

2020
1st Quarter

**EURAXESS
ASEAN
research
career
development
webinars 2020.
Which topics
would you like
us to cover?**

[Vote now!](#)

EURAXESS ASEAN

Dear Colleagues,

Our first newsletter of the year finds us all together in a time of unprecedented challenges as we are facing the spread of the COVID-19 virus. The European Commission is working closely with the research community to tackle the virus. In the words of European Commission President Ursula von der Leyen, “Scientific expertise and good advice is now more valuable than ever.”

Through the Horizon 2020 programme, the European Commission has very rapidly mobilised new funds for research through two special calls for research projects that will address the full spectrum of needs: understanding the disease, diagnosis, vaccines, treatment and preparedness.

The EURAXESS ASEAN team will continue to inform and support our community members in their mobility and research career development. We are planning a series of career development webinars and would appreciate your input to our very short survey.

We hope this finds you all well! Stay safe everyone!

EURAXESS ASEAN



Contents

| | | |
|------------|--|-----------|
| 1 | <i>Briefing: MSCA Individual Fellowships – promoting global talent circulation</i> | 3 |
| 2 | <i>Hot topic: COVID-19 – How unprecedented data sharing has led to faster-than-ever outbreak research</i> | 8 |
| 3 | <i>EURAXESS news</i> | 13 |
| 3.1 | <i>MORE4 survey on mobility patterns and career paths of researchers working outside Europe</i> | 13 |
| 3.2 | <i>Develop your research career with EURAXESS: Launch of ‘Career development tools and services’ brochure</i> | 14 |
| 4 | <i>In case you missed it...</i> | 15 |
| 5 | <i>About us</i> | 16 |



1 Briefing: MSCA Individual Fellowships – promoting global talent circulation

Are you interested in a two-year postdoc stay in Europe with EU funding to work on your dream project taking your career to the next level? Or are you looking to intensify collaboration with your European project partners by hosting a European postdoc at your research group or lab here in ASEAN? Then the highly prestigious MSCA Individual Fellowships should be on your radar.

The Marie Skłodowska-Curie Actions (MSCA) thrive by being open to all domains of research and innovation, chosen freely by the applicants in a fully bottom-up manner. They are based on the principle of mobility, and researchers can receive funding on the condition that they move from one country to another to acquire new knowledge and develop their research career.

There are two types of Individual Fellowships; European Fellowships and Global Fellowships enabling research talent to move between Europe and the world!

Postdoctoral research stays in Europe – European Fellowships

MSCA European Fellowships (EF) are a great option if you are an experienced researcher looking to give your career a boost by working in Europe. They offer exciting new learning opportunities and a chance to add some sparkle to your CV.

MSCA European Fellowships can be carried out in the 27 member countries of the European Union (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Spain, Slovakia, Slovenia and Sweden) or in European countries associated with the European Research Area (Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Moldova, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Tunisia, Turkey, and Ukraine). The [UK](#) is also eligible as a host country for the MSCA-IF call 2020.



MSCA European Fellowships provide funding for a research stay lasting between 12 and 24 months. They are open to experienced researchers from across the world and all nationalities are eligible. Applicants need a doctoral degree or at least four years' full-time research experience by the time of the call deadline. Remember this is a bottom-up call and all research areas can be funded!

Please note that the MSCA European Fellowship funds post-doctoral research in Europe only. MSCA Fellows must not have resided or carried out their main activity (e.g. work, studies) in the country where they intend to carry out their Fellowship for more than 12 months in the three years immediately prior to the recruitment date.

The grant provides a generous allowance to cover living, travel and family costs. In addition, the EU contributes to the training, networking and research costs of the fellow, as well as to the management and indirect costs of the project.

I want to go to Europe with an MSCA European Fellowship. What should I do next?

Step 1: Read up on the [MSCA European Fellowship Scheme](#).

- Does this scheme match your career development plans?
- Do you meet all the eligibility criteria?

Step 2: Develop a first idea for your research project.

- Is this a project that excites and challenges you?
- Will it take your career as a researcher to the next level?

Step 3: Find a supervisor in Europe to host you for the duration of the Fellowship!

- Search the [EURAXESS Database of Hosting Offers](#).
- Be proactive – let your network know you are ready to apply for this scheme! Contact your network of European collaborators; ask for assistance from your local supervisor, your research colleagues or your International Relations Office to put you in touch with their European colleagues. Let your network know that you are looking for a host and ask for help!



Creating closer links with European research partners – Hosting a Global Fellow in ASEAN

MSCA Global Fellowships (GF) are a great opportunity to deepen your ties with your European research partners by hosting a European research talent at your institution in ASEAN.

MSCA Global Fellowships offer the opportunity for Europe-based researchers to conduct a research project in a host institution located in a country that is neither a member of the European Union nor belongs to the group of countries associated with the European Research Area. All countries in ASEAN, including Singapore, are eligible under this scheme to host a European Fellow.

MSCA Global Fellowships provide funding for research stays between 12 to 24 months in the non-European country followed by a mandatory 12 month return phase to be spent at the institution in Europe. During the whole duration of the Global Fellowship the researcher is employed by the European host institution and is seconded to the institution in the non-European country for the outgoing phase. The entire duration of the Fellowship is funded by the EU.

MSCA Global Fellowships are open to experienced researchers who are citizens of a European Union Member State or an Associated Country. However, Global Fellowship are also open to nationals of non-European countries – for example, Singapore, US, Brazil... – providing they are long-term residents in Europe, meaning a period of at least five consecutive years spent in an EU Member State or Associated Country prior to the deadline. Applicants need a doctoral degree or at least four years' full-time research experience by the time of the call deadline. All research areas can be funded.

I want to host a European Fellow here in ASEAN. What should I do next?

Step 1: Read up on the [MSCA Global Fellowship Scheme](#).

Step 2: Reach out to your research collaborators in Europe.

- Let them know that you and your institution are keen to host an MSCA Fellow.
- Together with your European colleague(s) develop a joint hosting offer. Maybe you or your European colleague(s) already have a candidate in mind?

Step 3: Make your hosting offer known to potential applicants.

- Let your research network partners know. Do they know potential candidates?
- Post on relevant social media channels.
- **Post the hosting offer on the [EURAXESS portal](#). [Follow this step-by-step guide!](#)**



FAQ: How will Brexit impact the Marie Skłodowska-Curie Actions?

The Withdrawal Agreement foresees that the UK will continue to participate in the current (2014-2020) EU programmes, including Marie Skłodowska-Curie Actions, as if the UK was an EU Member State until the closure of the programmes. This means that UK beneficiaries can continue to take part in grants awarded under the current Multi-Annual Financial Framework (MFF) until their end date, even if it is after 2020.

Candidates interested in applying for the MSCA European Fellowship with a host based in the **UK** are invited to participate in a **webinar** hosted by the UK National Contact Point for Horizon 2020 Marie Skłodowska-Curie Actions on 8 April 2020. [Details and registration](#)

Resources and support

Where to find information about the grant scheme and the call for application?

- ⇒ [Official website](#) of the Marie Skłodowska Curie Actions (MSCA)
- ⇒ [Net4Mobility+ website](#)
- ⇒ If you would like to share the information please feel free to use our [Briefing on the MSCA Global Fellowship](#) and our [Briefing on the MSCA European Fellowship](#).

Can I get in touch with alumni of the programme?

Yes, please contact the [Marie Curie Alumni Association SEA Chapter](#). You can reach out to the Chapter's Chairwoman Dr Jenny Lind Elmaco at: se.asia.chapter@mariecuriealumni.eu

Can I get help in finding a European host?

The EURAXESS hosting database already lists **145 offers** from universities and research agencies across Europe wishing to host candidates for the 2020 MSCA-IF Call.

Search the [EURAXESS database of hosting offers](#).

Advertising your hosting offer in ASEAN to European applicants

Besides alerting your own research network in Europe, please do consider posting your offer on the EURAXESS portal. Our [Guide](#) explains how to do so in easy steps.

Can I get support for the proposal preparation?

- Consult the webinar slides, '[How to write a successful MSCA-IF proposal](#)' produced by the German Horizon 2020 National Contact Point for the Marie Skłodowska-Curie Actions (NCP MSCA for first tips and tricks.
- Read the [Advice](#) on proposal preparation by successful MSCA Fellow Judit Chamorro-Servent and study the [insight](#) by Malaysian MSCA Fellow Dr Valerie Soo.
- Take part in the **Net4Mobility+ webinar** on the Marie Skłodowska-Curie Actions with specific focus on Individual Fellowships on **2 June 2020 at 2pm (CET)**. Any open questions that remain will then be addressed in a subsequent interactive Q&A session. [Registration](#)



Interview with MSCA Fellow Quoc Chi Nguyen



Quoc Chi Nguyen received a Bachelor of Science in mechanical engineering in 2002 and four years later a Master's in cybernetics, both from Ho Chi Minh City University of Technology, Vietnam. He completed a PhD in mechanical engineering from the Pusan National University, Korea in 2012. He has been the head of the Department of Mechatronics, Ho Chi Minh University of Technology since 2018. Dr Nguyen's current research interests include MEMS control, nonlinear systems theory, adaptive control, and distributed parameter systems.

In 2013, Quoc Chi Nguyen received news that he had won a prestigious Marie Skłodowska-Curie Actions Global Fellowship (MSCA-GF) to carry out post-doctoral research at Tel Aviv University's School of Mechanical Engineering in Israel. He was chosen from a pool of more than 1,000 applicants! The MSCA-GF is an EU programme run by the European Commission to support researchers at all stages of their careers.

Receiving the award was an extremely happy and proud moment for Dr Nguyen. MSCA-GF is a very competitive and well-known programme worldwide, he noted, helping to advance research and establish new career paths.

As a Fellow, he got the chance to work with Prof. Slava Krylov in the project 'Vibration analysis and control of micro-beam' at the Microsystems Design and Characterisation Laboratory, Tel Aviv University.

"I think the most valuable part of my career development as a Marie Skłodowska-Curie Actions researcher in Israel was learning the importance of critical thinking and optimism," said Dr Nguyen.

He chose Israel as his research destination because it is such an innovative country with a diverse culture and rich history. He had a wonderful experience and appreciated the Israeli's innovative thinking and effective style of working.

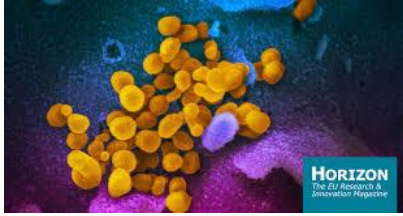
Dr Nguyen witnessed first-hand how the European research environment can help ASEAN researchers develop professionally. On the other hand, he pointed out that new ideas coming from ASEAN researchers can also help institutions in Europe identify and tackle global issues.

The day Dr Nguyen discovered on the internet what MSCA had to offer changed his world forever, leading to career advancement and new opportunities. Today, he is head of the Department of Mechatronics at Ho Chi Minh University of Technology. He is eager to tell his students and researchers about the unique experience of being a Fellow. His top tip for a successful application is to be "well prepared". Another piece of advice: "I mostly encourage the young researchers to not hesitate about their ideas for research proposals; any ideas can be successful if you focus and make it possible," he told EURAXESS ASEAN.

What comes next for this ambitious scientist? Innovation is the key to the future, he suggested: "Innovation for my country and to help people live more sustainably."



2 Hot topic: COVID-19 – How unprecedented data sharing has led to faster-than-ever outbreak research



This article has been produced by Ian Le Guillou and was published in *HORIZON: The EU Research & Innovation Magazine*.
[Source](#)

Advances in gene sequencing have allowed scientists to trace and monitor the COVID-19 pandemic faster than any previous outbreak. However, gaps in our knowledge of how coronaviruses work has made it difficult to understand what makes the new coronavirus special.

When the new coronavirus (formally known as SARS-CoV-2) was identified in China in January, scientists around the world were ready to respond. The virus's entire genetic makeup, or genome, was published [online](#) within days. By comparison, during the SARS coronavirus outbreak in 2003, this took almost three months, after the disease was [originally blamed on chlamydia](#).

Advances in the technology have brought down the cost of gene sequencing significantly and the machines are now small enough to fit in the palm of your hand. This has made it easier for a large number of samples to be sequenced around the world.

“You can see from the sequences how the virus spreads, the speed at which it's spreading and estimate the number of people that are infected. As we get more and more sequences, the more and more accurate the numbers are,” said Professor Anne-Mieke Vandamme from KU Leuven, Belgium.

Next-generation sequencing, or NGS, can generate enormous amounts of data, and the challenge becomes finding ways to analyse it properly.

In 2015, Prof. Vandamme led a project called [VIROGENESIS](#) to develop new tools to help analyse and interpret the data that comes from sequencing, particularly for laboratories that were not used to dealing with sophisticated genetic analysis.

“When we were doing the project, there were only mainly research labs that had NGS. Now everyone has NGS,” she said.

One of the tools developed, called [Genome Detective](#), can take the raw data from the sequencing machine, filter out results from non-viruses, piece together the genome and use that to identify the virus. It does not rely on any prior guesses or hypotheses, so it can even identify viruses



that have not been seen before. This was used to confirm the first case of COVID-19 in Belgium, identifying it as a SARS-related coronavirus.

Online sharing

The power of gene sequencing comes from comparing the results across different cases. Prof. Vandamme says that it has been “fantastic” to see the level of collaboration internationally: “There is a lot more online sharing of data and sequences ... compared to the past because we have a lot more online sharing tools available.”

One of these tools is [NextStrain](#), an online resource that uses genome data to monitor the evolution of disease-causing organisms such as viruses in real time. It has tracked several outbreaks including Zika, Ebola and Dengue and has even been used to inform World Health Organisation policy on seasonal flu.

“You can see from the sequences how the virus spreads, the speed at which it's spreading and estimate the number of people that are infected.”

Professor Anne-Mieke Vandamme, KU Leuven,

Research papers typically take months to be published – an aeon in the current race to tackle the pandemic. The need to share information quickly has encouraged greater sharing of ‘preprints’, drafts of papers that have not yet been through peer review.

“The push towards open science, open data and preprinting has really changed the way we experience the scientific discourse in this outbreak compared to previous ones,” said Professor Richard Neher, from the University of Basel, Switzerland, who leads the NextStrain project.

NextStrain already has over 700 genomes of the new coronavirus, which it can use to trace the outbreak by detecting new mutations in the virus. The mutations do not necessarily affect how the virus behaves, but they can act as a genetic signature to link cases that are related. Like tracing your ancestry through a DNA test, a virus sequenced in Madrid, for instance, could have mutations that suggest it originated from an outbreak in Italy.

“In the current pandemic, it gives us a ‘lower bound’ on how often the virus has been introduced to a specific location,” Prof. Neher said.

NextStrain publishes a weekly situation report that analyses these trends. The team was able to estimate that the [outbreak in Iran](#) may have been



introduced by a single person, whereas at least four different introductions were responsible for the outbreak in the UK, as of 13 March.

“[Sequencing cases] will become even more important because as we start cracking down on [the pandemic], which we hopefully will achieve, it will tell us how many transmission chains are still circulating and whether the virus is being transported from one region to another,” said Prof. Neher.

He believes that, as the virus continues to spread, it will accumulate more genetic diversity and it will give us more information on how the virus is being transmitted.

Genetic blueprint

Despite the genetic blueprint of the new coronavirus being readily available, it still does not tell us very much about how it differs from other coronaviruses. Much of what we know has come from seeing how it has spread through the population. It is now clear how different it is to previous coronavirus outbreaks, such as SARS and MERS.

“They were certainly much less easy to transmit, and also had a very different presentation in that only a few people were asymptomatic. One of the many challenges that we are facing here is that people that have only very mild symptoms have been substantial in transmitting this virus,” said Prof. Neher.

“That is much harder to control because you have to convince somebody who is basically healthy to distance themselves from others.”

Yet, it is not clear why that is the case. The traits of the virus, such as its infectiousness and severity, are driven by its proteins that are responsible for invading our cells and replicating the viral genome.

“Sequencing a genome these days is pretty fast, but for proteins it’s different,” said Dr Charlotte Uetrecht, from the Heinrich Pette Institute, Leibniz Institute for Experimental Virology, Germany. She studies coronavirus proteins through a project called [SPOCKS MS](#).

“My lab is producing the proteins [of the new coronavirus] right now. So we want to see whether they behave the same [as other coronaviruses]. We usually need to produce the proteins and purify them to a certain extent so we can look at them. So it’s a lot more laborious than sequencing.”

Even small changes to the viral proteins can significantly influence how they interact with each other. Dr Uetrecht studies these fleeting associations, which are crucial for the virus to replicate.

“We know a bit about how that looks, but we don’t really understand which of the proteins need to associate for a new genome to be produced,” she said.



Although understanding these processes could provide new targets for antiviral drugs, Dr Uetrecht says that historically there has been little interest in studying coronaviruses as they have had little relative impact until now.

The case numbers were low for SARS and MERS and interest fell after the outbreaks, she says. “The common-cold-causing coronaviruses were not [considered] dangerous.”

“There was not much research into coronaviruses at all, until SARS. I know a few people who have been working on coronaviruses since the 1990s, and they were not very well regarded – they had a hard time getting funding. It was considered a boring, irrelevant virus.

“Now, it is very interesting again.”

2.1 The European Commission is ramping up research funding to combat COVID-19



Through the [Horizon 2020](#) programme, the European Commission has very rapidly mobilised new funds for research through two special calls for research projects that will address the full spectrum of needs: understanding the disease, diagnosis, vaccines, treatment and preparedness.

On 10 March [the Commission mobilised €140 million of public and private funding for research on vaccines, diagnosis and treatment](#). On 30 January 2020, it launched a special call for expressions of interest to support research on COVID-19 with a budget of €10 million mobilised, subsequently increased to €47.5 million, given the scale of the outbreak and the potential of the research projects submitted. This rapid reaction is made possible by the standing budget line for emergency research funds that the Commission maintains as part of the Horizon 2020 programme for research and innovation.

Some 91 proposals were received within the very short two-week deadline and their evaluation by independent experts was performed in record time at the end of February. A total of [17 research projects were selected for funding](#) and applicants were informed on 4 March 2020. Subject to signing grant agreements with the the Commission, researchers can start their work immediately. Collectively, the 17 projects will address a range of issues.



- Rapid point-of-care diagnostic tests: Increased efforts will concentrate on enabling front-line health workers to make the diagnosis more quickly and more accurately, which will in turn reduce the risk of further spread of the virus.
- New treatments, in which a dual approach will be adopted: Firstly, accelerating the development of new treatments currently in the pipeline (including therapeutic peptides, monoclonal antibodies and broad-spectrum antivirals), and secondly, screening and identifying molecules that could work against the virus, using advanced modelling and computing techniques.
- The development of new vaccines: The research will focus on developing a prophylactic vaccine and a therapeutic vaccine, which will be used for prevention and treatment respectively.
- Improving epidemiology and public health, including our preparedness and response to outbreaks: These projects will help develop better monitoring systems in order to effectively prevent and control the spread of the virus, as well as contribute to the assessment of social dynamics.
- A [special fast-track call for research proposals](#): On 3 March 2020, this call was announced by the Innovative Medicines Initiative (IMI), a public-private partnership between the EU and the pharmaceutical industry through its association EFPIA.
- Treatments and diagnostics: The European Commission funds IMI through Horizon 2020 and will contribute up to €45 million to this call. A commitment of a similar scale is expected from the pharmaceutical industry so that the total investment could reach up to €90 million. The IMI call invites proposals for projects to develop treatments and diagnostics to better tackle the coronavirus outbreak and to increase preparedness for potential future outbreaks.

For regular updates on the European Commission's coronavirus response visit the [official website](#).



3 EURAXESS news

3.1 MORE4 survey on mobility patterns and career paths of researchers working outside Europe



MORE4

The European Commission has launched the fourth international study to improve the knowledge of mobility patterns, working conditions and career paths of researchers. The European Commission has commissioned PPMI (Lithuania), in collaboration with IDEA Consult (Belgium) and WIFO (Austria), to carry out this study which is known as MORE4 (<http://www.more-4.eu>).

This study involves two large surveys. The first one focuses on researchers currently working in one of the higher education institutes in the EU. The second survey will take a global perspective and focuses on **EU and non-EU researchers currently working outside the EU.**

If you are a researcher working in a non-European country, we invite you to complete the survey, which can be accessed through the following link:

[Click here to take and share the survey!](#)

Together, these two surveys will provide a comprehensive picture of researcher mobility and satisfaction worldwide.

THANK YOU!

Your input is very valuable to us. Please note that only aggregate data collected through this survey will be used for purposes of this study. Any personal data and individual answers will be treated as strictly confidential and processed anonymously. For more details please see the [Specific Privacy Statement](#).



3.2 Develop your research career with EURAXESS: Launch of 'Career development tools and services' brochure



EURAXESS is dedicated to supporting researchers in their career development throughout their professional journey!

A new section dedicated to ['career development'](#) has been added to the EURAXESS website listing an array of resources for both individual researchers and research organisations.

Among the available resources, you will find the following:

- Career orientation tool
- Engage with industry
- Find training resources
- Policy recommendations

All EURAXESS tools, resources and services are **free of charge** and are available online.

Also available is a new online brochure listing the available EURAXESS **career development tools and the services and resources** which have been developed to support researchers in improving their skills and knowledge at all stages of their research career.

The new online brochure was developed within the EURAXESS TOP IV 'Open to the World' project.

[Download and share the brochure now](#)



4 In case you missed it...

Latest edition of EURAXESS ASEAN Funding Guide published

The EURAXESS ASEAN Funding Guide provides a compilation of career advancement, funding and collaboration opportunities in Europe.

[Find out more](#)



**AESCON: Asia-Europe Sustainable
Connectivity Scientific Conference
postponed**

AESCON is the first scientific conference on Asia-Europe sustainable connectivity, bringing together researchers and policy analysts working in the field of international connectivity, globalisation and their impacts on sustainable development, with a particular focus on Asia-Europe connections. **The conference has been postponed until 23-25 September 2020. Participants are kindly asked [to register again](#) to confirm their attendance.**



European Commission awards MSCA Seal of Excellence to over 2,000 excellent researchers

The '[Seal of Excellence – Marie Curie Actions](#)' is being awarded to high quality MSCA-IF proposals. It recognises the value of a project proposal and guarantees it has passed a highly competitive evaluation process.

Stay updated on European Funding Opportunities – sign up for the EURAXESS ASEAN Flashnotes

EURAXESS Flashnotes are regular 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'**



EURAXESS ASEAN Flashnote



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 Australia and New Zealand, North America (USA and Canada), Japan, China, India, Korea, ASEAN (currently focusing on Singapore, Thailand, Malaysia, Vietnam and Indonesia), and Latin America and the Caribbean States (currently focusing on Brazil, Argentina, Chile, Mexico and Colombia).