Thai researcher wins 1st EURAXESS Science Slam ASEAN 2013. Second place goes to young researcher from the National University of Singapore

Dr Phanramphoei Frantz, a virologist working at BIOTEC in Thailand has won the EURAXESS Science Slam ASEAN 2013. Dr Frantz won over the audience of 160 scientists and researchers at the EURAXESS Science Slam ASEAN finals which were held on 25 September in Singapore. The Thai researcher captured the audience and the five member strong jury with a rap song about her work at the Virology and Cell Technology Lab at BIOTEC where she develops a vaccine to combat Porcine Epidemic Diarrhea Virus.

The second place went to Abhijeet Patra, a doctoral candidate with the NUS Nanoscience and Nanotechnology Institute in Singapore.

Dr Frantz and Mr Patra were among the 5 finalists who participated in the live event that was held in Singapore on Wednesday evening. More than 40 young researchers in ASEAN had submitted proposals in the hope to secure a place in the finals.

Dr Frantz won a trip to Brussels in Belgium where she will attend the EURAXESS conference “Raising Researchers’ Voices - opinions on jobs, careers and rights” in late November. There she will be joined by the champions of the science slams that took place concurrently in the EURAXESS Links hubs Brazil, China, India, Japan and North America.

EURAXESS Links ASEAN would like to thank all participants, our guests and the five finalists for making this a memorable event. Photographs (© howiephoto.com) of the finals can be viewed on our Facebook site.

Your EURAXESS Links ASEAN team
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What is innovation?

Innovation refers to the creation of new or significantly improved products, marketing, processes and organization that add value to markets, governments and society.

“Innovation is the ability of individuals, companies and entire nations to continuously create their desired future”


1 EU Insight: The Innovation Union

In his final ‘State of the Union’ speech European Commission President Jose Manuel Barroso touches on the key priorities for the European Union. For the work of the Parliament and the Commission, jobs and growth remain issues of highest importance. Barroso further emphasizes the significance of finding “innovative ways to create jobs” and the longer-term challenge of boosting Europe’s innovation capacity.

One of the seven flagship initiatives in the Europe2020 strategy to promote smart, sustainable and inclusive growth is the Innovation Union. It places innovation as overarching policy objective and as the best means of successfully tackling major societal challenges, such as climate change, energy and resource scarcity or health and ageing.

Figures 1 and 2 show the innovation performance of selected countries compared with EU27 and within the EU, respectively. Innovation is the main driver of economic growth in the EU. By 2050 Europe’s share of world GDP is likely to be half of today’s 29%.

Almost all EU countries have become better at fostering innovation, but progress is slowing. The EU not only has to close the innovation gap among its member states, it also has to keep up with the international leaders, namely the US, Japan or South Korea. On top of that, emerging economies such as China, Brazil, and India have been catching up over the past 5 years. The scoreboard makes clear that the EU will have to increase efforts to stimulate and speed up innovation if it is to boost – let alone maintain – its competitiveness.
Ingredients for innovation

The EU's innovation leaders are Sweden, Denmark, Germany and Finland. The 4 countries tend to have:

- above-average R&D expenditure, especially in the business sector
- higher investment in skills and finance
- strong national research and innovation systems with a key role for partnerships between public and private sectors
- better results in turning technological knowledge into products and services.

The scoreboard is part of the EU's strategy to create an Innovation Union where entrepreneurs find the support they need to turn their ideas into commercial products and services.

The main goals set by the Innovation Union are:

- make Europe into a world-class science performer;
- remove obstacles to innovation – like expensive patenting, market fragmentation, slow standard-setting and skills shortages – which currently prevent ideas getting quickly to market; and
- revolutionise the way public and private sectors work together, notably through Innovation Partnerships between the European institutions, national and regional authorities and business.

The first partnership – launched last year – aims to encourage new products and services that can help active and healthy ageing.

Sources and further information:

Feature: Meet the Researcher – Interview with ERC Starting Grant awardee Dr Mangala Srinivas

Dr Mangala Srinivas, you have just been awarded an ERC Starting Grant. Congratulations! Could you tell us a little bit about the research you are planning to conduct with this grant?

My research involves the development of contrast agents for in vivo imaging using different imaging modalities, such as ultrasound, MRI and fluorescence. These agents are stable, although they are not damaged by imaging (a pressing issue with microbubble contrast agents for ultrasound). The agents I’m working on are biodegradable, and thus can be used in vivo. I will be optimising these contrast agents, and testing them in a clinical setting for cell tracking, and a preclinical one for a broader range of applications such as in vivo targeting. This is a very interesting, multidisciplinary project with lots of exciting applications.

Can you tell us a little bit about the anticipated outcome of this research project? How will the general public benefit from it?

In vivo imaging, especially through techniques such as ultrasound and MRI, is an excellent, noninvasive manner in which to assess therapeutics such as cellular therapeutics or targeted drug delivery. These tools are sorely needed to optimise these extremely promising treatments, and tailor them for the individual. In particular, the ability to use ultrasound for such monitoring, in place of much more expensive imaging modalities such as MRI or PET will make the technology more accessible to both researchers and patients.

What this means is that it will become easier to monitor and optimise personalised medicine applications, which is of great benefit to patients with conditions ranging from cancer to organ transplants. Of course, it will take a lot of work for us to reach that stage, but progress is being made.

You are one of 287 successful ERC Starting Grant applicants. How did you find out about this grant?

I was looking for possibilities to apply for another grant. It is quite early in my career, effectively just over three years after completion of my Ph.D., so I had a lot of options. I knew that the ERC is very competitive and that the last year may have been especially so, due to the change from FP7 to Horizon2020 funding schemes. However, I felt that the ERC grant was the best fit for both my project and my career: The research I have planned is of relatively high risk, which is what the ERC encourages, and I am ready to start my own group. I also liked that the grant was open to all researchers working in or strongly affiliated with the EU. Another grant that I was considering applying to is the VIDI from the Netherlands Institute for Scientific Research (NWO), which is the next step from my current VENI grant.

Can you share any tips with our readers for a successful application to the next round of applications for an ERC grant?

Mangala Srinivas was born in India, moved to Indonesia and then to Singapore, where she completed her B.Sc. (Honours) at the National University of Singapore (NUS). From there, she went to Carnegie Mellon University (Pittsburgh, USA) for her Ph.D. She has since been working at the Department of Tumour Immunology at the Nijmegen Centre for Molecular Life Sciences in The Netherlands. Mangala’s initial work involved the development and application of $^{19}$F magnetic resonance imaging (MRI) for in vivo cell tracking. Her present work has expanded to multimodal imaging agents in a range of clinical and preclinical applications. Mangala is currently funded by a VENI grant from the Netherlands Institute for Scientific Research (NWO), and recently received a Starting Grant by the European Research Council (ERC).
Research synopsis

The success of modern medical treatments such as cellular therapy and targeted treatments requires appropriate tools for in vivo monitoring. Imaging modalities, such as magnetic resonance imaging (MRI), single photon emission computed tomography (SPECT) and positron emission tomography (PET) are key candidates due to their noninvasive nature. However, these imaging techniques are extremely expensive and can involve ionising radiation and radioligands, all of which hinder their longitudinal and frequent use. Ultrasound, currently the most widely available clinical imaging modality, has so far been largely unsuitable as typical ultrasound contrast agents have active lifetimes in the order of minutes too short for most personalised medicine applications. I am working on a new type of ultrasound contrast agent that is extremely stable while being biodegradable, and is therefore applicable to longitudinal and repeated imaging. The particles can be chemically bound to targeting agents, dyes and drugs, and are suitable for multimodal imaging including MRI (both $^1$H and $^{19}$F), fluorescence and SPECT. Finally, the agents are suitable for clinical use. Thus, we expect these agents to be applicable to a broad range of clinical and preclinical applications including cell tracking and targeted therapeutics.

Start early! Talk to others who have previously applied for the grant about their experience. I found that very helpful. It goes without saying that you need a good research idea that is meticulously planned through. Presentation and formatting is also very important, so that the proposal is “user-friendly”. This is often something that scientists tend to overlook, although it is essential.

You have studied in Singapore and are currently working in Europe. Could you tell us a little more about the stops in your research career so far?

Yes, I did my B.Sc. (Honours) in Singapore, before moving to the US for my Ph.D. From there, I chose to move to Europe to continue my work. I felt that my education at the National University of Singapore (NUS) gave me a very strong base in science. While I was there, I also participated in several special programmes such as the University Scholars’ Programme (USP), which emphasizes a broad education by requiring several courses in fields outside of one’s major. That multidisciplinary approach was something I really enjoyed, and so I chose to apply to universities like Carnegie Mellon University (CMU), which encourage interdisciplinary collaborations. For example, I did my Ph.D. there in the Dept. of Biological Sciences, although my advisor was a physicist by training. I find that working at the interface of different disciplines gives varied perspectives on the same work, while simultaneously enriching the whole experience. I continued with that mindset when I joined the Dept. of Tumour Immunology at Radboud University in The Netherlands. Here, I’m working in a department composed primarily of immunologists, while my research focuses on imaging techniques. Thus, I have a lot of collaborators who specialize in physics and chemistry to facilitate my work.

Having conducted research both in Asia and in Europe, what are the best aspects of either research community?

I’m not qualified to talk about research in Asia, as I have never worked there (excepting my time during my undergraduate, which is not really comparable). But, I have heard from colleagues and friends that there is a lot of positive energy directed towards research in Asia, with plenty of expansion and growth, and an increasingly multicultural environment. Based on all this, I would like very much to start collaborations with groups in Asia and experience these changes for myself. And of course, coming from Singapore, I cannot fail to mention that the local food is a benefit that is not insignificant!

Here in Europe, I particularly enjoy the flexible working hours (and longer vacations). This is important for me, as I have a young family and want to be able to spend time with them. Furthermore, I feel that defined working hours, whether enforced by the working environment or the working culture, are not necessarily the best for creative work in science. Of course, it takes more discipline to work flexibly and it is not the best solution for everyone. Access to such flexibility varies widely with local norms and preferences, but I feel that the European working lifestyle is generally easier to incorporate with a busy family life than that in the US or Asia currently, although this may be changing.

How important is the scientific cooperation between these two regions?

Science rarely progresses without cooperation, thus this is almost a rhetorical question! In particular, many new research centres are being
developed in Asia and these need to actively seek out collaborations, whether with Europe or elsewhere, in order to establish themselves. Becoming established is a slow process, but from what I have seen, it looks like Asian research institutes are doing an excellent job at this, and we are seeing more and more great work from these centres. From the other side, there is often a shortage of researchers; large proportions of these positions are often filled by students or post-docs from Asia. There is also increasing interest in research areas such as tropical diseases, traditional medicines and even newer fields like fuel production from palm oil. These are areas which would really benefit from collaborative research.

In your opinion, what could be done to further enhance international scientific cooperation and, most importantly, the mobility of international researchers?

The availability of information is crucial. This includes information on funding opportunities and job openings. I think more short term possibilities such as funded invited talks or small, focused symposia, and exchange programmes between graduate students and visiting faculty are necessary. Such initiatives would greatly foster international exchange through personal meetings without requiring a long-term commitment, at least initially. The short term nature is vital, in my opinion, as this makes the openings accessible to many more people, who may not consider moving from their current homes. It also makes it easier to take that difficult “first step” and make the move. From all the researchers I have met who have worked abroad, no one has ended up regretting it, but the process can seem intimidating in the beginning. At the moment, it seems that most such short term exchanges are organised by individual groups within pre-existing collaborations. It would be very helpful to have institutional support and funding for such exchanges, both in Europe and in Asia.

What motivates you as a researcher?

I find research fun! It is very exciting to be able work creatively in a scientific environment.

Which goals are you still hoping to achieve?

This is still early in my career, so I have several goals to achieve. In the short term, I would like to develop my research group. I would also like to see my project reach clinical or commercial development. In the long term, I would like to see tangible benefits to society from this research. I’m sure that is a goal shared by many researchers. I would also like to establish more collaborative work with research groups in Asia towards these ends. Of course, in the immediate future, I will focus on my family, as we are expecting our second child in the next month.

Congratulations on your fantastic achievement and thank you for the interview!
3 News & Developments

3.1 European Union

3.1.1 Sweden Getting the Most out of Innovation According to EU Commission’s New Indicator

The proposed indicator measures the progression of innovative ideas to the market, in a move to benchmark public policy and track Europe's performance internationally.

Sweden, Germany, Ireland and Luxembourg are top performers in delivering innovation, according to a new indicator proposed by the European Commission on 13 September. While Japan and Switzerland are the world leaders, the EU holds steady with the US in innovation output.

The new "Indicator of Innovation Output" measures the extent to which ideas stemming from innovative sectors are able to reach the market, provide better jobs and make Europe more competitive. The highest scores went to economies with a high share of knowledge-intensive sectors, fast-growing innovative firms, high levels of patenting and competitive exports.

The indicator was developed at the request of EU leaders to benchmark national innovation policies, and shows that significant differences remain between EU countries.

Commissioner Máire Geoghegan-Quinn, responsible for Research, Innovation and Science, said: "The European Union must turn more great ideas into successful products and services in order to lead in the global economy. We also have to close a worrying 'innovation divide'. The proposed indicator will help us measure how we are doing and pinpoint areas where countries need to take action."

Further information: Science|Business

3.1.2 How Gut Bacteria Could Influence Obesity Susceptibility

The microorganisms we host in our bodies could have significant consequences for the onset of obesity, an EU-funded project has found. This discovery could change how the medical profession treats the disease, which is forecast to affect more than 700 million adults globally by 2015. Most importantly, it could provide doctors with a simple identification test to find people most at risk.

The project, called METAHIT (Metagenomics of the Human Intestinal Tract), found that individuals with low gut bacteria richness were at greater risk of developing obesity-linked disorders such as type II diabetes and atherosclerosis. While the causes of obesity are partly due to external factors - sedentary lifestyle, easily obtained high energy food - it has also been broadly accepted that genetic factors also play a part.

However, genetics has appeared to account for only a minor part of the obesity trend. This is why scientists have questioned whether variations in the
microbiome - the global genome of all microorganisms we host in our bodies - could also have an impact on the onset of obesity than variations in the human genome.

In order to find out, the METAHIT project focused on a cohort of 292 Danish adults, comprising 123 non-obese and 169 obese. The scientists analysed their gut bacterial composition with the help of a new analytical approach called quantitative metagenomics.

They discovered that the cohort could be divided into those with an abundance of certain bacterial species, and those without. This distinction was not based on corpulence - lean and obese were found in both groups - even though 80% of the low bacterial richness group was obese.

What was interesting to the scientists was that poor microbiota contained a higher proportion of pro-inflammatory and a lower proportion of anti-inflammatory bacterial species than the rich one. The team then discovered that people with poor microbiota had more body fat, were more resistant to insulin and displayed symptoms that put them at increased risk of contracting type II diabetes and cardiovascular disorders.

Furthermore, obese people from the poor group gained more weight over time than the lean ones. These individuals either lacked entirely or had a very low abundance of eight particular bacterial species, which might therefore have a protective role against weight gain. Their discovery could lead to the development of new bacteria-therapies which help fight against weight gain.

Preliminary findings of the METAHIT project have now been published, which should contribute to a better understanding of why some individuals appear to be more susceptible to obesity than others. The study should also help the medical profession to identify those at risk early, and develop appropriate preventative strategies.

The METAHIT project, which consisted of 13 partners from a total of eight countries, received EUR 11.4 million in EU funding. The project was completed at the end of June 2012.

Source: European Commission

3.1.3 Female Scientist Honoured for EU-Funded AIDS Research

The numbers of women in science, technology and innovation fields have been alarmingly low for some time. However, many initiatives across Europe are committed to addressing this imbalance, one of which is the L’Oréal Portugal Honour Medals for Women in Science, which has acknowledged an EU-funded scientist for her research on the AIDS virus and its resistance to antiretroviral drugs.

Dr Ana Abecasis is a researcher involved in the project CHAIN (‘Collaborative HIV and Anti-HIV Drug Resistance Network’), with funding of EUR 13 million (of which the EU contribution is EUR 10 million ). The award is sponsored by a partnership between L’Oreal Portugal, the National Commission of United...
EURAXESS LINKS ASEAN

Nations Educational, Scientific and Cultural Organisation (UNESCO) and the Foundation for Science and Technology. The prize, worth EUR 20,000, targets young PhD researchers under 35 years of age who work in the health and environmental sectors in Portugal.

The CHAIN project is a large-scale integrated approach which is aimed at combating new and existing anti-HIV drug resistance. The pan-European network of surveillance and basic research activities involves: monitoring how resistance develops and evolves, improving understanding of mechanisms of resistance development, and providing improved and new strategies to evaluate and limit the emergence and transmission of HIV drug resistance.

Dr Abecasis, who is based at the Instituto de Higiene e Medicina Tropical (IHMT) at Universidade Nova de Lisboa, has analysed how HIV resistance to antiretroviral drugs, and the mutation of the virus, leads to resistance for some strains. The conclusion is that more toxic and costly treatments are needed because of resistance. In addition, data has shown that around 8% of patients diagnosed with HIV in Portugal have antiretroviral resistant strains of the disease.

‘The award is a very good incentive in continuing our research, and helps to give visibility to our work,’ says Dr Abecasis. ‘The CHAIN team’, she continues, ‘is keen to further explore how drug resistance mutations are being transmitted to untreated HIV patients. In the future, we would like to understand the behavioural patterns associated with the transmission of drug resistance,’ explains the medal-winning scientist.

Source: European Commission

3.1.4 The technology industry is expanding its fight against patent trolls to Europe.

In the United States, technology companies like Google, Apple and Microsoft have spent years and hundreds of millions of dollars to defend patent-infringement lawsuits by companies that make a business of buying technology patents primarily for suing software companies and makers of products like smartphones. Now they worry that Europe could soon become a broad battleground for similar court battles. In a letter sent to European officials, 14 companies outline their concerns about a coming change that will give most of Europe a unified patent court system for the first time. While the technology industry has generally supported this pan-European effort as a better way to protect intellectual property, the companies now fear that the new system could be vulnerable to what they call patent assertion entities, less politely known as patent trolls, which make a business of filing patent-infringement suits. Such companies say they play a valuable role in protecting innovators, but many corporations see the suits as frivolous and damaging.

New York Times
3.1.5 GBP 25m to Kick-Start ‘Industrial Revolution’ in Regenerative Medicine

Three UK Research Councils are to invest £25m in research and equipment to support the development of regenerative medicine therapies for a range of applications, including Parkinson’s disease, cardiovascular disease, wound and musculoskeletal repair, eye disorders and deafness.

GBP 4.5m will set up a new ‘Hub’ for pluripotent stem cell research as part of the UK Regenerative Medicine Platform (UKRMP), funded by the Biotechnology and Biological Sciences Research Council, Engineering and Physical Sciences Research Council and the Medical Research Council (MRC). The Hub will work with the other strands of the UKRMP to tackle some of the critical challenges in developing new regenerative treatments from discoveries made in the lab.

A further GBP 20m of capital funding from the MRC will provide state-of-the-art facilities and equipment to support the work of the UKRMP and the wider regenerative medicine research community.

At the moment, experimental regenerative therapies involve the use of relatively small numbers of cells, usually prepared by laboratory researchers. To be able to treat the thousands of patients who could benefit from regenerative medicine, scientists ultimately need to be able to scale-up these efforts to reliably and repeatedly manufacture thousands of millions of cells under uniform and controlled conditions.

Source: Medical Research Council

3.1.6 A Soft Computing Solution to Complex Medical Problems, GIARA

An algorithm developed to improve the delineation of tumours in medical images has won recognition from the European Association of Fuzzy Logic and Soft Computing (EUSFLAT). The innovation is designed to ensure that when doctors have to decide where tumour tissue should be separated from healthy tissue, the best solution is automatically offered.

The algorithm, developed by the Artificial Intelligence and Approximate Reasoning Group (GIARA) at Spain's NUP/UPNA-Public University of Navarre, is an example of how ‘soft computing’, an emerging discipline that exploits imprecision and uncertainty, can provide effective solutions to complex problems. Soft computing differs from conventional computing in that it is tolerant of approximation, in the same way that the human mind is.

The GIARA team first focused on studying brain images obtained by means of magnetic resonance. They then developed an algorithm to improve the process by segmenting the images, allowing each object in the image to be separated. Each pixel can therefore be analysed. In the case of medical images, this process can greatly help to delineate tumours, where, quite simply, millimetres count.
'Imagine we have the image of a brain by means of magnetic resonance and seven doctors who have to decide how to delimit the tumour,' said GIARA researcher Humberto Bustince. 'From experience we know that each one of them will separate the tumour differently. Now, with the proposed method, they will automatically be presented with a set of options which, in any case, are always going to improve the choice that the worst of the seven may make.'

In effect, the algorithm takes the risk of choice away from the expert, because it automatically selects the best - or least worst - function.

In addition to representing a potential breakthrough in medical procedure, the GIARA innovation also underlines a shift in the way scientists think of computing. Soft computing reflects the fact that the human mind, unlike present day computers, possesses a remarkable ability to store and process information which can be imprecise and uncertain.

Indeed, the successful application of soft computing suggests that this discipline will continue to grow in the coming years, and that its influence will extend further afield, into other sectors and industries.

Source: European Commission

3.1.7 Reducing CO₂ Footprint with Bio-Plastics

Today, the vast majority of plastics are still made using non-renewable fossil fuels, especially petroleum. With concerns about environmental impact and climate change increasing, some researchers have begun to look for alternatives.

The EU-funded project ECOTPU (‘Plastics from renewable sources applied in footwear’) was aimed at developing a new family of environmentally benign polyurethanes for the EU footwear market.

"Global warming is a big problem, so current processes have to be improved, with the aim of reducing greenhouse emissions," says project coordinator Joaquin Ferrer Palacios of Spain's Footwear Technological Institute (INESCOP).

"Thermoplastic polyurethanes (TPU) are one example of a family of plastics produced using fossil resources. These plastics are used in a vast range of products. In the footwear industry, for example, thermoplastic polyurethanes are used for stiffeners in toe puffs, counters and soles."

The project team looked for other raw materials that could be used to make plastics with similar properties to those obtained using fossil fuels. Responsibly farmed bio-resources, vegetable oils in particular, seemed like a good option because the process would be technically and economically feasible and would have less of an impact on the environment.

ECOTPU researchers believed a process for making plastics based on vegetable oils would help to reduce the consumption of non-renewable, petroleum-based materials while also reducing the CO2 emissions associated with those materials.
Ferrer says the project succeeded in producing raw thermoplastic polyurethanes using vegetable oils, with a bio-based content between 48 and 75 percent.

Project partners set up an operational production line with an estimated capacity of 5000 tonnes per year of ‘ecoTPU’. They manufactured four kinds of products, including the ecoTPU raw material itself, stiffeners and soles made of ecoTPU, and finally, shoes incorporating ecoTPU soles and stiffeners.

Over the course of the project, which ran for two years, from 2010 to 2012, the researchers managed to reduce non-renewable energy demand in the production line by about 480 tonnes per year and reduced CO₂ emissions by about 1000 tonnes per year. Ferrer says in the future, under full-production conditions, the process could eliminate up to 30,000 tonnes of CO₂ per year.

"The results of this project will benefit everybody," he says, "because almost everybody uses footwear."

In addition, other industries that use this family of plastics, including the automotive, furniture or clothing industries, could also benefit.

ECOTPU received about EUR 490,000 in EU funding under the Eco-Innovation Programme.

Source: European Commission

3.1.8 Swedish Participation in BBMRI-ERIC

The Swedish Research Council has signed a Memorandum of Understanding to participate in the establishment of BBMRI-ERIC.

BBMRI is a European collaboration between biobanks that is now implemented within a European Research Infrastructure Consortium (ERIC) as a legal entity. Consequently, there will be a central coordination of biobanks within the EU.

“By integrating the biobanks at a European level we will have a common set of definitions and standards that can guarantee comparability and give the researchers access to a large amount validated research material”, says Juni Palmgren, Secretary General at the Council for Research Infrastructures at the Swedish Research Council.

BBMRI is the Swedish hub of the collaboration and so far the Swedish Research Council’s largest investment in infrastructure within the field of medical research. Since 2010 it is a national infrastructure with Karolinska Institutet as the administrative organisation.

Biobanking is about optimisation of gathering, storage and analysis of samples for medical research from patients and healthy volunteers. By better means of coordination and structure of biological resources within biobanks the possibilities to study different causes to diseases and possible treatment improves.

Source: Swedish Research Council
3.1.9 Drug Developed in Cambridge Approved for Treatment of Multiple Sclerosis

Approval concludes nearly 40-year epic journey from fundamental research to discovery of an effective treatment for active relapsing multiple sclerosis.

A transformational new treatment for multiple sclerosis (MS) - the result of over three decades of research in Cambridge - was approved today by the EU agency responsible for regulating new drugs.

The European Medicines Agency (EMA) has approved the drug Alemtuzumab, to be known by the brand name Lemtrada and previously called Campath-1H (for ‘Cambridge Pathology 1st Human’), for the treatment of MS.

In recognition of the highly effective new treatment, the University of Cambridge has produced a video which explores the history of the drug, showing the many challenges as well as successes experienced during the course of this development.

In 1975 scientists Cesar Milstein and George Kohler working at the MRC Laboratory of Molecular Biology (LMB) in Cambridge invented the technology for making large quantities of an antibody targeted at one specificity, so-called monoclonal antibodies (work for which they were awarded the Nobel Prize for Physiology or Medicine in 1984). Building on this research, Herman Waldmann, Geoff Hale and Mike Clark from the University of Cambridge, with Greg Winter and Lutz Riechmann at LMB, produced the first monoclonal antibody for potential use as a medicine, Campath-1H (now known as Alemtuzumab), adopting the technique of ‘humanising’ these antibodies in order to minimise risk of the drug being rejected by patients.

Further information: Science|Business

3.1.10 Comprehensive Map of Functional Genetic Variation in Humans Published

A European consortium has presented the largest-ever study of functional genetic variation in human populations using RNA sequencing. The scientists, led by researchers from the University of Geneva (UNIGE) Faculty of Medicine in the context of the GEUVADIS project, today presented a map that points to the genetic causes of differences between people. The study, published in Nature and Nature Biotechnology, offers the largest-ever dataset linking human genomes to gene activity at the level of RNA.

Understanding how each person’s unique genome makes them more or less susceptible to disease is one of the biggest challenges in science today. Geneticists study how different genetic profiles affect how certain genes are turned on or off in different people, which could be the cause of a number of genetic disorders.

The study presented today, conducted by more than 50 scientists from nine European institutes, measured gene activity (i.e. gene expression) by sequencing RNA in human cells from 462 individuals, whose full genome
sequences had already been published as part of the 1,000 Genomes Project. This study adds a functional interpretation to the most important catalogue of human genomes.

“The richness of genetic variation that affects the regulation of most of our genes surprised us,” said study coordinator Tuuli Lappalainen, previously at UNIGE and now at Stanford University. “It's important that we figure out the general laws of how the human genome works, rather than just delving into individual genes.” The biological discovery was enabled by a staggering amount of RNA data from multiple human populations. “We've set new standards for production, analysis and dissemination of large RNA-sequencing datasets,” added Peter 't Hoen from Leiden University Medical Center, who coordinated the technical analysis of the data.

Further information: Academy of Finland

3.1.11 BBSRC-Funded Scientist in the UK and Italy have Identified a Gene Variant that Predisposes People to a Special Type of Heart Attack.

Their research, published in the International Journal of Cardiology could lead to the development of new drugs to treat the problem.

Dr Paolo Tammaro, who led the team, said: “Heart attacks happen when the blood supply to the heart is reduced by the narrowing or blocking of the coronary artery - the vessel that supplies the heart with oxygen and nutrients. Often this is due to fatty deposits which narrow the vessel. However, in some people with perfectly clean arteries, the vessel suddenly constricts shutting off the blood supply. We have discovered that this process, known as vasospasm, can be associated with a rare variant of a particular gene.”

Dr Enzo Emanuele, from the University of Pavia, who screened the patients, said: “We knew that this type of heart attack occurs in about 6% of patients and that many of them have a genetic predisposition, but we did not know the gene responsible. Now that it is identified it will be possible to predict who is at risk and to treat them accordingly.”

The gene identified by the team encodes a protein termed KATP channel. This protein forms microscopic gated pores that allow potassium ions to move into and out of the cells, in this way giving rise to electrical impulses.

Dr Tammaro and research scientist Keith Smith, both based at the Faculty of Life Sciences at The University of Manchester, added: “These channels are abundant in the cells forming the wall of coronary arteries, and the electrical impulses they generate govern this artery's diameter. Due to the mutation we have identified, the KATP channel in the coronary artery can no longer fulfill this delicate process.”

The team now plans to approach pharmaceutical companies with their findings, aiming to design drugs that could interact with this new target.

Source: BBSRC
3.1.12 EU-Funded COMPANION Project makes Human-Computer Interaction More Social

Usually, interaction with computers is generally task-oriented and rather one-sided. Making computer interfaces more 'human' has been a long-standing ambition for researchers. A team of European researchers has developed exciting prototypes that go some way to doing just that.

The virtual-companions-for-conversation system developed by researchers at EU-funded COMPANIONS ('Companions: persistent multi-modal interfaces to the Internet') moves on from traditional task-based interaction to social interaction.

Launched in 2006, COMPANIONS sought to bring to the internet a tailor-made, conversational interface that recognises its user. A key component of the research was machine learning – developing software with the ability to learn without explicitly programming it to modify the way it behaves.

The technology will be particularly beneficial for those living alone. More than a third those living in advanced societies will live alone by the mid- to late-2020s – of which 50 percent will be pensioners. It will be particularly important for this group to have access to a virtual interactive companion, providing conversation and diversion.

This interaction will help reduce depression (loss of companions is considered a key trigger of depression among the elderly), and act as an alternative access point to resources on the internet.

The team’s English Companion is able to listen to long statements or remarks in English and respond appropriately to what the user is saying. The Companion can also engage the user by responding, expressing interest and empathy – something the users often need to receive.

This ability to express interest and empathy is new and exciting. The Companion does this by analysing a person’s voice and the content of his or her dialogue before responding. It then uses a set of embedded rules to produce the right 'emovoice'. For example, this emovoice can state negative-active, negative-passive, neutral, positive-passive and positive-active expressions.

Source: European Commission

3.2 ASEAN

3.2.1 Singapore: Italian Professor says Solution to Personalised Treatment for Chronic Infections Could Lie in Patients’ Own Blood

A recent discovery by scientists at A*STAR’s Singapore Institute for Clinical Sciences (SICS), in close collaboration with researchers at the Singapore Immunology Network (SIgN), provides hope for a new personalised treatment
strategy that could use a patient’s own blood to treat the infection. This could help treat millions of people living with chronic infections such as HIV, Hepatitis B or Hepatitis C. These findings were published in the August 2013 issue of The Journal of Clinical Investigation.

Patients suffering from chronic infections often have to undergo long periods of anti-viral drug therapy to control the virus. Anti-viral drugs are not fully effective against viruses such as Hepatitis B and Hepatitis C, which have chronically-infected about 400 million worldwide with more than 1,000,000 people dying from Hepatitis-related diseases every year.

Vaccines are a potentially effective means to treat chronic viral infections such as this because they can eliminate the virus naturally. However, vaccines for patients with chronic infections are often difficult to produce since these patients already have weak immune responses or the vaccine is not effective due to genetic diversity amongst viruses.

The team at SICS led by Prof Antonio Bertoletti has discovered that monocytes, a type of white blood cell that can activate an immune response, are able to capture the virus in chronically-infected patients and use the captured virus to boost the patient's own immune response.

Source: A*STAR

3.2.2 Malaysia/UK: Medical school opens branch campus in London

A private medical school in Malaysia, Allianze University College of Medical Sciences or AUCMS, is to expand to Europe with the purchase of a major university site in London. The 32-hectare park and buildings, which previously housed Middlesex University’s Trent Park campus, attracted international attention when it was acquired by AUCMS for £30 million (US$46.5 million) this year. It was put up for sale last year after Middlesex University moved all its operations to a single site in Hendon, North London.

A further £10 million to £20 million is expected to be spent on renovations – a historic protected building, Mansion House, sits on the site. But some facilities need little work, with amenities and equipment already in place.

Around 300 students are expected to be on campus by October.

AUCMS, based in Penang, has five specialist medical schools and around 3,500 students. It has also been expanding into business studies, accounting and hospitality.

While it aims to secure accreditation as a British university in order to be able to enrol British students, for the time being existing AUCMS students from Malaysia will spend time there.

AUCMS has been offering a medical degree in Malaysia, in collaboration with Universiti Kebangsaan Malaysia, and one in conjunction with Indonesia’s Universitas Sumatera Utara. It is planning to build two hospitals in Penang by 2015.
The university has been trying to attract more foreign students to its Malaysian campus, mainly from Indonesia, Thailand and the Middle East.

AUCMS Chair Zainuddin Md Wazir said earlier: “With this campus we hope to expand our educational programmes, not only to our students in Malaysia, but also to international students.

Source: University World News

3.2.3 Singapore: NTU Ramps Up 3D Printing with SD30 million Research Centre

Soon, life-saving body parts such as corneas, skin and heart tissue may just be a click away, thanks to the rapid advancement of 3D printing technology at Nanyang Technological University (NTU).

Singapore’s research in 3D printing, also known as Additive Manufacturing, will be boosted by the establishment of a new $30 million research centre at NTU. The new NTU Additive Manufacturing Centre (NAMC), supported by Singapore’s Economic Development Board (EDB), will have the latest 3D printing machines, such as laser-aided machines for building metal parts and objects for industry, and bioprinters which are able to print human tissues.

Additive Manufacturing includes processes that can create 3D products from computer-aided design models by adding materials in a layer-by-layer fashion, much like how current printers print ink on paper. As opposed to conventional manufacturing processes such as machining, casting and moulding, this modern fabrication process can handle complex designs and changes easily without incurring additional costs.

The 300sqm centre, will work closely with the manufacturing industry on R&D projects to develop new materials, software and processes leading to commercial applications.

Further information: NTU

3.2.4 Southeast Asia: Anti-malaria Bed Nets also Curb Elephantiasis

The bed nets used in national malaria programmes in Africa and South-East Asia may also help to curb the transmission of parasitic worms that can cause lymphatic filariasis, or elephantiasis, a study says.

The study published in The New England Journal of Medicine last month (22 August) found that bed nets treated with insecticide have reduced the transmission of lymphatic filariasis in five villages in Papua New Guinea to almost zero levels.

They did so by blocking mosquito access to human blood while the chemical cuts the insect's life span by half, thus preventing the parasite's transmission across populations.
This intervention could form an important part of the global strategy to eliminate the disease, according to James Kazura, professor of international health and medicine at Case Western Reserve University, United States, and lead author of the study.

Lymphatic filariasis is a tropical disease infecting over 120 million people worldwide and threatening 1.4 billion people in 73 countries. One in three victims are disfigured or disabled by the disease, WHO data show.

The bed nets act as a barrier and without access to their blood meals, the mosquitoes are unable to host the parasite until it reaches the infectious stage. It takes about ten days for a filarial parasite to reach this stage, Kazura tells SciDev.Net.

Moreover, mere contact with the insecticide coating the bed nets actually shortens the mosquito life span, he adds.

"With no vaccine developed for elephantiasis or malaria yet, bed nets can serve as cheap, effective and sustainable defence against such infectious diseases," Kazura explains.

Most developing countries receive bed nets treated with insecticides free of charge from philanthropic organisations such as the Global Fund. A total of 294 million treated bed nets were distributed in Africa from 2008 to 2010. On the open market, one can buy the net for US$5 or less.

Kazura thinks the bed nets strategy can be partnered with mosquito control at the larval or breeding stage to prevent them from reaching maturity.

Jaime Montoya, executive director of the Philippine Council for Health Research and Development, says: "In handling infectious diseases such as those transmitted by mosquitoes, it is important to consider the host and the vector organism carrying the virus, and how you can limit or disrupt the exposure of the host to the virus, as well as how you can lower the vector's population".

He adds that because a female mosquito can lay up to 1,600 eggs (of which 80 per cent are female) throughout its lifetime, controlling the vector's population is critical.

Source: SciDevNet

3.2.5 Singapore: French-Singaporian Collaboration to Develop Immunity-Modulating Drugs to Combat Cancer and Autoimmune Diseases

Servier, France’s largest privately-owned pharmaceutical company, announced today that it has inked three Research Collaboration Agreements (RCAs) with A*STAR’s Singapore Immunology Network (SIgN). The collaboration projects aim to discover and develop drugs that harness the immune system to tackle diseases such as cancer and autoimmune disorders.

By developing innovative therapeutic strategies that can accurately modulate the body’s own defense mechanism, Servier and SIgN hope to develop
immunotherapeutic drugs that are more targeted, and hence less likely to cause side effects.

Acting Executive Director of SIgN, Associate Professor Laurent Rénia said, “We are very pleased that Servier is expanding their collaboration with us. This is an excellent example of how private companies and public research institutions can work hand-in-hand to translate medical science breakthroughs into innovative medicines to meet healthcare needs. I am confident that the convergence of our strengths - SIgN's strong expertise in translational human immunology and Servier's in-depth knowledge in drug discovery and development – will push the frontiers of immunotherapy for complex and difficult-to-treat diseases.”

Jean-Philippe Seta, MD, CEO of Servier added “The expansion of this partnership is expressing our goal to collaborate closely with leading scientists worldwide, to discover and develop innovative medicines, particularly in the field of cancer. We believe that the high quality of the research done at the Singapore Immunology Network (SIgN) is a unique opportunity to achieve this goal.”

Source: A*STAR

3.2.6 Thailand: CCOP signs MoU with AIT for Strengthening Cooperation in Geosciences

The Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) today signed a Memorandum of Understanding (MoU) with the Asian Institute of Technology (AIT) for strengthening cooperation in the field of geosciences. CCOP Director, Dr Adichat Surinkum and AIT interim President Prof. Worsak Kanok Nukulchai signed the MoU on 28 August 2013.

The agreement is aimed at fostering collaborating in geosciences research and increasing capability of personnel in relevant institutions in CCOP member countries in the fields of policy development, planning, management and technology of geosciences.

Dr Adichat stated that CCOP is keen on capacity building, besides sharing of knowledge and information. CCOP organizes regular programs on topics ranging from Carbon Capture Storage Management to Disaster Mitigation, he said. Dr Adichat suggested that a forthcoming CCOP program could be organized in AIT in early October.

Welcoming the delegation, Prof. Worsak remarked that as an International organization functioning under Thai law, AIT continues with its three missions of education, research and outreach. He proposed that CCOP could utilize AIT as a platform where experts and researchers from CCOP member countries can conduct joint research activities. This will build stronger networks and enhance research capabilities and knowledge exchange, Prof. Worsak added.

CCOP includes 13 member countries including Cambodia, China, Indonesia, Japan, Korea, Lao PDR, Malaysia, Papua New Guinea, The Philippines, and Thailand.
Singapore, Thailand, Timor-Leste and Vietnam. It also includes numerous cooperation countries and cooperating organisations.

Source: AIT

3.2.7 Singapore: NTU and A*STAR Scientists Create Super Biomaterials from Squids, Mussels and Sea Snails

Scientists from Nanyang Technological University (NTU) and Singapore’s Agency for Science, Technology and Research (A*STAR) have developed new biomaterials, such as one from squid's sucker ring teeth that is harder, more rigid and more wear-resistant than conventional plastics.

This breakthrough is made possible by the use of a new interdisciplinary approach which integrates RNA sequencing and proteomics - the study of functions, structures and the interactions of proteins - with material science.

Published this week in Nature Biotechnology, the world’s top international scientific journal in the field, this ground-breaking work now allows scientists to speed up the discovery and development of new and better biomaterials within months instead of years.

The squid sucker ring teeth is just one of the three biomaterials that NTU and A*STAR scientists have studied in the past year. The other two discoveries include sticky underwater glue which is derived from mussels and an extremely elastic material from sea snails’ egg capsules.

The squid-inspired biomaterial can be made into biocompatible films for food and drug packaging, and as cost-effective encapsulants to protect expensive drugs against heat and impact during transportation and storage. Such new biomaterials can be used for a wide number of applications, even as parts for organ implants, as they are versatile and easily processed into different shapes and forms.

These new biomaterials are superior, if not comparable with those produced from petroleum-based polymers, yet are made using eco-friendly processes without using harsh chemicals. This study further accelerates the understanding of nature’s design and aims to find new materials for the future which are more sustainable than today’s plastics.

Source: A*STAR

4 Grants & Fellowships

4.1 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.
4.2 A time line for Horizon 2020

- Vote on Horizon 2020 in EP Plenary: October/November 2013
- Adoption by the Council: November/December 2013
- Adoption of work programme and publication of first calls for proposals: 11 December 2013
- Horizon 2020 national launch events: October 2013 to January 2014

Horizon 2020 is being adopted using the "ordinary legislative procedure" (formerly known as "co-decision"). The diagram below illustrates this.

The “Ordinary legislative procedure”
(ex "co-decision")

Source: Timeline
Further information: Horizon 2020
4.3 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).

### 4.3.1 COOPERATION

Four open calls remain in the Cooperation strand of FP7:

<table>
<thead>
<tr>
<th>Field</th>
<th>Call Identifier</th>
<th>Call Title</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food, Agriculture and Fisheries, and Biotechnology</td>
<td>FP7-KBBE-2013-FEEDTRIALS</td>
<td>FEEDTRIALS KBBE 2013</td>
</tr>
<tr>
<td>2</td>
<td>Information and Communication Technologies</td>
<td>FP7-2013-ICT-FI</td>
<td>&quot;Future Internet&quot;-2013</td>
</tr>
<tr>
<td>3</td>
<td>Joint Technology Initiatives</td>
<td>IMI-CALL-2013-9</td>
<td>IMI 9th Call</td>
</tr>
<tr>
<td>4</td>
<td>Joint Technology Initiatives</td>
<td>SP1-JTI-CS-2013-02</td>
<td>Clean Sky JTI 2013-02</td>
</tr>
</tbody>
</table>

Currently no forthcoming calls remain in the Cooperation strand of FP7:

**Further information:** [Cooperation](#)

### 4.3.2 IDEAS

1 open call remains in the Ideas strand of FP7.

<table>
<thead>
<tr>
<th>Call Identifier</th>
<th>Call Title</th>
<th>Publication Date</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC-2013-PoC</td>
<td>Calls for proposals for ERC Proof of Concept Grant</td>
<td>2013-01-10</td>
<td>2013-10-03</td>
</tr>
</tbody>
</table>

**Further information:** [IDEAS](#)

For more general information for **non-European researchers** in the ERC’s grants: [http://erc.europa.eu/non-european-researchers](http://erc.europa.eu/non-european-researchers)
4.3.3 PEOPLE

No open calls remain in the People strand of FP7.

Further information: PEOPLE

4.3.4 CAPACITIES

2 open call remain in the Capacities strand of FP7.

<table>
<thead>
<tr>
<th>Call Identifier</th>
<th>Call Title</th>
<th>Publication Date</th>
<th>Deadline</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>FP7-CDRP-Women-Innovators</td>
<td>2012-07-10</td>
<td>2013-10-15</td>
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<tr>
<td>2</td>
<td>Call N° 12 - FP7-INFRASTRUCTURES-2013-2</td>
<td>2013-09-03</td>
<td>2013-12-03</td>
</tr>
</tbody>
</table>

Further information: CAPACITIES

4.4 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.

4.4.1 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

4.4.2 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**

4.4.3 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**

4.5 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 March 2014, 15 September 2014

Further information: **ISTFELLOW**

4.6 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

4.7 Switzerland: PostDoc Scholarships by the University of Fribourg

For researchers at the PostDoc level. The scholarships are granted to foreign students (living abroad) who would like to undertake research at the PostDoc level.

**Deadlined for applications:** 28 February 2014, 30 September 2014

More information: University of Fribourg

4.8 UK: Joint Global Health Trials Scheme – Launch of Fourth Call for Proposals

The UK Department for International Development, the Medical Research Council and the Wellcome Trust are pleased to jointly announce the launch of the fourth call for proposals under this initiative to fund global health trials.

DfID, MRC and the Wellcome Trust each have a strong history of supporting research that aims to improve health in low and middle income countries. The three partner agencies share the view that in order to have maximum impact on health we need to work together to provide evidence of the best, and most appropriate interventions. Pooling resources brings the necessary funds and experience together to achieve implementable results which address health problems affecting low and middle income countries. Together we will invest up to a total of £15 million for the fourth call to be launched under the joint global health trials partnership.

The purpose of this scheme is to provide funding for the best proposals to generate new knowledge about interventions that will contribute to the improvement of health in low and middle income countries.

The programme will give priority to proposals that are likely to produce implementable results and that are designed to address the major causes of mortality or morbidity in low and middle income countries.

This scheme is primarily focused on late stage (equivalent to phase III/IV*) clinical and health intervention trials evaluating efficacy and effectiveness. The scheme is aimed at funding Randomised Controlled Trials (RCTs), although other types of methodologies may be used alongside the RCT to explore implementation and operational issues. In certain circumstances researchers may wish to propose methods other than an RCT; if this is the case the reasons for adopting a different method must be clarified in the proposal.

*Please note that this scheme will not include support for registration of pharmaceutical products.
Phase IIb trials of major relevance to the objectives of this scheme may be permitted. If you are considering submitting a phase IIb trial, please consult one of the partner agencies involved for further guidance.

The scheme is open to the best proposals which address any major health related problem affecting low and middle income countries, particularly those that affect the most vulnerable populations. Although the breadth of the scheme is deliberately wide, we particularly welcome proposals for research into chronic non-communicable diseases, in recognition of the increasing burden of these conditions in low and middle income countries. We also welcome innovative proposals which address reproductive, maternal and newborn health.

The scope of the scheme encompasses interventions of all kinds, including, but not limited to, behavioural interventions, complex interventions, disease management, drugs, vaccines, hygiene and diagnostic strategies.

The scheme is targeted at trials led by academic groups, and not at trials led by commercial companies or product development partnerships (PDPs). However, applications are welcome from investigators from academic institutions who wish to collaborate with commercial companies or PDPs.

**Deadline for submissions: 1 October 2013**

**Further information:** Medical Research Council

### 4.9 Switzerland: ETH Zurich Postdoctoral Fellowship Program

ETH Zurich is a science and technology university with an outstanding research record and is regularly ranked among the top universities in Europe. It provides a highly stimulating work environment and a state-of-the-art scientific infrastructure. The ETH Zurich Postdoctoral Fellowship Program offers an excellent opportunity for young researchers to acquire new skills and competencies, boosting their careers and helping to attain an independent senior position.

The ETH Zurich Postdoctoral Fellowship Program supports incoming fellowships for postdoctoral researchers at the ETH Zurich. The program is intended to foster high-potential, young researchers, who have already demonstrated excellence in terms of internationally competitive achievements in the early stages of their professional careers. Applications have to be made jointly by the candidate and their host who must be an ETH Zurich Professor and who will act as a mentor to the fellow. The duration of an ETH Fellowship is between one year and a maximum of two years.

Eligible are young postdoctoral scientists worldwide, who have been awarded their doctoral degree within two years of the relevant submission deadline. The applicants need to have at least one scientific publication in a peer-reviewed journal or have been awarded a prize for their PhD thesis.

**Application deadline: 1 March 2014, 1 September 2014**
Further information: **ETH**

4.10 France: Agropolis Fondation

Agropolis Fondation is a French scientific foundation established in 2007 to promote and support high-level research and higher education (training-through-research) as well as to broaden international research partnerships in agricultural sciences and sustainable development research.

4.10.1 Visiting Fellowship

Agropolis Fondation Visiting Fellows are outstanding scholars with significant track record in research, teaching and publication. They will be involved, either as team leaders or members of a team, in key research activities of one or two research units of the Foundation. This Programme is meant to foster scientific exchange between their home and host research unit.

Candidates from or having worked in developing or emerging, Southern or Mediterranean countries are encouraged to apply under this Programme.

Further Information: [agropolis fondation](#)

4.10.2 Doctoral and Post-doctoral Fellowship

Promising and qualified doctoral or post-doc scientists with noteworthy research and publication record may qualify for this Fellowship Award. Successful candidates will be hosted in and work jointly with any of the Foundation's research units in developing and launching new research projects on the Foundation's thematic focus. Open to candidates from or having worked in developing or emerging, Southern or Mediterranean countries, this research award also aims to contribute to developing international scientific partnership.

Candidates from or having worked in developing or emerging, Southern or Mediterranean countries are encouraged to apply under this Programme.

Further information: [agropolis fondation](#)

4.11 France: IARC Fellowships for Cancer Research

Since 1966, IARC has awarded more than 500 fellowships to junior scientists for research training in cancer. Approximately 85% of Fellows return to their home country on completion of their training, and around 82% remain active in cancer research. As a result, IARC Fellowships have made a substantial contribution to the development of cancer research in many countries.

The Fellowship Programme offers postdoctoral fellowships to junior scientists from any country who intend to pursue a career in cancer research and wish to complete their training at the IARC in Lyon, France working in a research Group. Applications from candidates from low- and medium-resource countries
or applicants from any part of the world but with projects related to low- and medium-resource countries are encouraged.

A Senior Visiting Scientist Award is also offered for a qualified and experienced senior investigator who wishes to spend from six to twelve months at the IARC working on a collaborative project in a research area related to the Agency's programmes.

IARC is also offering an Expertise Transfer Fellowship to enable an established investigator to spend from six to twelve months in an appropriate host institute in a low- / medium-resource country in order to transfer knowledge and expertise in a research area relevant for the host country and related to the Agency's programmes.

**Deadline for application:** The next call for applications for IARC Fellowships will be open as from 1 October 2013, with a deadline of 30 November 2013.

**Further information:** [IARC](#)

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### 4.12 Ireland: President of Ireland Young Researcher Award (PIYRA)

The President of Ireland Young Researcher Award (PIYRA) is Science Foundation Ireland's most prestigious award to recruit and retain early career researchers to carry out their research in Ireland. This programme emphasises the importance that Science Foundation Ireland places on the early development of academic careers. The award recognises outstanding engineers and scientists who, early in their careers, have already demonstrated or shown exceptional potential for leadership at the frontiers of knowledge. Awardees will be selected on the basis of exceptional accomplishments in science and engineering in all areas covered by SFI’s legal remit and on the basis of creative research plans that are built on work that has attracted international attention. For the PIYRA programme, scientific excellence is both necessary and paramount but is not sufficient; applications must also demonstrate potential impact.

Applicants for the PIYRA competition must meet all of the following requirements.

- **Awarded Ph.D. or M.D. within the last eight years and have completed a minimum of 36 months active post-doctoral research (with extensions for documented eligible leave).**

- **Has not previously received an SFI investigator-type award, such as Principal Investigator, Investigator Award (IA), Stokes Professorship or Lectureship, Research Professorship, or SFI PIYRA nor should they have received a SFI Research Centre as a lead or co-PI. Applicants holding or having held smaller awards such as Starting Investigator Research Grant (SIRG), Research Frontiers Programme (RFP), Investigators Projects (IP), Waltons, Young Women in Engineering Scholarship, TIDA, Industry Fellowship and UREKA supplement MAY apply to SFI PIYRA. Please**
note that SIRG award holders may only apply to SFI PIYRA in the last 12 months of their active award.

- Will be recognised by the research body upon receipt of the SFI grant as an independent investigator who will have an independent office and research space at the host research body for which he/she will be fully responsible for at least the duration of the SFI grant.

- Has an exceptional record of internationally recognised independent research accomplishments for their career stage (as measured by publications in top quality international journals and conferences, invited talks at international conferences, or other academic metrics appropriate to the applicant's field).

- Has demonstrated research independence (or be in the process of establishing independence) and shown exceptional potential to become a research leader of the future.

- The applicant is expected to have the capability and authority to mentor and supervise postgraduate students and team members.

**Application Deadline: Rolling call**

**Further information:** sfi

### 4.13 Germany: Science Tour 2014: Artificial Intelligence and Visual/Multimodal Computing

The German Academic Exchange Service (DAAD) invites scientists and administrators from universities and research institutions to apply for a tour that introduces cutting-edge research in the field of computer science in southwest Germany. The tour will cover a range of topics relating to Artificial Intelligence and Visual/Multimodal Computing with a special focus on interdisciplinary research.

Scientists and administrators with strong research background and an interest in international cooperation (PhD/doctorate for at least two years) are invited to apply.

**Deadline for application:** 29 September 2013

**Further information:** Research in Germany

### 4.14 Singapore: SlgN-NTU Immunology PhD Program – August 2014 Intake

A joint initiative of Nanyang Technological University's (NTU) School of Biological Sciences (SBS) and A*STAR's Singapore Immunology Network (SlgN) Program is targeting both local and international students in a research-based program with minimum coursework.
The PhD degree will be awarded by NTU to students who fulfill the graduation criteria. The Program Board members comprise Professors from NTU-SBS and Principal Investigators from SlgN. Students can be either under the supervision of a SlgN PI or a NTU Professor, or under joint supervision.

Projects can be carried out either at SlgN or at NTU. 2 types of scholarships are available (granted for 4 years):

AGS: A*STAR Graduate Scholarship (local students)
SINGA: Singapore International Graduate Award (international students).

Application deadline: 13 December 2013

For application instructions and details on the selection process, please see here.

4.15 Marie Curie Fellows – Where are they now?

EURAXESS Links ASEAN continues its series where we meet up with researchers in ASEAN who are benefiting from a Marie Curie Fellowship in Europe. Marie Curie Fellowships are European research grants available to researchers regardless of their nationality or field of research. In addition to generous research funding, scientists have the possibility to gain experience abroad and in the private sector, and to complete their training with competences or disciplines useful for their careers.

Simon Grimley met up with Thai researcher Dr Pranee Inprakhon to find out about her mobility experience.

Dr Pranee, please tell us a little about yourself.
I am a mid-career researcher from Mahidol University in Bangkok, Thailand. I completed my Ph.D. in material science (polymers) at the Pierre-and-Marie-Curie University (Paris VI) in Paris, France. I completed my undergraduate studies at Khon Kaen University in Thailand.

Where are you from?
I’m an application-oriented academic researcher from the Department of Biotechnology, Faculty of Science, Mahidol University, Bangkok, Thailand.

What is your research background?
My research focus is on the eco-efficient synthesis of biomaterials/biochemicals from renewable resources, and my expertise is in the area of enzymatic polymerization. My research interests include natural products, the application of fat and oil in cosmetic products, natural antioxidants and their applications, and the extraction, characterization and application of essential oil from plants.

Please tell us briefly about the research project you have been doing as a Marie Curie (MC) Fellow?
In July 2012 I was awarded a Marie Curie International Incoming Fellowship (IIF) from the European Union’s Seventh Framework Program for Research and Technological Development (FP7) to undertake a project called “AquaCat” – Tailor made lipases for synthetic catalysis in biphasic media: From poly(lactone) applications towards novel sugars esters” in cooperation with the Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB, Straubing, Germany. The project is focused on the development of innovative, greener process using renewable resources for synthesis of products of commercial interest.

I have been working closely with an expert team led by Prof. Volker Sieber, an eminent European researcher in the field of renewable resources utilization and will be here at Fraunhofer IGB until May 2014 when I will return to Thailand for an additional year of research supported by the Marie Curie IIF.

The outcomes of this project will be extremely important to Europe, as sustainable chemistry is identified as a key driving force contributing to the achievement of the Lisbon strategy and EU strategy for 2020 to make Europe the most competitive and knowledge-based economy in the world. Green technology involving renewable resources utilization has been identified as one of the key topics requiring more research activity.

**Why did you chose to apply for this particular project?**

Personally, I believe that research and development aimed at enhancing the value added (?) of bio-resources/renewable resources is a highly promising and extremely important research field to support both Thailand's and Europe's economic competitiveness and sustainability.

**Where did you get information about the MC Actions?**

I was first made aware of the MC Actions from colleagues in Europe and did make an application for the Marie IIF which was initially unsuccessful. I then attended an “FP7 Information Day” organized by Thailand’s National Science and Technology Development Agency (NSTDA). NSTDA is the leading applied R&D agency in Thailand and is the FP7 focal point for the country.

**In retrospect, which elements do you think were decisive in you being successful in your application?**

As I mentioned above, my research project fits well with the EU’s strategic plan for economic competitiveness so I think this was certainly a factor in being successful. This fact also made it easier for me to develop my proposal. In addition, the correct choice of host (well established host with the research focus fit to the proposal) as well as their assistance is crucial.

The support and guidance I received from NSTDA and the NSTDA network was extremely beneficial. NSTDA introduced me to FP7 National Contact Points
who sat with me and helped me re-work my initial proposal so that it met the objectives of the Marie Curie IIF call. This support was a decisive factor for me, and I think that without this coaching I would not have been successful.

**Do you have any advice for other young researchers who are considering applying for a MCF?**

Just believe that you are good enough and try to find ways to demonstrate it. Just believe that your research is interesting and important. I also think it is extremely important to seek the advice of people who have experience in the Marie Curie Actions. The FP7 National Contact Point network is an invaluable resource, and I would encourage all potential applicants to take advantage of this network. And finally, if at first you don’t succeed then try again. Perseverance does pay off. It’s worthwhile to try once in your life.

**What were the most significant benefits you derived as a MC Fellow?**

The opportunity to work with world class researchers on a full-time basis in an excellent working environment with good financial support. My IIF has also allowed me to extend my international network, to learn a new culture, and to build a linkage between Fraunhofer IGB and my own institution in Thailand, Mahidol University.

**As a researcher, which goals and ambitions do you have for your future career?**

I would like to see my research applied one day and replace chemical processes currently being used which are harmful to our planet.

**5 Jobs**

**EURAXESS Jobs**

There are currently 6012 research jobs and fellowship programmes (all over Europe and partner countries and in all disciplines) accessible via the EURAXESS Jobs database

**AUSTRIA (Vienna):** Post-Doctoral Scientist (Targeted Proteomics),
Boehringer Ingelheim Veterinary Research Center
Application deadline: 31 November 2013
[Details](#)

**BRAZIL (Sao Paulo):** PostDoctorate Fellowship (Pain and Analgesia),
Butantán Institute/LETA
http://ec.europa.eu/euraxess
Application deadline: 11 October 2013

Details

DENMARK (Copenhagen): PhD within Soil Biological Fertility – Sustainability of Organic and Inorganic Fertilisation Practices for Plant Nutrition, Crop Productivity and Soil Health, University of Copenhagen

Application deadline: 15 October 2013

Details

FINLAND (Helsinki): Six Post-Doctoral Researcher Positions (Electrical Engineering), Aalto University

Application deadline: 28 October 2013

Details

GERMANY (Munich): Up to 10 Tenure Track Assistant Professorships (Electrocatalysis, Nanoelectronics, Computational Photonics, Computational Biology, Human Pain Research, Cell Biology in Gastrointestinal Pathology, Molecular Engineering at Functional Interfaces, Epigenetics, Geosciences, Urban Water Systems

Application deadline: 30 November 2013

Details

NORWAY (Bergen): Full-time permanent position as Professor/Associate Professor in Biochemistry and Molecular Biology (two positions), University of Bergen

Application deadline: 26 October 2013

Details

6 Events

6.1 Germany: Molecular Machines: Lessons from Integrating Structure, Biophysics and Chemistry, 18-21 May 2014

The conference program is designed for biochemists and molecular biologists who are interested in molecular machines. It should provide an overview of how structural biology, and more generally biophysical techniques can be applied to different biological problems. The techniques covered in the program include
classical high resolution structural biology techniques such as electron microscopy, crystallography and nuclear magnetic resonance spectroscopy, as well as fluorescence, mass spectrometry, small angle scattering and chemical biology.

The aim of the conference is to show the interdisciplinary nature of the diverse experimental approaches and promote a modern way of thinking, where barriers between specific expertises are crossed. The sessions are organised according to the biological questions, ranging from gene expression to cell division. Experts in the different techniques will present their work back to back, showing the multiplicity of routes that can be followed to understand molecular machines in the cell.

**Deadline for submission: 13 February 2014**

**Further information:** [EMBO / EMBL](#)

### 6.2 UK-Southeast Asia: Partners in Science – Forthcoming Events

The team is planning the following events and activities for 2013/14. If you are interested to find out more, please contact the lead team member.

- Aquaculture mission to Malaysia, October 2013 ([Ching](#))
- Future Cities, Singapore, November 2013 ([Matt](#))
- Tackling Infectious Diseases and Zoonoses: The Implications for Burma, Singapore and Burma, November 2013 ([Nashya](#))
- Science Communication, Malaysia, Thailand and Indonesia, November 2013 ([Ching](#))
- Natural Hazards, Malaysia, November 2013 ([Ching](#))
- Chemicals/Synthetic Biology, Singapore, January 2014 ([Ching](#))
- Investigative Dermatology Symposium, Singapore, February 2014 ([Nashya](#))
- Space and Satellite Technology, Singapore, February 2014 ([Mark](#))
- Technology Cooperation for Maritime Applications, Singapore, TBC ([Mark](#))

**Further information:** [UK-Southeast Asia: Partners in Science](#)

### 6.3 Indonesia: 7th Open Science Meeting, 26-28 January 2014

The 7th Open Science Meeting 2014 will be held from 26 to 28 January 2014 in Makassar, Indonesia.

The Open Science Meeting (OSM) has been organized biannually, mostly in Indonesia, since 2002. Its main goal is to strengthen the scientific bonds between the Netherlands and Indonesia. OSM 2014 will focus on the interconnections between science and society.
The provisional programme is now available at the [OSM 2014 website](http://ec.europa.eu/euraxess).


The World Innovation Forum Kuala Lumpur (WIF-KL) is the region’s premier annual event on innovation. Multi-stakeholders from the local, regional and international arena converge at Kuala Lumpur on the singular theme of “innovation”. WIF-KL is jointly organized by Malaysia’s Ministry of Science, Technology and Innovation (MOSTI) and the Malaysian Innovation Foundation/Yayasan Inovasi Malaysia (YIM). 1,500 international delegates from 50 different countries and 10,000 visitors are expected to attend the World Innovation Exposition to be held alongside the forum. These will cover all aspects of innovation, which include grassroots, education, research, commercialisation and integration of innovation to propel the region toward high-income, advanced economy nations.

Further information: [WIF-KL](http://ec.europa.eu/euraxess)

6.5 Singapore: International Energy Week (SIEW), 28 October-1 November 2013

The Singapore International Energy Week (SIEW) is an annual week-long platform for energy professionals, policymakers and commentators to discuss and share best practices and solutions within the global energy space. First held in 2008, SIEW is organised by the Singapore Energy Market Authority (EMA).

Further information: [SIEW](http://ec.europa.eu/euraxess)

6.6 Singapore: Electromobility Conference Asia (EMCA), 29 – 31 October 2013

TUM CREATE, a research programme jointly performed by Technische Universität München (Germany) and Nanyang Technological University (Singapore), are organizing the Electromobility Conference Asia (EMCA) as part of the Singapore International Energy Week (SIEW).

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 Oct – 1 Nov 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.
6.7 Singapore: 8th World Congress on Developmental Origins of Health and Disease (DOHaD 2013), 17 – 20 November 2013

The 8th World Congress on Developmental Origins of Health and Diseases will be held on 17 – 20 November 2013 in Singapore. Themed “From Science to Policy and Action”, the conference will attract researchers, academia, policy makers and health care providers worldwide to converge and present the latest science and developments on basic, clinical, public health and programmatic research into early-life and developmental origins of health and diseases. The plenary sessions will cover the full spectrum of topics from our multidisciplinary field, ranging from epigenetics to economics. The programme will also include a series of satellite symposia, workshops, special programmes for students and emerging researchers, as well as number of panel discussions to deal with some controversial areas.

Further information: DOHaD 2013

6.8 Singapore: EURAXESS Links ASEAN @ Study in Europe 2013, 28 September 2013

EURAXESS Links ASEAN will be present at the 2013 edition of Study in Europe in Singapore. Organized by the Delegation of the European Union to Singapore, the Study in Europe Education Fair will take place on September 28th, where European countries will showcase Europe’s excellence in Higher Education and Research.

EURAXESS Links ASEAN representatives will provide information to all researchers and visitors interested in the European research landscape and in conducting research in Europe or with European partners.

A select group of European countries will showcase Europe’s excellence in higher education and research.

Further information: Study in Europe

6.9 Austria: Going Green – CARE INNOVATION 2014, 17-20 November 2014

The International CARE Electronics Office is pleased to announce the Going Green – CARE INNOVATION 2014 conference and exhibition on Electronics and the Environment. It will take place in Schoenbrunn Palace Conference Centre Vienna (Austria), which is situated in the Apothecaries’ Wing of the famous building. This Symposium is the only platform for presenting the up-to-
date progress on sustainable development and the development of eco-efficient electronic & automotive products.

This year’s program will feature the latest in environmental design, clean manufacturing, resource efficiency, climate change, new eco-efficient technologies, collection, reverse logistics, refurbishment, carbon trading, re-use, recycling and policy making from leading experts in industry, academia, consulting, recyclers and public area around the globe. Leading companies and institutions in green electronics will present their innovative products, processes and services at the exhibition.

All companies in the electronics, automotive, solar and PV, chemical and recycling industry, power suppliers, electricity generators and distributors, contract manufacturers, material and component suppliers, service and logistic companies, collective systems, academia, consulting and public authorities (local, regional, international) are invited to attend and contribute.

**Deadline for submissions: 31 May 2014**

Further information: CARE INNOVATION 2014

### 6.10 Italy: Third Workshop on Emerging Oncogenic Viruses, 4-8 June 2014

The success of the first two Emerging Oncogenic Viruses meetings, held in 2010 and 2012, and the enthusiastic feedback from the participants, about 120 top scientists, encouraged us to repeat the event in 2014.

You are cordially invited to attend this meeting, which is intended for basic researchers (biologists and epidemiologists) as well as clinicians. The workshop is organized and co-sponsored by the International Agency for Research on Cancer (IARC) and the German Cancer Research Center (Deutsches Krebsforschungszentrum; DKFZ).

The objectives of the meeting will be the critical evaluation of epidemiology, immunology, and biology of cancer-associated viruses. The programme will emphasise new HPV-related cancers and newly discovered human polyomaviruses; advances concerning other pathogens will be incorporated as they arise.

The official language will be English.

**Dates for submissions: 13 January 2014 to 16 April 2014**

Further information: EOV

### 6.11 Thailand: ASEAN-EU STI Days 2014, 21-23 January 2014

SEA-EU-Net II organizes the first ASEAN-EU Science, Technology and Innovation (STI) Days from 21-23 January 2014 in Bangkok, Thailand. The
ASEAN-EU Science, Technology and Innovation Days serve as a visible forum for cooperation activities between the two regions in the field of STI. The event addresses researchers from many thematic areas – with a focus on the societal challenges with relevance to both regions – as well policy makers, research conducting companies and innovation managers. It takes place annually, alternating between an ASEAN and a European country. High-level policy makers as well as many research projects and companies seize the chance to network, discuss, exchange and inform themselves.

Further Information: ASEAN-EU

6.12 Germany: 3rd Fraunhofer Direct Digital Manufacturing Conference, 12-13 March 2014

The conference will cover the entire range of topics in additive manufacturing, starting with methodologies, design and simulation, right up to more application-specific topics, e.g. from the realm of medical engineering and electronics.

Purpose of the Fraunhofer Direct Digital Manufacturing Conference series is an intellectual exchange between researchers, enterprises and users of Additive Manufacturing technologies in order to gather the latest information about trends, progress, importance and the future potential of these technologies.

Themes of the conference will be:

- Design, virtual environments and simulation
- Laser based Additive Manufacturing technologies
- Micro technologies, printing and deposition
- Novel materials and compounds
- Application toward manufacturing
- Quality methods for Additive Manufacturing
- Sustainable manufacturing and carbon footprint

Registration: To open in October 2013

Further information: ddmc-fraunhofer

6.13 Germany: 10TH INTERNATIONAL NANOTECHNOLOGY SYMPOSIUM – NEW IDEAS FOR INDUSTRY, 1-3 July 2013

Encouraged by the success and positive reception of the previous years, Fraunhofer IWS is pleased to invite you to Europe’s foremost conference on nanotechnology. Nanofair has established itself as one of the premier events worldwide. With the slogan “New Ideas for Industry” the conference provides a vital platform for a scientific and industrial audience to exchange the latest
results and ideas. The participants will have an excellent opportunity to make new contacts and to renew old ones.

Plenary lectures by internationally renowned speakers as well as an exhibition running concurrently to the conference will offer delegates excellent possibilities to get acquainted with the latest developments and research results. A poster session will complement the comprehensive technical program.

With pinpoint precision and with a minimum of organizational effort Nanofair allows meeting the key players from industry and R&D. During the exhibitor’s evening as well as at the conference reception there will be sufficient time for scientifically profound discussions and for finding new cooperation partners.

Special emphasis will be given to all kinds of material aspects. Therefore, Nanofair 2014 will focus on the following topics:

- functional nanocomposites
- nanostructured surfaces
- nanomaterials for life sciences
- nanomaterials for energy applications
- nanoelectronics & photonics
- processing aspects of nanomaterials
- nanoanalytical methods
- carbon nanotubes & graphene

**Deadline for abstract submission: 30 November 2013**

**Further information:** [Nanofair 2014](#)

**6.14 Singapore: swissnex Singapore End of Year Party 2013, 5 December 2013**

Join the End of the Year Party and take the opportunity to meet new partners from the academic and high-tech fields.

swissnex Singapore will organize its traditional year-end gathering to thank its partners and supporters and beckon a great New Year 2014. Key partners from the academic and high-tech fields will take part to this year-end event to highlight their current year’s activities as well as to present next year’s projects and collaborations. In the meantime, participants will be able to enjoy a dinner and widen their network.

**For further information:** [swissnex](#)
6.15 UK: Re-Distributed Manufacturing Scoping Workshop, 7-8 November 2013

The Engineering and Physical Sciences Research Council’s (EPSRC) Manufacturing the Future theme has identified Re-Distributed Manufacturing as a potential area for future research and funding. This area of interest has potential scope for cross council involvement, therefore EPSRC and the Economic and Social Research Council (ESRC) are inviting applicants for participation in a workshop with the aim to explore Re-Distributed Manufacturing and the research challenges that underpin it. The workshop will also aim to determine the challenges that are not being addressed by current research programmes and to identify the scope for future research council involvement within Re-Distributed Manufacturing.

This will be a two day workshop, starting after lunch on Thursday 7 November 2013 and finishing early afternoon on Friday. It will provide an opportunity for the community to help develop our joint understanding of this research area and the direction Research Council support should take to address it.

Deadline for applications:

Further information: [EPSRC](http://epsrc.gov.uk)

6.16 Austria: 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications – SIMULTECH, 2-4 September 2014

The purpose of the 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH) is to bring together researchers, engineers, applied mathematicians and practitioners interested in the advances and applications in the field of system simulation. Four simultaneous tracks will be held, covering on one side domain independent methodologies and technologies and on the other side practical work developed in specific application areas. The specific topics listed under each of these tracks highlight the interest of this conference in aspects related to computing, including Conceptual Modeling, Agent Based Modeling and Simulation, Interoperability, Ontologies, Knowledge Based Decision Support, Petri Nets, Business Process Modeling and Simulation, amongst others.

Topics:

- Conference Areas
- Simulation tools and platforms
- Formal Methods
- Complex systems modelling and simulation
- Application Domains
SIMULTECH 2014 will be held in conjunction with ICETE 2014 (International Joint Conference on E-Business and Telecommunications), ICSOFT 2014 (International Joint Conference on Software Technologies), ICINCO 2014 (International Conference on Informatics in Control, Automation and Robotics) and DATA 2014 (Data Management Technologies and Applications).

**Deadlines:**
- Regular Papers: Paper Submission: 10 April 2014
- Position Papers: Paper Submission: 20 May 2014
- Special Session SDDOM: Paper Submission: 23 June 2014
- Special Session MSCCEC: Paper Submission: 23 June 2014
- Special Session MSIE: Paper Submission: 26 June 2014
- Special Session HA: Paper Submission: 23 June 2014

**Further information:** SIMULTECH 2014

6.17 France: Graphene 2014, 6-9 May 2014

Toulouse will host the 4th edition of Graphene Conference series, the largest European Event in Graphene, from the 6th until the 9th of May 2014 at Centre de Congres Pierre Baudis. A Plenary session with internationally renowned speakers, extensive thematic workshops in parallel, an important industrial exhibition carried out with the latest Graphene nanotrends for the future and a brokerage event will be some of the features of this event.

Following the overwhelming success of the last three editions of Graphene, Phantoms Foundation is pleased to announce the fourth edition of this great event that will gather the Graphene community, including researchers, industry policymakers, investors and plans to be a reference in Europe in the upcoming years.

**Deadline for abstracts submission:** To be announced

**Further information:** Graphene 2014


The automobile is going through the biggest transformation in its history. Automation and electrification of vehicles are expected to enable safer and cleaner mobility. The prospects and requirements of the future automobile affect innovations in major technology fields like driver assistance systems, vehicle networking and drivetrain development. Smart systems such as adaptive ICT
components and MEMS devices, novel network architectures, integrated sensor systems, intelligent interfaces and functional materials form the basis of these features and permit their successful and synergetic integration. They increasingly appear to be the key enabling technologies for safe and green road mobility.

It has been the mission of the International Forum on Advanced Microsystems for Automotive Applications (AMAA) for more than fifteen years to detect novel trends like this and to discuss the technological implications from early on. Therefore, the topic of the AMAA 2014 will be “Smart Systems for Safe, Clean and Automated Vehicles”.

Leading engineers and scholars from all around the world are cordially invited to participate in the dialogue and submit proposals for papers addressing ongoing research and novel developments in this field. Discussions at the conference will focus particularly on the application areas mentioned below. A special attention will be given to topics covered in public funding programs like the European Green Vehicles Initiative PPP.

Topics:
- Driver Assistance & Vehicle Automation
- Networked Vehicles, ITS & Road Safety
- Vehicle Efficiency & Green Power Trains
- Vehicle Electrification
- Components & Systems

Deadline for submission of abstracts: 1 November 2013

Further information: AMAA 2014


In discussions of economic development, industrialization, modernization and urbanization are often in the equation. But as this generation being a product of past environmental transgressions, we are now all inclined to include environmental sustainability in the picture. We now not only refer economic development to quantitative and qualitative progress in the economy, community and society, but we now also consider the kind of natural environment we would be leaving for future generations. Industrialization, modernization and urbanization translate to an insatiable thirst for energy. But as demand for energy grows, so do the greenhouse gas emissions. If the aspiration of development is to raise living standards, provide proper access to modern energy services, more efficient use of energy to protect the global environment and ensure reliable energy supplies, then green growth must play a key role. Incorporating elements of low-carbon green growth in economic
strategies that would cover technological, financial and investment aspects, as well as national and regional energy development policies geared towards achieving a sustainable green future has now become more important. A low-carbon based type of economy will help mitigate environmental pollution and CO2 emissions caused by fossil fuel use, help reduce reliance to dwindling fossil reserves, and encourage technological innovations.

Open for registration: 15 January 2014

Further information: Green Energy

7 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

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/
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)
Brainpower Austria: http://www.brainpower-austria.at/