Estimates presented at past ASEM education conferences indicated the number of Asian students going to Europe for full-time degrees was 15 times the number of European students heading to Asia.

Source: University World News

3 Grants & Fellowships

3.1 International Cooperation opportunities in FP7 for ASEAN countries

DG Research and Innovation has published tailored presentations for various world regions, highlighting the key areas of FP7 with a focus on international cooperation and specific opportunities for ASEAN countries.

Further information can be found here:

DG Research & Innovation: International Cooperation

ASEAN

3.2 Update on European Research Council (ERC) Calls for proposals (2014)

As the EU's Seventh Research Framework Programme (FP7) will finish at the end of this year, the main ERC calls for proposals within FP7 are now closed. The next ERC calls will be made under the future programme, "Horizon 2020", that will take over from FP7 for 2014 to 2020. However, "Horizon 2020" has not yet been adopted. As is normally the case during the transition from one framework programme to another, the schedule for the next ERC calls (and ERC Work Programme) is very likely to differ from previous years. **The**

provisional schedule for the new calls (ERC Work Programme 2014) could be published in late 2013; however, this is on a purely indicative basis.

3.3 Open calls in the 7th Framework Programme (FP7)

Below is a list of all currently open calls in each strand of FP7. The work programmes for 2013 can be found here: **CORDIS**

You can also find a good overview of upcoming calls at EURESEARCH, the platform on European research by the Swiss National Science Foundation (SNSF).

3.3.1 COOPERATION

5 open calls remain in the Cooperation strand of FP7.

Transport (including Aeronautics) – **1** open call

Joint Technology Initiatives (Annex IV-SP1) – **4** open calls

Forthcoming calls in the Cooperation strand of FP7:

	Call Identifier	Call Title	Foreseen Date of Publication
1	SP1-JTI-CS-2013-03	FP7-AERONAUTICS and AIR TRANSPORT (AAT)-2013-RTD-High Speed	2013-07-09
2	FP7-2013-ICT-FI	Future Internet	2013-06-28

Further information: Cooperation

3.3.2 IDEAS

1 open call remains in the Ideas strand of FP7.

	Call Identifier	Call Title	Publication Date	Deadline
1	ERC-2013-PoC	Calls for proposals for ERC Proof of Concept Grant	2013-01-10	2013-10-03

For more general information for **non-European researchers** in the ERC's grants: http://erc.europa.eu/non-european-researchers

3.3.3 PEOPLE

4 open calls remain in the People strand of FP7.

	Call Identifier	Call Title	Publication Date	Cut-off Date	Deadline
1	FP7-PEOPLE-2013-IEF	MARIE CURIE INTRA-EUROPEAN FELLOWSHIPS FOR CAREER DEVELOPMENT (IEF)	2013-03-14		2013-08-14
2	FP7-PEOPLE-2013-IIF	MARIE CURIE INTERNATIONAL INCOMING FELLOWSHIPS (IIF)	2013-03-14		2013-08-14
3	FP7-PEOPLE-2013-IOF	MARIE CURIE INTERNATIONAL OUTGOING FELLOWSHIPS FOR CAREER DEVELOPMENT	2013-03-14		2013-08-14
4	FP7-PEOPLE-2013-CIG	MARIE CURIE CAREER INTEGRATION GRANTS (CIG)	2012-10-18	2013-09-18	2013-09-18

Further information: PEOPLE

3.3.4 CAPACITIES

2 open calls remain in the Capacities strand of FP7.

	Call Identifier	Call Title	Publication Date	Deadline
1	FP7-ERAChairs-PilotCall-2013	ERA Chairs Pilot Call	2012-12-18	2013-05-30
2	FP7-CDRP-Women-Innovators	EU Prize for Women Innovators 2014	2012-07-10	2013-10-15

Further information: CAPACITIES

3.4 Germany: Humboldt Fellowships

The German Humboldt Foundation offers a number of fellowships and awards for researchers at different stages in their careers. Applications for the following programmes can be made at any time.

3.4.1 Humboldt Research Fellowship for Postdoctoral Researchers

The fellowship is open to researchers from abroad with above average qualifications who are at the beginning of their academic career and who have completed their doctorate in the last four years. A Humboldt Research Fellowship for postdoctoral researchers allows for carrying out a long-term research project (6-24 months) that is selected by the fellows in cooperation with an academic host at a research institution in Germany.

Further information: **Humboldt Fellowships for Postdocs**

3.4.2 Humboldt Research Fellowship for Experienced Researchers

For researchers from abroad with above average qualifications who completed their doctorate less than twelve years ago and work at least at the level of Assistant Professor or Junior Research Group Leader or have a record of several years of independent academic work. A Humboldt Research Fellowship for experienced researchers allows for carrying out a long-term research project (6-18 months) that is selected by the fellow in cooperation with an academic host at a research institution in Germany.

Further information: **Humboldt Fellowship for Experienced Researchers**

3.4.3 Georg Forster Research Fellowship for Postdoctoral Researchers

Open to researchers from developing countries with above average qualifications who are at the beginning of their academic career and who have completed their doctorate in the last four years. A Georg Forster Research Fellowship for postdoctoral researchers allows for carrying out a long-term research project (6−24 months) selected by the fellow in cooperation with an academic host at a research institution in Germany.

Further information: **Georg Forster Research Fellowship for Postdoctoral Researchers**

3.5 Austria: Institute of Science and Technology, ISTFELLOW

IST Austria in Vienna has set up a programme for exceptional postdoctoral researchers partially funded by the European Union, ISTFELLOW. The programme will fund 40 fellows for a period of two years each. ISTFELLOW is open to qualified applicants from all over the world who are interested in spending the postdoctoral stage of their scientific research career at IST Austria. As the research portfolio of the Institute continues to branch out into other areas in the coming years, including physics, chemistry, and mathematics, so will the ISTFELLOW programme. ISTFELLOW will give preference to scientists who have a strong interest in cross-disciplinary approaches. Applications will be accepted at any time, but fellows will be selected twice a year in October and April. The deadlines for each selection are the 15th of September and March. Applicants must have the support of one or more members of the IST Austria faculty who will host them in their research group.

Application deadline: 15 September 2013

Further information: ISTFELLOW

3.6 EMBO funding for Courses & Workshops

Biannual selection by a committee of members of the European Molecular Biology Organization (EMBO) ensures the consistent high quality and novelty of EMBO-funded courses, workshops and conferences. The commitment of the scientific organizers guarantees the long-term success of the programme to inform and train researchers at all career stages. With over 80 meetings attracting more than 8,000 participants every year, EMBO offers the largest number of scientific training events in Europe. Funding is available for conference series, workshops, practical courses and symposia as well as plenary lectures. EMBO assists organizers with websites, posters and registration.

Further information: EMBO Courses & Workshops

3.7 Denmark: Danish Council for Independent Research (DFF): Strategic Research in Transport and Infrastructure

The Danish Council for Strategic Research (DCSR) and The Energy Technology Development and Demonstration Programme (EDDP) offer a total of DKK 25 million to a special effort with the aim to support research, development and demonstration within energy efficient transport. All Danish and foreign citizens can apply. However, it is required that the supported research activities promote and strengthen Danish research.

Deadline for application: 14 June 2013

Further information: [Strategic Research in Transport and Infrastructure]

3.8 Green Talents Competition 2013

Our planet is facing a rapid depletion of natural resources, increasing environmental contamination and major changes in the earth's atmosphere. As a frontrunner in sustainability research, Germany strongly believes in international cooperation to overcome these global challenges. Especially the creativity and innovativeness of young scientists is called for.

This is why the German Federal Ministry of Education and Research (BMBF) is now holding the 5th round of its prestigious "Green Talents – International Forum for High Potentials in Sustainable Development". The competition, under the patronage of Minister Professor Johanna Wanka, annually awards the 25 most outstanding minds worldwide. Hailing from various research disciplines, the winners are honoured for their original solutions for a more sustainable future.

Selected by a high-ranking jury of German experts, the "Green Talents" will be invited to a two-week science forum, touring Germany in the fall of 2013. This visit will not only grant them unique access to some of the country's hot spots of sustainable development but also allows the participants to exchange ideas with peers and senior scientists. In addition, the awardees will have the chance to present themselves to experts of their choice and discuss their work with them in individual appointments.

Deadline for submissions: 9 June 2013

Further information: [Green Talents]

3.9 EXPERIMEDIA

EXPERIMEDIA is a collaborative project aiming to accelerate research, development and exploitation of innovative Future Media Internet products and services through testbeds that support experimentation in the real world which explore new forms of social interaction and experience in online and real world communities.

By means of this open call, the EXPERIMEDIA project seeks innovative experiments in Future Media Internet systems that offer potential to deliver significant impact to users and businesses within EXPERIMEDIA venues' ecosystems.

EXPERIMEDIA will develop and operate a unique facility that offers researchers what they need for Future Media Internet experimentation. EXPERIMEDIA aims to explore new forms of social interaction and rich media experiences enabled by the Future Media Internet considering the demands of both online and real-world communities associated with Live Events. This will be achieved by research, development and operation of a unique FIRE facility targeting the Future Media Internet research community working with stakeholders such as

venue management, broadcasters, content providers, application developers and service providers.

Deadline for submissions: 3 July 2013

Further information: EXPERIMEDIA

3.10 Luxembourg National Research Fund: INTER Mobility Programme

The aim of the INTER Mobility Programme is to promote the scientific exchange between research groups of the Luxembourg public research institutions and research groups abroad in order to foster innovative, internationally competitive research and support the exchange of key knowledge and technological know-how. Thus the activities should have a strong impact on the research programme of the Luxembourg research group as well as on the career development of the researcher. The INTER Mobility Programme allows for research stays in both directions (researchers working in Luxembourg to go abroad or for researchers from elsewhere to come to Luxembourg).

More specifically, the FNR intends to support:

- Post-Docs and senior researchers working in Luxembourg to visit the leading research institutions in the field or
- The visit of established senior researchers in Luxembourg public research institutions.

Within the INTER Mobility Scheme, the FNR does not intend to support research stays of early stage researchers (e.g. PhD candidates).

Deadline for submissions: 1 July 2013

Further information: INTER Mobility

4 Jobs

EURAXESS Jobs

There are currently **10.156** research jobs and fellowship programmes (all over Europe and partner countries and in all disciplines) accessible via the EURAXESS Jobs database.

BRAZIL: Researcher within Offshore Technology (INSTITUTO SINTEF DO BRASIL, Rio de Janeiro)

Details here

BELGIUM: Professor in the field of dental biomaterials (Faculty of medicine, University of Liège, Liège)

Details here

DENMARK: Professor in Sedimentary Geology (The Department of Geoscience, Aarhus University)

Details here

ESTONIA: Assistant Professor (Docent) of Robotics (Institute of Technology, University of Tartu)

Details here

FRANCE: PostDoc in imaging and computer science for radiotherapy (AQUILAB, Loos Les Lille)

Details here

GERMANY: Group Leader Chemical Biology (Cellzome GmbH, a GSK company, Heidelberg)

Details here

LICHTENSTEIN: PhD Candidates with a focus in IT and Business Process Management (The University of Liechtenstein, Hilti Chair of Business Process Management, Vaduz)

Details here

5 Events

5.1 EMBO Events Calendar

Find the latest event announcements of the European Molecular Biology Organisation at **EMBO Events Calendar**.

5.2 Switzerland: International Conference on Advances in Mechanical and Robotics Engineering – AMRE, 12-13 October 2013

AMRE-2013 is being organized by Institute of Research Engineers and Doctors (IRED). The aim of the conference is to provide the platform for students, engineers, researchers and scientists to share the knowledge and ideas in the recent trends in the field of Mechanical and Robotics Engineering.

The primary goal of the conference is to promote research and developmental activities in Mechanical and Robotics Engineering . Another goal is to promote scientific information interchange between researchers, developers, engineers, students, and practitioners working in and around the world. The conference will be held every year to make it an ideal platform for people to share views and

experiences in Mechanical and Robert Engineering and related areas. English is the official language of the conference. We welcome paper submissions.

Deadline for submissions: 20 June 2013

Further information: AMRE

5.3 France: Implementing Future Media Internet towards New Horizons – Maximising the global value of Content, Media and Networks, 28-30 October 2013

The NEM Initiative, the Networked and Electronic Media European Technology Platform, is organising the sixth edition of its main annual conference NEM Summit 2013 in Nantes, France. Building on successful previous Summit editions, this NEM Summit will address various issues, such as research and business challenges, societal and user needs, implementation requirements, regulatory and standardisation environment etc., related to the implementation of the Future Media Internet towards New Horizons.

The NEM Summit 2013 will have the following three Scientific and Technical Tracks:

- Enhanced Media Content Generation, Transmission and Consumption
- Experience, Inclusion and Environmental Responsibility in Networked Media
- Networked Media Analytics

Besides the Scientific and Technical Tracks, the NEM Summit 2013 will also provide the floor for talks on innovative applications or related business models, in particular considering specific issues related to SME's, in the scope of its Application, Experimentation and Market Track.

Deadline for submissions: 3 June 2013

Further information: 2013 NEM Summit

5.4 Germany: 2014 Global Land Project – Land Transformations: Between Global Challenges and Local Realities, 19-21 March 2014

The 2014 Global Land Project Open Science Meeting will synthesize and discuss the role of the land system as a platform for human-environment interactions, connecting local land use decisions to global impacts and responses. The venue of the meeting is the Humboldt University in Berlin.

The main conference themes:

- Rethinking land change transitions: drastic changes in land cover and subtle changes in land management.
- Local land users in a tele-connected world: the role of human decision making on land use as both a driver and response to global environmental change.
- Impacts and responses: land systems changes to mitigate global environmental change impacts and adapt to increasing demands for food, fuel and ecosystem services.
- Land governance: the ways in which alternative approaches to governance of land resources can enhance the sustainability transition.

Deadline for submissions: 30 June 2013

Further information: glp-osm2014

5.5 UK: 2014 Norwich Conference on Earth System Governance – Allocation and Access in the Anthropocene, 1-3 July 2014

This event is part of the annual conference series organized by the Earth System Governance Project. The conference will be co-hosted by the School of International Development, the School of Environmental Sciences and the Tyndall Centre for Climate Change Research.

The conference will focus on three main research areas related to questions around allocation and access, the governance of the nexus between of water, forests, food, energy and carbon as well as searching for transformation pathways to sustainability.

Release date of call for papers: 1 Septmber 2013

Further information: Earth System Governance

5.6 Denmark: Euroscience Open Forum, 21-26 June 2014

ESOF 2014 Copenhagen is designed as an open platform for debating science and as a showcase for European and global research at all levels. ESOF 2014 will be an opportunity for leading scientists, young researchers, students, entrepreneurs, policymakers, journalists and the general public to discuss new discoveries and debate the direction that research is taking in all the sciences.

The vision is to raise awareness of science in the public and to strengthen the effective “bridges” between science and society that is synonymous with Euroscience. The 2014 is titled meeting “Science Building Bridges”. The conference programme will be cross-cutting and multidisciplinary. And the programme is accompanied by an ambitious outreach programme, including a special section for children and the younger generation – the ESOF Academy.

One of the programmes, the “Science-2-Business Programme: Why great ideas aren’t enough” is the track that provides opportunities for business leaders, researchers and policy makers to engage with one another. The ESOF 2014 Programme Committee invites original and excellent session proposals on the relation between science and business. A proposal can focus on one industrial sector or discipline, or cut across many.

Deadline for submissions: 11 August 2013

Further information: ESOF 2014

5.7 Croatia: INFuture2013: Information Governance, 6-8 November 2013

The Future of Information Sciences (INFuture) is a series of biannual international conferences aimed at researchers and professionals from the broad field of information and communication sciences and related professions. The objective of the conference is to provide a platform for discussing both theoretical and practical issues in information organization and information integration.

INFuture 2013: Information Governance is the fourth in a series of INFuture conferences focusing on the theory and methodology of information governance, EU infrastructure integration, interaction between e-society and e-government, preservation of electronic records, language technologies and interdisciplinary education. The objective of the conference is to provide a platform for discussing both theoretical and practical issues.

Further information: INFuture2013

5.8 Singapore: Electromobility Conference Asia 2013, 29-31 October 2013

The Electromobility Conference Asia is organized as part of the Singapore International Energy Week. The conference will focus on vehicle concepts and engineering, energy storage technologies, grid connectivity, transportation engineering, mobility and services. Those subjects will be discussed from the perspective of crosscutting issues, just as sustainability, safety, marketability and efficiency. Electromobility experts from science and industry will meet in Singapore from 28 October to 1 November 2013 to exchange ideas and build up new collaborations for future innovations. In the scientific programme, there will be 3-4 topical parallel sessions and one joint plenary session.

EMCA 2013 is organized by TUM CREATE, a research programme jointly performed by Technische Universität München (Germany) and Nanyang Technological University (Singapore), and with competencies in vehicle engineering, battery technology, and EV infrastructure. The conference is held in partnership with Asia Future Energy Forum & Exhibition (AFEF) and in conjunction with the Singapore International Energy Week (SIEW), a gathering

of over 10,000 research, business, and policy leaders. SIEW is organized by the Singapore Energy Market Authority (EMA).

Deadline for submissions: 10 June 2013

Further information: NTU

5.9 Singapore: Smart Grid and Energy Storage Conference, SGES2013, 20-31 October 2013

The Smart Grid and Energy Storage Conference (SGES2013) will bring together academic and professional researchers and engineers, government policy makers, and business professionals from the Power Grid and Renewable Energy domains. The aim of the conference is to share the latest developments in policy, fundamental research, and readily-commercialized technologies pertaining to Smart Grid with or without Energy Storage. This will be a forum for leading energy and practicing professionals to meet and discuss their contributions to the challenges faced in Power Transmission and Distribution and to discover the opportunities that await them.

SGES2013 is organized by the Energy Research Institute at Nanyang Technological University and will be held in conjunction with the Singapore International Energy Week (SIEW), a gathering of over 10,000 research, business, and policy leaders. SIEW is organized by the Singapore Energy Market Authority (EMA), a statutory board under the Ministry of Trade and Industry that is tasked with promoting effective competition in the energy market, ensuring a reliable and secure energy supply, and developing a dynamic energy sector in Singapore.

Deadline for submissions: 10 June 2013

Further information: NTU

5.10 Thailand: Training course “Enterprise-based Early Warning System for Enterprises” in Thailand, 17-21 June 2013

Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), a partner of the Asian Institute of Technology (AIT) will be organizing a five-day training course on "Enterprise-Based Early Warning System for Enterprises in Thailand" from 17-21 June 2013 at the AIT campus.

The training is aimed at helping participants and their respective organizations to design and implement Early Warning Systems. The course will help participants develop an early warning system and risk management plan tailored to the needs of their organization; examine the kinds of tools and products that are available or could be developed to integrate information into forms most useful for them to make decisions at various levels; and set-up

appropriate contingency plan or options to guide members of their organization against various hazards of different timescales.

The training includes a three-day series of presentations and discussions, and a two-day enterprise-based guided planning workshop

Further information: RIMES

5.11 Indonesia: 6th Annual International Ecosystem Services Partnership Conference 2013, 26-30 August 2013

Organised by the Ecosystem Services Partnership (ESP) and convened by the World Agroforestry Centre (ICRAF) and CGIAR Research Program: Forests, Trees and Agroforestry in collaboration with the Sub Global Assessment Program coordinated by UNEP's World Conservation Monitoring Centre, the UNCCD-Global Mechanism, The Economics of Ecosystems and Biodiversity (TEEB), the International Association for Landscape Ecology (IALE), A Community on Ecosystem Services (ACES), and other ESP partners.

Deadline for submissions: 1 June 2013

Further information: ESP Conference

5.12 Malaysia: 14th Science Council of Asia (SCA) Conference – Future Earth: Research for Global Sustainability and a Holistic Understanding of Sustainable Development in Asia, 17-19 June 2013

The conference aims to:

- Provide opportunity for scientists to report on progress of scientific research on global sustainability and poverty alleviation in Asia
- Share global, regional and national perspectives on global sustainability
- Highlight successful interdisciplinary research, research collaboration and dialogue across natural, social and engineering sciences to address interrelated economic, social and environmental aspects of development in Asia
- Provide platform for the science, technology and innovation (STI) community to discuss sustainable development challenges and solutions with policy-makers and other stakeholders

Further information: SCA

6 Resources

Latest Calls

Here you can find the latest calls on the newly set up **Research Participant Portal.**

International Cooperation Activities

Access the **portal of the European Commission's International Cooperation Activities** here.

Become an Expert Evaluator for FP7

The website to register as an expert for research activities is available on CORDIS. The call for experts is open both for individuals and for organizations.
Source: **CORDIS**

Other Research Career Sites

The Chronicle of Higher Education Careers Service: http://chronicle.com/jobs/
Find A Postdoc: http://www.findapostdoc.com/
Find Scholarships in Europe: http://www.scholarshipportal.eu/
Find PhDs in Europe: http://www.phdportal.eu/
Academic Jobs EU: http://www.academicjobseu.com
Euro Science Jobs: http://www.eurosciencejobs.com/
The European Job Mobility Portal: http://ec.europa.eu/eures/home.jsp?lang=en
EMBO excellence in life sciences: http://www.embo.org
EuroBrussels: http://www.eurobrussels.com/
Jobs at ITER: http://www.iter.org/jobs
Nature.jobs: http://www.nature.com/naturejobs/index.html
Jobs.ac.uk: www.jobs.ac.uk
Research Jobs in Germany: Research-in-Germany.de
Scholarship Database of the German Academic Exchange Service (DAAD)
Research Jobs in the Netherlands: http://www.academictransfer.org/
Brainpower Austria: http://www.brainpower-austria.at/

7 About EURAXESS Links ASEAN

EURAXESS Links ASEAN is a network of European researchers, scientists, and scholars working in or commuting to ASEAN. This multidisciplinary network includes members at all stages of their careers. It allows them to connect with each other and with Europe, ensuring that they are recognized as an important resource for European research, whether they remain in ASEAN or return to Europe. For further information and to sign up for membership in our network, as well as in the virtual SINAPSE community of European researchers abroad, please go to our website and **click** on the Join the EURAXESS Links ASEAN community hyperlink on the right-hand side of the page.