RESEARCHERS IN MOTION

2019
2nd Quarter

EURAXESS ASEAN

Dear Colleagues,

Welcome to the second edition of the EURAXESS ASEAN quarterly newsletter 2019.

Scientific cooperation between Southeast Asia and Europe is high on the agenda of both regions. The Southeast Asia – Europe Joint Funding Scheme has launched new calls to support multilateral collaborative research and innovation projects. In our **Briefing** section we present the details of the new calls.

Two outstanding science communicators are this year's first recipients of the EURAXESS ASEAN Prize, a travel bursary to facilitate professional networking with research peers in Europe. **In Focus** brings you an interview with Dr Hazreen Abdul Rashid and Ms Napat Tandikul who have just returned from their trip to Europe.

As the EU's 8th Framework Programme for Research & Technology – Horizon 2020 – draws to a close in less than 18 months time, preparations are well under way for its successor. **Hot Topic** brings you an overview of what to expect from the next EU research programme Horizon Europe.

We hope you enjoy reading our newsletter, and welcome your feedback.

Your EURAXESS ASEAN team

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1 BRIEFING: Southeast Asia – Europe Joint Funding Scheme launches 2 new calls for proposal

The Southeast Asia-Europe Joint Funding Scheme for Research and Innovation (JFS) has just launched two new calls! The JFS is an instrument for the funding of bi-regional research and innovation projects. The funding for the projects is provided by funding agencies or ministries at national, regional or local level from Southeast Asia and Europe.

2019 Innovation Joint Call for Proposals: Infectious Diseases (including Antimicrobial Resistance - AMR) and Smart Cities

Deadline: 18 NOVEMBER 2019 12:00 (noon) CET/ 18:00 Jakarta time

Countries contributing to the Call are: Cambodia, Czech Republic, Indonesia, Lao PDR, Latvia, Myanmar, The Philippines, Spain, Thailand, Turkey and Vietnam.

Please visit the website for additional information on application process and eligibility.

Type of funded projects:

Southeast Asia-Europe Joint Call Projects must comprise of at least 3 partners from 3 different countries (either 2 different Southeast Asian partners and 1 European partner or 2 different European partners and 1 Southeast Asian partner) applying for funding from funding agencies participating in the call. The proposals must cover the thematic areas of Infectious Diseases (including Antimicrobial Resistance) or Smart Cities to enhance bi-regional co-operation and develop new partnerships as well as strengthen existing ones. The 2019 Innovation call aims to support projects with a strong application focus and the targeted Technology Readiness Level (TRL) at the end of the project should at least be 3[1].

Scope of the projects:

Funding will be provided for the **duration of a maximum of three years (36 months)**. They should start earliest in **July 2020**.

Who can apply?

Proposals may be submitted by public legal RTD (Research and Technology Development) entities, higher education institutions, non-university research establishments, companies (all depending on national regulations).

The participation of industries is not strictly mandatory but due to the strong application focus of this innovation call the participation of SMEs, industries and clusters in consortia is strongly recommended. Eligibly criteria can be found in the respective national funding regulations.

Thematic Areas:

1) Infectious Diseases (including Antimicrobial Resistance [AMR])

There is a long tradition of cooperation on infectious diseases between Europe and Southeast Asia and health research is a proven strength of both regions. Nonetheless, major obstacles exist to overcome the existing and increasing global health challenges including the need for a deeper understanding of diseases pathology and the socio-economic causes of the diseases and linked effectiveness of health intervention.

There is a strong potential for collaboration in the area of antimicrobial resistance, as South-East Asia is affected by situations similar to Europe and requiring actions to which it can contribute.

2) Smart Cities

The sustainable development of urban areas is a challenge of key importance. It requires new, efficient, and user-friendly technologies and services, in particular in the areas of energy, transport and ICT. However, these solutions need integrated approaches, both in terms of research and development of advanced technological solutions, as well as deployment in the following areas:

- Smart Energy Systems
- Building and Space Sustainability
- Intelligent Transport and Mobility
- Societal Challenges: inclusion, education, health, tourism, etc.

2019 S&T Joint Call for Proposals: Integrated Water Resource Management (IWRM) and Nanotechnologies

Deadline: 18 OCTOBER 2019 12:00 (noon) CET/ 18:00 Jakarta time

Countries contributing to the Call are: Brunei Darussalam, Bulgaria, Cambodia, Czech Republic, Germany, Indonesia, Lao PDR, Latvia, Myanmar, The Philippines, Switzerland, Thailand, Turkey and Vietnam

Type of funded projects:

Southeast Asia-Europe Joint Call Projects must comprise of at least 3 partners from 3 different countries (either 2 different Southeast Asian partners and 1 European partner or 2 different European partners and 1 Southeast Asian partner) applying for funding from funding agencies participating in the call. The proposals have to cover the thematic areas of Integrated Water Resource Management or Nanotechnology to enhance bi-regional co-operation and develop new partnerships as well as strengthen existing ones. The 2019 S&T call aims to support projects which are close to basic research and the targeted Technology Readiness Level (TRL) at the end of the project should not be higher than 4[1].

Scope of the projects:

Funding will be provided for the **duration of a maximum of three years (36 months)**. They should start earliest in **July 2020**.

Who can apply?

Proposals may be submitted by public legal RTD (Research and Technology Development) entities, higher education institutions, non-university research establishments, companies (all depending on national regulations). Eligibly criteria can be found in the respective national funding regulations.

Thematic Areas:

1) Integrated Water Resource Management (IWRM):

The protection and sustainable use of water resources plays a decisive role for the future of humankind. IWRM is a process that aims to maximize social and economic well-being while avoiding damage to vital ecosystems and creating fair conditions for the utilization of resources. In this context, ecological goals must be linked to economic and social goals. The areas under investigation are generally river basins or parts thereof, or settlement areas with bodies of water.

Climate Change in South-East Asia will cause more extreme weather events that may lead to drastic change in rainfall and runoff, water quality and supply as well as the viability of irrigation schemes according to the Intergovernmental Panel on Climate Change (IPCC). Research and innovative technology approaches on integrated land use and water management systems as well as science diplomacy especially for river basins and deltas would contribute to prepare for, mitigate and negotiate the effects of climate change. Combining the experiences in Europe (e.g. Danube) and South-East Asia (e.g. Mekong) would provide opportunities for synergies in joint research and innovative technology development projects to support both policy makers and farmers in the two regions.

2) Nanotechnologies

Nanoscience and nanotechnology are highly interdisciplinary and cut across industrial and commercial sectors to research and create new materials and devices with remarkable properties and functions. To name but a few, nanotechnology is being used in medicine, electronics, food, manufacturing and materials or water purification. Despite the fact that the technology has a high potential for both regions, research and innovation cooperation in nanotechnology has still a high untapped potential. Hence addressing setting research and innovation initiatives could bring new avenues for joining scientific and innovation capabilities from both regions.

2 IN FOCUS: 1st batch of EURAXESS Prize winners 2019 travel to Europe

Two outstanding science communicators are the first two recipients of the EURAXESS Prize 2019. By beating other excellent science communicators from across their respective country, they not only won the national grand finals of the British Council's FameLab competition, but they also walked away with the EURAXESS ASEAN Prize 2019 worth €600. The Prize is meant as a career-advancement bursary enabling the awardees to expand their professional network through linkages with researchers in the European Union.

Malaysian Dr Hazreen Abdul Rashid, a medical officer in the psychiatry department at a public hospital in Kuala Lumpur, was announced as Champion of FameLab Malaysia 2019. His winning pitch explained how society tends to label drug addicts as criminals instead of patients which may be detrimental to their recovery. Only a few days later, Ms Napat Tandikul won the national grand finale of the FameLab competition in Thailand. A stem cell scientist and former research associate at EpiBone Inc. in Brooklyn, NY., Ms Tandikul convinced the jury with her pitch for lab-grown meat as a new sustainable way to make better meat for the world.

Earlier this June, both awardees travelled to the UK to compete in the global science communication competition FameLab at the Cheltenham Science Festival. As winners of the EURAXESS Prize 2019 they also met with fellow European researchers in their area of expertise. EURAXESS ASEAN caught up with Hazreen and Napat to find out about their trip.

Napat at the Cheltenham Science Festival

You just took part in the FameLab finals in the UK. How would you describe this experience?

Napat: First of all, it was an incredible experience being able to meet amazing scientists from all fields of expertise from 25 countries around the world. It is my honor to represent my beloved country, Thailand. And I am so proud to be the first female FameLab Thailand Winner and the first Thai finalist in FameLab International finals.

Hazreen: I would say it was definitely an amazing once-in-a-lifetime experience. To be able to compete and speak in front of international audiences was very nerve-wrecking to be completely honest but it was also a very proud moment at the same time. I feel thankful that I got to deliver a very important message, tell the stories about the work that we do every day and the kind of problems that we constantly face.

What did you enjoy best about this experience?

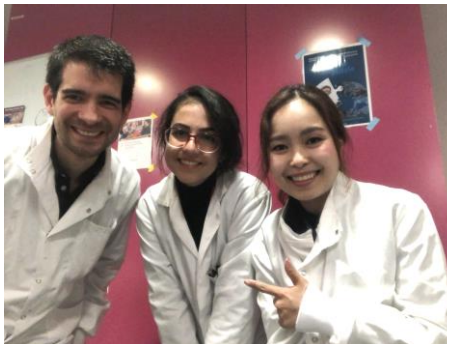
Napat: I am so happy that I got to share my passion in "Stem Cell research" with the public worldwide. I got to deliver my top two favorite topics including my own research with EpiBone Inc. about lab-grown bones. I designed this talk with a Harry Potter theme, comparing the real-life magic in the lab with the "Skele-gro" magic potion used to regrow bones in Harry Potter. This talk made me win the semi-finals and the audience's choice award to enter the finals. My other talk is about lab-grown meat, the same topic that made me win FameLab Thailand competition. I really enjoyed delivering both stories to the public because they are both about technology that will change our lives in the near future.

Hazreen: Just the fact that you get to know and befriend some of the most passionate people who are very proud of their scientific works. Because it is after all a science communication competition, these people are very good communicators as well. Of course, I enjoyed seeing them talking on stage, but I also had a great time chatting and getting to understand some of the more difficult sciences when we were off-stage.

As EURAXESS Prize winners you also met with European research peers. Who did you meet and how did it go?

Hazreen with Dr Nicola Metrebian and her research group at the UK National Addiction Centre in King's College London.

Hazreen: I had the opportunity to meet Dr Nicola Metrebian who is a Senior Research Fellow at the UK National Addiction Centre in King's College London and her amazing team members. I learned about some of the ground-breaking works that they do to save people from dying on the street from opioid overdose and also some of the more novel pharmaceutical approach to treat addiction. I can conclude that some problems that we had in treating patients who are addicted to substances are quite universal in nature – the problems we always have with limited funding from the government and also the stigma attached to these patients which definitely impedes the process of healing. I also got to present a short presentation of the kind of works we do in Malaysia on patients who take Methadone treatment, the challenges we face and the future prospect.



Napat: I would like to thank EURAXESS again for this amazing prize. I went to Prof. Molly Stevens' lab at Imperial College London. Unfortunately, Prof. Stevens was out of town so I didn't get to meet her in person but I had the opportunity to meet her team. They are a big group of 17 or 18 people. Their research is divided into 4 subgroups; nanomaterials for drug delivery and diagnosis, biomaterials for tissue engineering, Cell-material interface and innovative material characterization of cells and

tissue. They also have a few projects that related to my work at EpiBone, including lab-grown bones and cartilage. I met a lab manager (Akemi), a senior post-doctoral researcher (Daniel) and 2 PhD students. They showed me the lab and all the facilities, told me about their research projects and about their collaborations with other labs in Europe and Africa.

What is your main takeaway from this opportunity to connect with fellow researchers in Europe?

Left- Daniel Hachim (post-doc) researching biomaterial-based approaches for drug delivery and tissue engineering application
Middle- Tabasom Haghighi (PhD student)
Right- Napat Tandikul

Hazreen: I think to just be able to talk to them in person and not just through e-mail exchanges or reading their findings in scientific journals or research publications helps to bridge the communication gap. I learned that we share more problems in common than we knew of and that makes us feel more united and a part of the global fight against the addiction and abuse epidemic.

Napat: An opportunity to connect and network with them, exchange contacts and an opportunity to apply for a PhD program and scholarship here at Imperial College London (if I want to). That's amazing!!

How do you think the meeting will be useful for your work at your home institution?

Napat: Prof Stevens' team has done a lot of work in developing innovative biomedical material for tissue engineering that can be applied in lab-grown tissue/ organ. This advancement in material science could help making big progress in the field of tissue engineering. I am impressed with one of the project's led by a PhD student, Chunching Li, in gradient scaffold design that mimics the natural gradient in the body and could potentially break the limits of growing a wide range of tissues together. Learning this methodology from experts and networking with an amazing team of scientists could possibly help my team at EpiBone in the future.

Hazreen and Napat visited the British Council HQ in London.

What was the highlight of your trip to Europe?

Hazreen: Definitely the entire time I was in Cheltenham Science Festival; taking part in the competition and making friends with my fellow contestants. I also enjoyed my short trip to London after the festival was over. I went to the British Museum, the Natural History Museum, the Science Museum and also the Imperial War Museum. I got to say the War Museum was the best out of the four.

Napat: This was one of the best experiences of my life being able to represent my country and sharing my passion in science and stem cell research with the world at the Cheltenham science festival. It is so special to visit and connect with Prof. Stevens' lab at a world class university like Imperial College London. It is also a great opportunity to meet the British Council UK team in London during my trip. I now have a better understanding about the British Council's roles in international culture and education and how they could help us, scientists, collaborate with researchers in Europe. And last but not least, an opportunity to explore around the UK is a priceless experience!

What is up next for you?

Hazreen: I look forward to submitting my thesis and completing my post-graduate study by the end of this year. Beyond that I really hope I can utilise the connection and the networking I have established with the British Council, EURAXESS ASEAN and the researchers I met in UK for future works and research collaborations.

Thank you so much for your time and we look forward to hearing about your next achievements soon!

Related: EURAXESS Prize for Falling Walls Lab winners 2019

EURAXESS ASEAN is proudly supporting the Science Communication Competitions Falling Walls Lab in Indonesia (Jakarta), Malaysia (AIMST), Singapore, Thailand and Vietnam with the EURAXESS Prize. To find out more visit our website.

3 *HOT TOPIC*: Horizon Europe – the next research and innovation framework programme

The European Commission has published its proposal for Horizon Europe, an ambitious €100 billion research and innovation programme that will succeed Horizon 2020. Set to launch in 2021, Horizon Europe will build on the achievements and success of Horizon 2020, bridging the past and the future of research and innovation in Europe.

The European Commission is proposing a total budget of €100 billion for 2021-2027 for Horizon Europe and the Euratom Research and Training Programme. The new Framework Programme is intended to be the most ambitious research and innovation funding programme to date, described by Commissioner Carlos Moedas as "the biggest increase in absolute amounts ever."

In keeping with the design of its predecessor, Horizon Europe is divided into three pillars:

The Open Science pillar (€25.8 billion) supports frontier research projects defined and driven by researchers themselves through the European Research Council (€16.6 billion), funds fellowships and exchanges for researchers through Marie Skłodowska-Curie Actions (€6.8 billion), and invests in world-class research infrastructures.

At a conference entitled "International R&D: Horizon Europe and the world" Jean-Eric Paquet, Director General of DG Research and Innovation, outlined the Commission's plans for participation of non-EU-countries in Horizon Europe. Association agreements to the Framework Programme, allowing countries to participate in EU research under the same conditions as Member States, will be much wider than in the past. Making Horizon Europe open for international collaboration is "a top priority" for the Commission. See

The Global Challenges and Industrial Competiveness pillar (€52.7 billion) directly supports research relating to societal challenges, reinforces technological and industrial capacities, and sets EU-wide missions with ambitious goals tackling some of our biggest problems. It also includes activities pursued by the Joint Research Centre (€2.2 billion) which supports EU and national policymakers with independent scientific evidence and technical support.

The Open Innovation pillar (€13.5 billion) aims to make Europe a frontrunner in market-creating innovation via the European Innovation Council (€10 billion). It will help develop the overall European innovation landscape, including by further strengthening the European Institute of Innovation and Technology (EIT) to foster the integration of business, research, higher education and entrepreneurship (€3 billion).

Horizon Europe will continue to drive Europe's scientific excellence through the European Research Council (ERC) and the Marie Skłodowska-Curie fellowships and exchanges and draw on the scientific advice, technical support and dedicated research of the Joint Research Centre (JRC). It will also add a new level of ambition and boost the scientific, economic and societal impact of EU funding.

Horizon Europe will also introduce several new main features.

The European Innovation Council: one-stop shop to bring the most promising ideas from lab to real world application and support the most innovative start-ups and companies to scale up their ideas. It will provide direct support to innovators through two main funding instruments, one for early stages and the other for development and market deployment.

EU-wide R&I missions: ambitious, bold goals to tackle issues that affect our daily lives. Examples could range from the fight against cancer, to clean transport or plastic-free oceans. They will be co-designed with citizens, stakeholders, the European Parliament and Member States.

Open Science: will become the modus operandi of Horizon Europe. It will go beyond the open access policy of Horizon 2020 and require open access to publications, data, and to research data management plans.

A new generation of European Partnerships: Horizon Europe will streamline the number of partnerships that the EU co-programmes or co-funds with partners like industry, civil society and funding foundations.

Simpler rules: This will increase legal certainty and reduce administrative burden for beneficiaries and programme administrators.

- Continued principle of a single set of rules with further improvements
- Stable funding rates
- Further simplification of funding model
- Increased use of simplified forms of grants where appropriate (including lump sums)
- More dissemination and exploitation of research result

The proposed budget allocation of €100 billion for 2021-2027 includes €97.6 billion under Horizon Europe (€3.5 billion of which will be allocated under the InvestEU Fund) and €2.4 billion for the Euratom Research and Training Programme. The Euratom programme, which funds research and training on nuclear safety, security and radiation protection, will have an increased focus on non-power applications such as healthcare and medical equipment, and will also support the mobility of nuclear researchers under the Marie Skłodowska-Curie Actions.

Related: Innovation Scoreboard 2019

The innovation performance of the EU and its regions is increasing. For the first time ever, Europe's innovation outperforms that of the United States. However, the EU continues to lose some ground to Japan and South Korea, and China is catching up fast.

Source: European Commission Fact Sheet Horizon Europe

4 In Case You Missed IT…

Get Expert Advice on your MSCA Proposal! 8-9 July, Bangkok, Thailand

We offer a comprehensive and **interactive workshop covering all aspects of effective proposal preparation** for the Marie Sklodowska-Curie Actions (MSCA) with a focus the MSCA Individual Fellowships and the MSCA Research and Innovation Staff Exchange Programme (RISE). If you are preparing a grant proposal now – don't miss this unique opportunity for hands on advice! Find out more

EURAXESS ASEAN Hosting European Research Days in Thailand & Malaysia

Do you want to **advance your research career in Europe**? Are you keen to collaborate with research partners in Europe? Join the European Research Days in Bangkok, Thailand on 1 July 2019 and in Kuala Lumpur, Malaysia on 27 August 2019 to learn about the opportunities available to researchers in ASEAN.

European Research & Innovation Days, 24 – 26 September 2019, Brussels, Begium

EUROPEAN RESEARCH & INNOVATION DAYS

European Research and Innovation Days is the first annual policy event of the European Commission, bringing together stakeholders to debate and shape the future research and innovation landscape. Find out more

EC publishes foresight study: 100 radical innovation breakthroughs for the future

A self-healing smartphones, asteroid mining for essential minerals and telepathic brain-to-brain communication enabled by technology. These are some examples of impressive innovations on the horizon presented in the new independent expert report 100 radical Innovation Breakthroughs for the future.

EURAXESS Members in Focus: Serbia

40 European countries are part of the EURAXESS network. Here we focus on Serbia.

The country file can be accessed here.

July edition of EURAXESS ASEAN Funding Guide

EURAXESS ASEAN has launched an electronic Guide to Research Funding & Fellowship Opportunities in Europe**.** The guide provides an overview of the available schemes available to researchers in ASEAN. Latest edition out now.

Stay updated on European Funding Opportunities – Sign Up for the EURAXESS ASEAN Flashnotes

EURAXESS ASEAN Flashnote

EURAXESS Flashnotes are bi-monthly emailers on European research funding and mobility programmes.

To join our mailing list, please send us an email at asean@euraxess.net with the heading "join Flashnote mailing list"

5 About us

EURAXESS ASEAN is a networking tool for European researchers active in Southeast Asia and for international researchers wishing to collaborate and/or pursue a career in Europe. EURAXESS ASEAN provides information about research in Europe, European research policy, opportunities for research funding, for EU-ASEAN and international collaboration and for trans-national mobility. Membership is free.

Visit us at asean.euraxess.org and Join the EURAXESS ASEAN community.

EURAXESS Worldwide networks have thus far been launched in North America (USA & Canada) Japan, China, India, Korea, and in ASEAN (currently focusing on Singapore, Thailand, Malaysia, Vietnam and Indonesia). As of March 2017, the EURAXESS Brazil network has been expanded to cover Latin America and the Caribbean States as well.