

January 2019

NEWSLETTER



Vienna is calling! The sixth MCAA General Assembly and Annual Conference will take place in Austria's capital city on 24-25 February. Here's a sneak peek!

Now you can use PayPal for our events. And networking just got a lot easier thanks to our brand new app.

The MCAA Policy Working Group aims to support researchers with disabilities through its ResearchAbility project. [Alexandra Katharina Nothnagel](#) tells us all about it.

page 13

page 19

CONTENTS ■

Message from the board

[page 02](#)

News from the board

[page 13](#)

Networking for nerds

[page 25](#)

Partner:
Vienna BioCenter
[page 03](#)

News from the Chapters
Germany
[page 14](#)

Austrian EU Council Presidency Conference
[page 27](#)

Partner
VIKKI Academy
[page 05](#)

News from the Chapters
Bulgary
[page 16](#)

Researchers and Students of Munich
[page 29](#)

GA in Vienna:
Top five reasons to attend
[page 07](#)

The project for researchers with disabilities
[page 19](#)

Members' achievements
[page 32](#)

GA in Vienna:
Meet Mostafa Moonir
[page 09](#)

Members' achievements
[page 21](#)

GA in Vienna:
A promising workshop
[page 12](#)

24th Annual Meeting of Archaeologists
[page 23](#)

MESSAGE FROM THE BOARD



For many, winter is a time for slowing down, conserving energy and making plans for the warmer, brighter months to come in spring and summer. Not so for MCAA.

With our 6th Annual General Assembly and Annual Conference in Vienna on February 24-25 fast approaching, we are busy as ever making the final preparations to what will undoubtedly be the biggest MCAA event to date.

Unlike past years, the Annual Conference will take place over 2 days and beginning directly after the close of the General Assembly on February 24. Historically, the General Assembly included parallel sessions for individual working groups, but we realized that these sessions would be of interest to all researchers and stakeholders and give our working groups an opportunity to promote their activities to a wider audience.

Our program now features over 20 parallel sessions spread out over 5 time slots, ensuring that attendees will have more opportunity to engage in topics of interest to them.

Throughout both days, a career fair will take place where attendees will have a chance to interact with some of our esteemed partners.

We also have an inspiring keynote speaker, Sabine Herlitschka, Chief Executive Officer and Chief Technology Officer of Infineon Technologies Austria AG. With a background in research, Dr. Herlitschka's career path includes through leadership positions in university, national research funding and industrial settings.

Vienna 2019 also includes a fantastic evening program. On February 24, we will host our Gala Dinner in the Rathauskeller just beneath the landmark Vienna "Rathaus", or City Hall. The Gala will be highlighted by the annual presentation of the MCAA Awards, as well as by a keynote address from world-renowned quantum physicist Professor Anton Zeilinger of the University of Vienna.

We'll be wrapping up the two days in style with an evening of networking, fun and entertainment featuring "The Dark Side of Research", an MCAA-produced Science Comedy event taking place at the Ottakringer Brewery. Combining elements of Science Slams, stand-up comedy and the hard relatives of life as a researcher, "The Dark Side of Research" was first presented at the Edinburgh Fringe Festival 2018, and is sure to entertain. We'll close out the night with live music to ensure you go home with a smile.

While much of our work has been focused on Vienna 2019, we should

also recognize what MCAA has been doing in other areas. The MCAA Norway Chapter has been founded and had their kick-off meeting in January, 2019. Likewise for the newly established Research Funding Working Group (RFWG).

MCAA is also very proud of our partnership with KAZI, an Antwerp-based company, who has partnered with us to use tailored surveys for identifying the expectation gap between researchers and industries. Funded by the Flanders government, the project aims for talent retention and better career perspectives for researchers.

There are too many other initiatives of MCAA to list here, but you can learn more about what we're up to in this Newsletter, on our web portal, and of course at Vienna 2019.

Finally, I want to personally thank each and every member who has volunteered for MCAA throughout this year, and in particular our Board Members, Chapter Boards and Working Group Boards who put in countless hours of their valuable time to help build a stronger MCAA community.

I look forward to seeing many of you in Vienna, and I wish everyone health, success and happiness in 2019.

MATTHEW DIFRANCO
MCAA CHAIR ON BEHALF
OF THE MCAA BOARD

PARTNER



Are you attending the MCAA General Assembly and Annual Conference in Vienna? You may know that Vienna is one of the most livable cities in the world, but did you know that it is home to one of Europe's biggest life sciences hubs?

VIENNA BIOCENTER

The Vienna BioCenter is a leading life sciences campus, offering a unique combination of research, education, and companies in a single location.

RESEARCH

Scientists at the Vienna BioCenter have made several ground-breaking discoveries that have seen them recognised by some of the most prestigious awards in the world, including the Breakthrough Prizes

for Emmanuelle Charpentier (CRISPR/Cas9) and for Kim Nasmyth (chromosome segregation).

The Vienna BioCenter hosts over 1,300 scientists, with a focus on molecular biology and biomedicine. About 40% of the staff at

PARTNER



the Vienna BioCenter come from abroad, and English is their working language. The heavy-weight research is carried out by four academic research institutes, supported by the state-of-the-art Vienna Biocenter Core Facilities (VBCF):

- Gregor Mendel Institute of Molecular Plant Biology (GMI)
- Institute of Molecular Biotechnology (IMBA)
- Max F. Perutz Laboratories (MFPL)
- Research Institute of Molecular Pathology (IMP)

EDUCATION & CAREER

Education is one of the pillars of the Vienna BioCenter. The four re-

search institutes offer different training opportunities under the motto "Empowering Curious Researchers", including an international Summer School and PhD programmes. There are also multiple opportunities for experienced researchers: as Postdocs or as independent Group Leaders.

BIOTECH

The biotech scene at the Vienna BioCenter is growing rapidly. Currently there are more than 20 companies on campus, mainly in the areas of vaccine development, immunology, and disease diagnostics. Several biotech companies are spin-offs from the research and educational institutions on site, while others have chosen to relo-

cate to the Vienna BioCenter for its unique location, services, and atmosphere.

CAREER OPPORTUNITIES

If you are passionate about science, the Vienna BioCenter offers a fantastic environment for growth, both professionally and personally. Check the full list of vacancies here: <https://www.viennabiocenter.org/career/open-positions/>

MEET US AT THE MCAA ANNUAL CONFERENCE 2019

Are you attending the MCAA Annual Conference in Vienna on 24-25 February 2019? If so, come and meet us in person at the Vienna BioCenter stand!

MORE INFORMATION

Raquel Diaz Francia

Vienna BioCenter Marketing Manager

raquel.diaz@vbc.ac.at

www.viennabiocenter.org



PARTNER

YOUR RESEARCH CAN CHANGE
THE WORLD
THAT'S WHY EVERYBODY SHOULD
KNOW ABOUT IT



VIKKI ANIMATING
GREAT
RESEARCH

Academic research benefits social and political discourse. It helps people make better decisions, it helps organisations offer better outputs, and it helps policymakers shape better futures. In short – your research could change the world. But it has to reach it first. In reality, val-

uable knowledge created through academic research does not easily seep through to the general public.

Vikki's mission is to help create a flywheel of knowledge distribution. We help researchers tell compelling stories, create relatable content, and

distribute it via a multitude of media channels. This is how groundbreaking research can reach the outside world and make a meaningful impact, helping the general public take informed and intelligent decisions.

Reaching beyond your circle of influence

Alongside with MCAA, Vikki is aiming to empower researchers to build communities of enthusiasts around them and create their own 'tribe' of passionate people infatuated with how great research can impact society and shape a better future. By doing so, researchers - you - can make



PARTNER



a difference beyond your immediate circle of influence.

Imagine that those interested in your research are your tribe. Not only your colleagues, but other stakeholders from relevant disciplines, industries, or those who can be impacted from it in some aspect - locally and across borders. You can lead them to better understand an element of the world around them, and unleash human knowledge by making it accessible and consumable by a large variety of audiences.

How can you use storytelling techniques yourself?

There's no need to wait until communities emerge. You can start with sharing your research at events, meetings, conferences and even on social media by following these 5 practical tips:

- People like stories, not explanations. Shape your messaging as

a storyteller telling about a journey towards a goal.

- Stick to your key messages. Compose two sentences about the ultimate purpose of the research, what you set out to discover, and how it helps your field.
- Use metaphors if possible, or visuals from a relatable image your audience is familiar with (e.g. the "bad" cancer cells you studied act like the drug barons in the series *Narcos* if this works for your audience).
- Get personal. Explain your motivation, struggle, and connection to the topic, add pictures of your laboratory and team. Show

you're passionate about the topic.

- What's next? Tell your audience about what you're planning to do next and paint them a picture of the future vision for your research.

We warmly welcome you to join the Vikki community, where we equip researchers with practical tools to build their own communities of knowledge enthusiasts. Get inspired from past publications (e.g. a cancer treatment [research hitting almost 1m views on YouTube](#)). Lead your own tribe. Reach the world with your research.

CONTACT DETAILS

nofar@vikkiacademy.com
www.vikkiacademy.com/
<https://www.youtube.com/user/VIKKiAcademy/videos>

SPECIAL COVERAGE GENERAL ASSEMBLY IN VIENNA

TOP FIVE REASONS TO ATTEND

It will be the MCAA's biggest event of the year. There's still time to register! If you aren't convinced yet, here are the top five reasons to attend.

1. IT'S THE BIGGEST EVER

Get ready for two days of intensive networking! More than 700 partic-

ipants are expected to attend the General Assembly and its many social events. We are also pleased to inform you that the biggest career fair is also on the agenda!

2. A WONDERFUL VENUE

The University of Vienna was founded by Duke Rudolph IV in



SPECIAL COVERAGE GENERAL ASSEMBLY IN VIENNA

RESEARCH
AND
INNOVATION
BEYOND THE
INFORMATION AGE

6TH GENERAL ASSEMBLY AND ANNUAL CONFERENCE



24 - 25
FEBRUARY 2019
VIENNA, AUSTRIA

#MCAAAGA2019

1365. It is the oldest university in the German-speaking world, one of the largest in Central Europe, and one of the most renowned, especially in the Humanities. It is Austria's largest teaching and research institution. What's more, it is associated with 15 Nobel Prize winners and has been the academic home to an impressive number of scholars of historical, as well as, academic importance. A very inspiring venue indeed!

3. THE FUTURE OF RESEARCH

Don't miss a unique opportunity to learn about what we can expect from research! Our very own Renaud Jolivet is organising a session about this topic and will welcome Pablo Garcia Tello, Pablo Achard and Martin Etzrodt for an exciting debate.

4. QUALITY SPEAKERS

Speakers have been carefully selected, respecting geographical

and gender balance. We are also pleased to welcome our first honorary member since 2015, Mike Rogers, who was for many years the senior policy officer for the Marie Curie Actions at the European Commission. He continues to contribute to the flow of news and information and advice and will lead a session dedicated to mentoring and outreach projects.

5. LET'S GET DIGITAL!

For the first time, the MCAA is introducing a digital poster presentation, via its conference app. After the General Assembly, the MCAA will produce a Book of Abstracts.

[More information](#)



SPECIAL COVERAGE GENERAL ASSEMBLY IN VIENNA

THE EVENT WILL BRING TOGETHER HUNDREDS OF POLICYMAKERS, ENTREPRENEURS, NATIONAL CONTACT POINTS AND RESEARCHERS

Mostafa Moonir, MCAA Vice-Chair, is behind the organisation of the General Assembly in Vienna. Discover what is in the pipeline!

ABOUT THE VENUE

The University of Vienna's historical main building will serve as this year's conference venue. The building, which was designed by the famous Austrian Architect Professor Heinrich von Ferstel and opened in 1884¹, has a beautiful inner courtyard. The plenary hall Auditorium Maximum (AudiMax) was built in 1935². During this period, it was the most modern hall in Vienna with film, sound and projection facilities. The AudiMax was a central location for hosting large events, along with Vienna's famous Musikvereinssaal concert hall. The

AudiMax was also used for conferences and demonstrations.

Many of the rooms which will be used for the conference will have barrier-free access facilities. We have reserved the main and small ceremonial chambers for career fairs, catering and exhibitions. I hope the participants will have a memorable experience here.

ACHIEVEMENTS AND CHALLENGES

Building on its motto 'Researchers for Researchers' to support and develop its members, MCAA has

achieved so much as a young and new organisation. Its size and activities are proof of what MCAA can do now and in future. However, some of our achievements have resulted in challenges.

For one, the sheer size of this year's conference is proving challenging. It is the biggest conference we have organised to date. While we are happy to welcome more than 700 participants to this mega event, preparing, executing, coordinating and managing 23 parallel sessions, three keynote speeches, multiple social events, MCAA's biggest career fair and

¹ <https://geschichte.univie.ac.at/en/topics/main-building-university-vienna-ringstrasse>

² <https://geschichte.univie.ac.at/en/articles/audimax>

SPECIAL COVERAGE GENERAL ASSEMBLY IN VIENNA



partnerships with external organisations, requires extraordinary dedication and focus. Although we have received a significant number of positive responses from our sponsors, we believe this event deserves more. Also, one of the hurdles we need to overcome, as a relatively young organisation, is the lack of national, regional and international exposure to attract potential sponsors. Furthermore, we also have to consider the trade-off of available time since nearly all responsible personnel are volunteers. Despite all these challenges, we do believe the experience of this year's MCAA General Assembly and Annual Conference will be a memorable one.

BEHIND THE THEMATIC 'RESEARCH AND INNOVATION BEYOND THE INFORMATION AGE'

Almost half of our members are young researchers dealing with novel innovations as well as the most significant new challenges of science and technology. At the same time, we are fortunate to

have over 3 500 members who have gained valuable experience in scientific research and its impact. Therefore, we can utilise their input to understand what are the most significant and relevant issues in science in order to select a theme. We have 11 members on the board who will discuss and decide on a theme for the next GA.

Contemporary research and innovation can be game changers. As such, we expect a paradigm shift in our event theme. In the past few decades, the introduction of information and communication technology to scientific and innovation research has accelerated this transformation. We believe we have reached a point where this advancement will be elevated beyond our computational and communicative competencies. As for the future, this development should be planned, budgeted, executed and evaluated in advance.

This simply means that MCAA members will try to find solutions through research and innovation for the same problems society faces as a whole. Moreover, MCAA is committed to supporting its members in career, network, policy and

entrepreneurship as an integral part of this process.

So, this year's theme is relevant for our members as well as for the human civilisation in various capacities.

GREAT EXPECTATIONS

This event will bring together policy-makers, entrepreneurs, National Contact Points, researchers across disciplines from both academia and industry. It will provide a forum for presentations, workshops, debates, a career fair and networking, with a focus on research careers, innovation and science policy. I am expecting over 700 people from various parts of the world to participate in the event. I am glad to report that about 100 members from Erasmus Mundus Association will also be joining the annual conference. Of course, I expect more attendees as this event welcomes all members of society.

Innovation and sustainability – as part of responsible research – is at the heart of MCAA. Therefore, we are exploring new avenues such as a digital poster, conference app, open

SPECIAL COVERAGE GENERAL ASSEMBLY IN VIENNA



science Clinique, and child-care service for registered attendees.

JOIN!

I believe we have something to offer every participant at this annual conference. From a recent MCAA Major Survey, we learnt about the most significant and relevant challenges within the lifespan of a researcher. We have tried to incorporate as many of these issues while organising different sessions for attendees. For example, the two major challenges are funding and job positions.

At this event, we will offer sessions for Early Stage Researchers

to Principle Investigators. For instance, sessions on how to write a project proposal or how to launch a start-up will provide early career researchers an overview on academia as well the entrepreneur world. A session on Career Paths will help researchers understand their options outside academia and traditional industrial employment. Behind the scenes, businesses will provide our members the opportunity to discuss their business ventures and how it can help participants at the conference. We will also host sessions on hot topics like Responsible Research & Innovation, Open Science and Future of Researcher. In addition, we will also organise sessions on issues such

as Researchers' Mental Health, Refugees in Higher Education and Researchers with Disabilities. At this event, a significant number of higher education institutions and funding agencies, sponsor companies and industry leaders will be present where funding and job opportunities will be available.

For a newcomer, this event can work as a complete package as they will have the opportunity to develop necessary skills for future endeavours and get up-to-date information on societal challenges.

ARE YOU THE NEXT ORGANISER? HERE'S SOME ADVICE AND A COUPLE OF TIPS!

As an organiser of this year's event, I wish to emphasise the following:

- Plan ahead of time;
- Establish a good local task force;
- Delegate tasks;
- Communicate regularly;
- Meet deadlines.

We will fully support the organisation of GA 2020. Please don't hesitate to ask for our help.

I LOOK FORWARD TO WELCOMING THE PARTICIPANTS IN VIENNA!

MOSTAFA MOONIR

SPECIAL COVERAGE GENERAL ASSEMBLY IN VIENNA

'TEAM LEADERS MENTAL HEALTH' – A PROMISING WORKSHOP

The workshop "Stress Management within Top Academics: Feeling before thinking" aims to address the topic of mental health of the sometimes-forgotten population of senior researchers such as principal investigators.

It is extremely important to consider the metal health of senior researchers.

Firstly, principal investigators play an important role in promoting the well-being of others. They feel as much stress as early stage researchers and are often more involved in their students' success. The peers of senior researchers, for example, may see the failure of a PhD student as the failure of the person in charge of them. Secondly, principal investigators struggle to achieve promotions and are often not included in publishing rankings.

Furthermore, competition within academia is getting harder and harder. So, in the case that a person in a senior role is stressed, they may be seen as weak and unsuitable for leading a laboratory.

The third and most important point is that senior researchers often tend to suffer in silence. PhD students have seen the progress made in the promotion of metal health awareness and at the same time senior roles have seen their responsibilities increase. Besides the fact that they need to overcome obstacles, they will have to (just as anybody else) also face personal issues. They also need to keep in mind that if a student is unwell, it is ultimately the student's responsibility.

There is a real need for this issue to be addressed. The academic society needs to understand that senior roles do not have superpowers. Instead, they have their own challenges, some of which are associated to mental health and well-being.

The aim of this workshop will be to spread awareness of this important topic within the Marie Curie Alumni Association. It is also to promote discussion and break the silence surrounding this topic. Organisers hope this event will serve as the starting point to promote changes within universities and research centres in order to create policy changes that will promote well-being, not only for early stage researchers, but for senior positions as well.

While the session is free and open to all to attend, pre-registration is required!

FRANCISCO
GONÇALVES

NEWS FROM THE BOARD

TECHNICAL INNOVATIONS AT THE MCAA

PayPal can now be used for our events. And networking has just gotten a lot easier thanks to the brand new Marie Curie Alumni Connect mobile application.

ATTEND MCAA EVENTS USING PAYPAL

The MCAA is now using PayPal. Users can apply to register for an event and complete the transaction using PayPal. Registration will be automatically finalised when PayPal has completed the transaction.

PayPal is available on the website both for members and non-members.

Of course, for those who do not wish to use PayPal, they may make payments via bank transfer.

FIND YOUR PROFESSIONAL MATCH USING THE MARIE CURIE ALUMNI CONNECT APP

Here's a new way to meet other MCAA members!

We have partnered with the start-up Lounjee to build our networking app that empowers the whole Marie Curie alumni community. Download the app by clicking on this link from your mobile device <https://mcalumni.app.link/>.

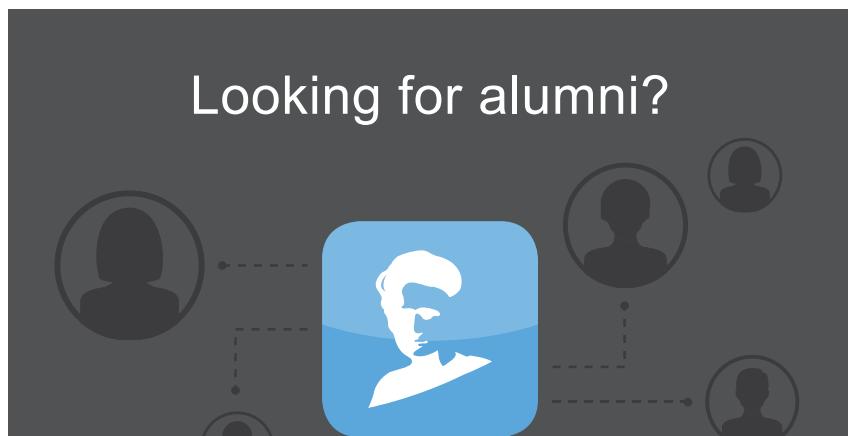
With this app, you will be able to find your match among alumni you haven't met yet, but who you should know because they match your professional interests and goals.

THANKS TO THE MATCHING ALGORITHM, USERS WILL BE ABLE TO:

- find jobs, funding and mentors by connecting with other alumni
- find other alumni who want to start a company

- access a wider professional network within the same branded app
- discover events and activities of the alumni association
- obtain valuable insights about their network and up-to-date information about each member

Interested?
Download the app [here](#)



Looking for alumni?

The **Marie Curie Alumni Connect app** can help you find them

NEWS FROM THE CHAPTERS

A NEW CHAIRWOMAN FOR THE GERMAN CHAPTER



Meet [Marina Rantanen Modeer](#), the new Chairwoman of the German Chapter. We caught up with her to talk strategy.

IN HER OWN WORDS:

My name is Marina Rantanen Modeer. I'm originally from Sweden where I grew up on a very small island not too far away from Stockholm. Since mid-2016, I have been a doctoral candidate at TU Dortmund researching model driven design of Cyber Physical Systems (CPS). This research is part of the oCPS ITN, or the "Platform-aware Model-driven Optimisation of CPS" programme. My academic background is in both mechanical engineering and general management, with degrees from KTH Royal Institute of Technology and the Stockholm School of Economics.

INSPIRATION

What inspired me to apply were my encounters and discussions with the former chair Brian Cahill and various members of the MCAA board. I discovered the MCAA fairly recently and became interested in becoming more active, quite simply, because of the positive atmosphere surrounding its representatives. Being a PhD student can be tough at times and being surrounded by positive people who share their energy is very valuable. I wanted to become an integral part of that. It was a rather spontaneous decision to apply, but with the support I received, I felt like this could be the start of something that would allow me to make the most of my time as an MSCA fellow. I felt like this would give me a chance to share my own energy with other people in a positive way and a chance for personal growth. Organisations are the people that form them and so far, everyone I have met within the MCAA has been supportive, positive and competent.



NEWS FROM THE CHAPTERS



OBJECTIVES OF THE CHAPTER

I want to contribute to the strategies of the German Chapter, to reach out to more Early Stage Researchers and inspire them to be active in the chapter as well as offer them activities that would be directly relevant to them in their role as MSCA ESRs. I would have loved to have discovered this organisation on my very first day at Dortmund! First and foremost, the MCAA offers members a network of other mobile researchers, which is gold to anyone who is new to a country.

Of course, the chapter will continue working for all its members (not only ESRs). The new board is very keen to help both old and

new members grow their networks. We will start by creating local meet up groups throughout Germany and invite anyone who is interested in getting together for a Gluhwein (or two) during these winter months.

UPCOMING EVENTS

We are participating in the organisation of a two-day conference on the topic of 'Social Innovators' initiated by the MCAA working group on Bridging Science and Business. The event will take place in Berlin in summer 2019.

We are also planning several smaller networking events, including the aforementioned local meet up groups to be held in different cities. Keep an eye out for those dates!

JOIN THE CHAPTER!

If my above praise of how nice everyone is is not convincing enough, then let me add that the MCAA German chapter offers a great opportunity for its members to create local networks. The chapter greatly complements MCAA as the organisation can offer more local expertise and support. Some members are native Germans or have lived in Germany long enough to be able to provide guidance and know-how on navigating through German society. They might also be geographically closer than other members, which makes meeting up much easier.

NEWS FROM THE CHAPTERS

WHY CHOOSING A BULGARIAN RESEARCH INSTITUTION AS A HOST CAN BE A SUCCESSFUL STRATEGY



Welcome to Bulgaria! Anife Ahmedova from the University of Sofia tells us about the activities organised by this growing Chapter.

OUR OBJECTIVES

One of our main objectives is to attract and encourage more young MSCA Fellows to become members of MCAA and to join the Bulgaria Chapter. We believe that their enthusiasm is the most productive driving force – not only for the implementation of our current plans, but for the sustainable continuation of the Chapter's activities.

A second major objective on our agenda is to help increase the participation levels of researchers from Bulgaria and Bulgarian research institutions in the MSCA (either as individual fellows and consortia partners or by hosting MSC fellows from abroad).

As an EU member state and one of the few countries starting a National programme for funding MSCA projects (which was awarded the MSCA 'Seal of Excellence' certificate), choosing a Bulgarian research institution as a host can



NEWS FROM THE CHAPTERS

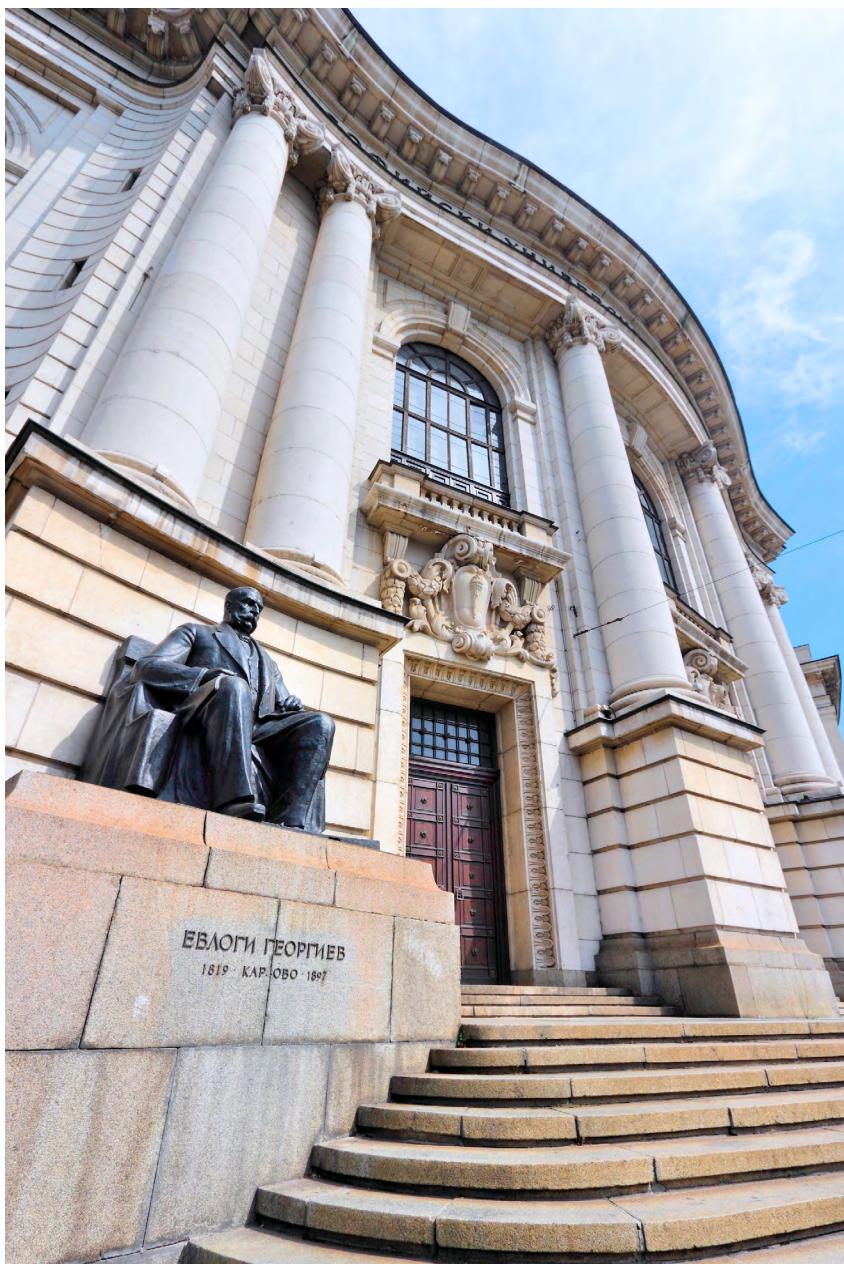
be a successful strategy for many future applicants. We will disseminate the updated information about the National Programme “Petar Beron - Research and Innovation with Europe” among potential applicants in the forthcoming calls for IF-2019 (Standard European Fellowships) aimed to increase the attractiveness of the Bulgarian research institutions as hosts for MSC Fellows.

Another objective is to establish working partnerships with policy-makers, scientific societies in Bulgaria, media, NGOs or SMEs. This can help us increase our visibility and achieve our main goal, which is to increase the popularity of MSCA among Bulgarian researchers and help them be better prepared for successful participation in H2020 Research programmes.

A SUCCESSFUL ANNUAL MEETING ON 19 OCTOBER 2018

We are pleased to note that our annual meeting was very successful. It was hosted and officially opened by the Dean of the Faculty of Chemistry and Pharmacy at Sofia University, and greetings were expressed by the Deputy Minister of Education and Science and a member of the European Commission Representative Unit in Bulgaria. All official guests announced their readiness for close collaboration with the MCAA-BG_Chapter and some common initiatives are already on the way. As a result, a Policy Working Group in the Chapter has been constituted and is ready to take part in policy discussions at national and European level.

The work programme of the meeting started with a presentation and discussion on the annual plan of activities which resulted in a concrete plan of action for the implementation of our tasks. This was followed by a presentation about the scientific fields of four of our members. With the purpose to attract more new members, the second part of the meeting was open to non-members and invited guests who have been informed about the MCAA and its goals and activities, as well as the benefits of becoming a member. Also, in this part, two projects, currently conducted by groups from the Bulgarian Academy of Sciences, have been presented. One is IProPBio, Integrated Process and Product Design for Sustainable Biorefineries (<http://ipropbio.sdu.dk/>). The



NEWS FROM THE CHAPTERS

other is EXANDAS, Exploitation of Aromatic plaNts' by-proDucts for the development of novel cosmeceuticAls and food SuppleMents (<https://www.exandas-project.eu/>).

The meeting was announced on the websites of Sofia University¹, the Faculty of Chemistry and Pharmacy² and the Horizon2020-Bulgaria website³. Following the meeting, a press release was also published on the websites of the Faculty⁴ and Sofia University⁵.

The high interest and participation of non-members has resulted in a significant increase in the number of members of the Bulgaria Chapter during the week of the meeting – from 26 to 31, and presently we are 34 members.

UPCOMING ACTIVITIES

We intend to hold several information seminars on the MSC Actions with interested young researchers and faculty members from Bulgarian universities in order to raise awareness on career development possibilities and scientific funding that the MSCA provide. One such information seminar was already held on 6 November at the Faculty of Chemistry and Pharmacy at Sofia University by the NCPs of Bulgaria that are also our active

members. As many of our members are currently abroad, we plan to organise an informal meeting so that we can meet them in person and exchange ideas for the activities we are planning to carry out in 2019. One such event is the planned midterm meeting that we intend to combine with a conference and make it a two-day event from 17 to 18 May 2019. To organise this conference, we will apply for external funding and depending on the outcome, we will decide on a venue and announce it in due time. Active participation at the Sofia Science Festival, which will take place from 9 to 12 May in Sofia, is also in our agenda.

FUTURE EVENTS

Except the two informal meetings we plan to organise during the Christmas and the summer holidays, our major event will be the Midterm meeting and Annual Conference from 17 to 18 May 2019. It will be a half-day of discussions on the Chapter's plans and achievements and a scientific conference for one day and a half, covering the fields of all participating members. We intend to invite members from other MCAA chapters and WGs with which we have established contacts. Exchanging ideas on scientific topics as well as on Chapter management and sharing experi-

ences with other MCAA chapters and WGs will be the main goal of this event. The details are yet to be decided and will be announced in the MCAA portal.

JOIN THE CHAPTER!

Although similar in size and population, our countries are at the two extreme ends not only geographically – on the map of Europe, but also on the intensity of participation in the European research and innovation programme. For us this means that we have a lot to learn, and closer connections with members from the Benelux Chapter can be extremely beneficial for us in terms of learning from their knowledge and experience. On the other hand, Bulgaria is a lovely place to live and work – safe and quiet, with pleasant climate most of the year, diverse and beautiful nature, hospitable people and delicious cuisine. We strongly welcome members from Benelux and other chapters to join us. We believe that exchanging experience and scientific ideas can be mutually useful and lead to establishing fruitful collaborations.

ANIFE AHMEDOVA

¹ https://www.uni-sofia.bg/index.php/bul/novini/kalendar/godishna_srescha_na_b_lgarskata_sekciya_k_m_asociaciyata_na_stipendantite_po_programata_mariya_kyuri

² https://www.uni-sofia.bg/index.php/bul/universitet_t/fakulteti/fakultet_po_himiya_i_farmaciya/novini/godishnata_srescha_na_b_lgarskata_sekciya_k_m_asociaciyata_na_stipendantite_po_programata_mariya_kyuri

³ <http://horizon2020.mon.bg/?go=news&p=detail&newsId=161>

⁴ https://www.uni-sofia.bg/index.php/bul/universitet_t/fakulteti/fakultet_po_himiya_i_farmaciya/novini/godishnata_srescha_na_b_lgarskata_sekciya_k_m_asociaciyata_na_stipendantite_po_programata_mariya_kyuri

⁵ https://www.uni-sofia.bg/index.php/bul/novini/novini_i_s_bitiya/godishna_srescha_na_b_lgarskata_sekciya_k_m_asociaciyata_na_stipendantite_po_programata_mariya_kyuri

COMMUNITY

THE RESEARCHABILITY PROJECT FOR RESEARCHERS WITH DISABILITIES 'NOTHING ABOUT US WITHOUT US'

The MCAA Policy Working Group aims to support researchers with disabilities through its ResearchAbility project. Alexandra Katharina Nothnagel tells us all about it.



Everyone in the research community knows Stephen Hawking, the famous university professor and researcher who performed ground-breaking work in theoretical physics and cosmology. He also suffered from a neurological disease that paralysed his body.

What about Albert Einstein, Leonardo Da Vinci, Isaac Newton and our very own Marie Skłodowska

Curie? Did you know they were also persons with disabilities? Surprised? Don't be. More than 80 % of impairments/chronical diseases are invisible.

In most countries, at least 1 in 10 people have some physical, mental or sensory impairment. This is based on the United Nations. Other statistics also suggest that 5 in 10 people will be temporarily or

permanently impaired during their professional life.

As such, impairments and chronical diseases should not become a barrier to advances in research. It is important for researchers with disabilities to develop new and different strategies that can help them adapt to their situation and further accelerate inventions.

COMMUNITY

Laws, policy initiatives and public health strategies should help by ensuring persons with disabilities have access and are included in higher education and professional life. The UN Convention on the Rights of Persons with Disabilities is the first international legally binding instrument setting minimum standards for the rights of people with disabilities. Proposed by the European Commission in 2015, after more than 10 years of campaigning by the disability movement, a first agreement on the European Accessibility Act was reached by the EU Institutions in November 2018. This added new EU-wide minimum requirements for accessibility on a limited range of products and services, mostly digital.

A lot of work still needs to be done, especially regarding accessible buildings, transport, infrastructure and, of course, education. Innovation and enterprises providing (community-based) services are essential. Associative work, mediation and dialogue can promote awareness, sensitisation and inclusion.

The ResearchAbility project aims to support students and scientists

with disabilities throughout their career by providing advice and increased visibility. In the context of the policy working group, ResearchAbility aims to give a voice to those at risk of becoming disabled during their career. The project's goal is to ensure equal opportunity and better accessibility.

As the MCAA France chapter activity coordinator, I initiated the project. I attended the European Day of Persons with Disabilities at the European Commission in Brussels which called for an international disability status facilitating mobility for researchers/employees in the public and private sector.

The MCAA annual meeting in Vienna will feature the project's first session. The panel will include a diverse group of speakers and guests. The list includes: Elmar Fürst from WU Vienna, Associate professor at Institute for Transport and Logistics Management, Khalil I. Hamzaoui, Gian Maria Greco, MSCA Fellow in Accessibility at the Autonomous University of Barcelona and member of the WG Comm of MCAA and computer scientist from Lille, as well as lawyers and representatives from associations for persons with disabilities.

The MCAA French Chapter is already active in this realm. A first workshop dedicated to informing master students and PhD candidates about research careers was successfully held in Paris in November 2018 during the national meeting of the French federation of students with a disability (FÉDÉEH). The MCAA French Chapter and FÉDÉEH members will jointly hold workshops to advise about careers in research. The workshops will be held in Paris between 16-17 February 2019. Interested in becoming a mentor and/or adviser? Register now via email.

Are you a researcher with a disability or working on a topic regarding accessibility and inclusion? Are you interested in participating in the session at Vienna's annual meeting or the activities of the working group "ResearchAbility"? Please join MCAA supporting individuals with disabilities and their professional environment to start an open dialogue and proactive work on accessibility. Let's join forces and show the richness of being diverse and take a step together for a more inclusive society. Contact the project's activity coordinator, [Alexandra Nothnagel](mailto:Alexandra.Nothnagel).

ALEXANDRA
KATHARINA
NOTHNAGEL

MEMBERS' ACHIEVEMENTS

THE JOINT EUROPEAN MENTORING INITIATIVE PILOT: NAVIGATING NEW PLATFORMS FOR CONNECTING MOBILE RESEARCHERS

Angela Bellia has joined the Joint European Mentoring Initiative. She tells us about her aims, aspirations and expectations.

THE JOINT EUROPEAN MENTORING INITIATIVE (JEMI)

My experience with JEMI started in 2018 at the last MCAA Conference which took place in February in Leuven. During the Mentoring Session within this event, Viktoria Bodnarova, the regional representative at EURAXESS North America¹, informed us about JEMI's mission and vision, and about the involvement of the MCAA North America and beyond in this project. The JEMI project aims to empower researchers from and working in Europe to achieve their full potential by providing a bottom-up comprehensive mentoring platform to build and maintain networks for their research career advancement.

THE ROLE OF THE MCAA

The MCAA is a partner of the JEMI project. When the MCAA Academy team and Marco Masia contacted me, I quickly agreed to become part of the JEMI Pilot in



¹ <https://euraxess.ec.europa.eu/worldwide/north-america>

MEMBERS' ACHIEVEMENTS

order to add my enthusiastic support to this important initiative. What I wish to do is to give back some of what I have received in my research career thanks to Europe and European programmes. My aim is to help develop careers, personal growth, relationships, and offer guidance to my potential mentees. On the basis of my own personal experience (and resilience), I am deeply motivated to offer my support in pursuing the JEMI objectives: to advocate for European intellectuals by providing a comprehensive range of learning opportunities, and to expand the scope of European-funded services and support available for European researchers worldwide, especially to younger researchers in North America so that they can reconnect with Europe.

MY ROLE AS A MENTOR

Like all other mentors from the pilot programme, I was selected based on the recommendation and experience of MCAA and JEMI representatives. I have been paired with a Postdoctoral Research Fellow at the American Museum of Natural History. Her name is Claudia Wultsch and she is an Austrian wildlife scientist with a broad interest in ecology and conservation of mammals occurring across fragmented and human-altered landscapes. Our first Skype meeting, which took place in October, was a very positive and pleasant conversation. We were very excited to meet. I listened to her attentively to

understand her most urgent issues. She is working in New York, but her dream is to return to Europe.

I provided her with encouragement, helping her to identify and assess her priorities at this moment of her life and her research career in order to develop step by step. I discussed the opportunities offered by the European programmes, and particularly by the Marie Skłodowska-Curie Individual Fellowships. We also considered a possible host institution in Europe which would be able to develop her international, interdisciplinary and inter-sectorial project. I hope to help her in preparing a successful proposal on the basis of my experience as a two-time winner of the Marie Skłodowska-Curie Individual Fellowships. Seeing her be successful in this would make me very happy!

WHAT'S NEXT?

I am confident that this important initiative will allow European researchers outside Europe to take advantage of best practices from other systems and to integrate it into their professional career development schemes. I think JEMI will contribute to promoting broader pan-European and global collaborative projects. As a baseline platform, the JEMI project will highlight the quality of European academics and emphasise the value of European influence in the US and North America².

As Dimah Mahmoud, the Euraxess North America programme officer, emphasised at the Fourth Annual Meeting of the European Scientific Diasporas in North America which took place in Washington³, one of the goals of the JEMI project is the advancement of the European Research Area. Its full implementation is the main research policy objective of the European Union, as per Article 179 of the Treaty on the Functioning of the European Union. Transnational research across the whole of Europe and beyond is instrumental, not only for leveraging the achievement of a fully functional European Research Area, but also for Europe to be part of a Global Research Area that embraces open science in the coming years.

For this reason, the JEMI project is not only a knowledge-sharing tool, but an investment in a global-oriented European identity and ultimately, the future.

ANGELA BELLIA

² An example is <https://giovannisogari.com/blog/articles/137-euraxess-innovation-to-society.html>

³ <https://euraxess.ec.europa.eu/worldwide/north-america/4th-annual-meeting-european-scientific-diasporas-north-america>

EVENT

MCAA AT THE 24TH ANNUAL MEETING OF THE EUROPEAN ASSOCIATION OF ARCHAEOLOGISTS



The Marie Curie Alumni Association's Events and Network Working Group organised the session "Perspectives of the Marie Skłodowska-Curie Fellows in the Archaeological and Cultural Heritage Fields" at the Annual Meeting of the European Association of Archaeologists (EEA) 2018.

The EEA 2018 took place 5-8 September 2018 in Barcelona. Some 3 000 participants attended the event. The MCAA's session, organised by Angela Bellia and Bettina Schulz Paulsson, was held on 7 September.

Participation at the EEA Annual Meeting in Barcelona aimed to reinforce the MCAA's network within this particular community, which is significantly dynamic and influential in terms of intellectual ambition and practical relevance. This vibrant community is made up of MCAA alumni who are archaeologists and members of the EAA.

As such, the EEA Annual Meeting proved to be a unique opportunity to share good practice and encour-

age discussion on past and on-going experiences in the field of archaeology. It served as a forum for promoting debate, research and the exchange of good practices on the quality of conservation, safeguarding, innovative reuse and enhancement of cultural heritage, and on contemporary interventions in the historical environment.

The MCAA panel at the EEA meeting highlighted how Marie Skłodowska-Curie Fellowships

contribute to the development of the MSCA researchers and their future perspectives in the archaeological and cultural heritage fields. In addition, the session raised the issue with postdoctoral fellows stuck in temporary and insecure employment.

The chair of the Archaeology and Heritage Research Area Group, Helen Dawson, emphasised the aim of the group which is to bring together fellows working in or with

EVENT



an interest in archaeology and/or cultural heritage. In February 2018, several group members met at the MCAA General Assembly in Leuven. The meeting was an opportunity to take stock and think about the future directions of the group. The range of expertise as a select group of archaeology and heritage researchers places them in a unique position to comment and provide feedback on important issues, such as the European Year of Cultural Heritage 2018.

Bettina Schulz Paulsson shared her research experience related to the Career Restart Panel (CAR), a multidisciplinary panel of the MSCA-IF fellowships which provides financial support to individual researchers who want to resume research in Europe after a career break. At her host institution, she is receiving both the required specific training for her research topic and long-term academic career training. In addition, the focus is on hands-on training to prepare

funding applications for research projects at national and EU level, competence on project management strategies and leadership for advancing collaborative work environments in the academic world.

As a result of his individual fellowship, Piero Gilento is working in Jordan, an area of great archaeological and architectural value. His contribution aimed to reflect on the practice to be adopted in terms of its contribution, not only for a better knowledge of the sites, but also for their conservation and enhancement. The view here is that cultural heritage can contribute to the development of small local communities.

Meanwhile, Angela Bellia is expanding her skills in the use of post-processing software and acoustic techniques based on computerised models. Her second MSCA-IF fellowship stresses her aspiration to develop new skills in digital heritage. These skills will be extremely useful for her return

and reintegration into a long-term research position in Italy, a country that is well established in the fields of cultural and digital heritage studies.

As was the case last year, the E&N WG set up a booth at the conference venue to promote the MCAA's activities. MCAA fellows were invited to promote MCAA to groups, companies, autonomous researchers, and political and research institutions.

Many MCAA archaeologists who visited the stand said they are planning to attend the 2019 EEA Annual Meeting, which will be held in Berna.



ANGELA BELLIA

MCAA WEBINAR

NETWORKING FOR NERDS

The Bridging Science and Business working group organised the [Networking for nerds](#) webinar on 25 October. Here are the main outcomes.

ABOUT THE WEBINAR

The webinar was part of a series of webinars organised by the Bridging Science and Business working group (BSB WG). Looking for a job can be hard, particularly so if we are trying to navigate between the realms of academia and industry. Most jobs and other game-changing career opportunities are not advertised, and even if they are, there is usually a short-list of candidates already in mind.

So how can you find out about and access 90% of jobs and other op-

portunities that are hidden? In this webinar, the focus was on proven networking strategies and tactics to identify new opportunities. It also delved into how to locate decision-makers within organisations and how to solidify your reputation and brand in the minds of those who hire.

ABOUT THE SPEAKER: ALAINA G. LEVINE

Alaina G. Levine is an award-winning entrepreneur, STEM career consultant, science journalist, professional speaker and corporate

comedian. Her first book, Networking for Nerds (Wiley, 2015), beat out Einstein (really!) for the honour of being named one of the Top 5 Books of 2015 by Physics Today Magazine.

As the president of Quantum Success Solutions, Levine is a prolific speaker and writer on career development and professional advancement for scientists and engineers. She has delivered over 700 speeches for clients in the US, Europe, Mexico, Canada, and Africa. She is also the author of more than 350 articles published in international publications such as Nature,

JOIN THE MCAA WEBINAR
ON OCTOBER 25TH

NETWORKING
FOR NERDS:
CREATE YOUR
DREAM CAREER



MCAA WEBINAR

Science, Scientific American, National Geographic News Watch, and IEEE Spectrum.

Levine has served as a career columnist for Physics Today and is a regular contributor to the American Physical Society's APS News and ScienceCareers.org. She is also the author of two online courses for Oxford University Press on career development and entrepreneurship/commercialisation, a consultant, speaker, and writer for the Lindau Nobel Laureate Meetings, and the event manager for an international conference on phononics.

GREAT ATTENDANCE

Some 60 people attended the webinar and there were many requests for information following the webinar. As such, it is now being considered whether to make the recording available to people for 10 EUR.

Upcoming webinars will explore topics such as team leadership for researchers, and harassment in the workplace – topics of growing importance for our members and followers.

A 'PASSIONATE AND ENGAGING' TALK

Levine delivered a passionate and engaging talk, covering a wide range of topics. She received a large number of questions, most of them showing the difficulty of researchers to establish professional and interpersonal connections.

Despite a few moments of technical difficulties, participants were

very satisfied. The feedback received from participants was amazing! The vast majority considered the webinar very good to excellent as regards the presentation of the speaker and for the information provided. Many participants also asked that future webinars go deeper into other career development areas such as leadership, making a career plan, and managing projects with industrial partners.

As organisers, we are more than happy to look for professional speakers who will be able to discuss these topics.

As for the concerns and operational challenges of organising these webinars, there were three in particular:

1. Time. Some attendees complained that 2pm was too early. This is understandable, but the fact is that we have attendees from all over the world, such as Australia and the United States – the two extremes. We would like to be as inclusive as we can and this is why we prefer early afternoons.
2. Technical setup. For free webinars, we use YouTube. For paid webinars, we use gotowebinar. The former is certainly better because it has a simple interface and is very flexible. The latter is rather for a corporate environment and has an unappealing interface; it also requires two dry runs to test all the options as well as to optimise it. Unfortunately, for the moment, we must stick to it.
3. We are always short of volunteers to help in setting up the event. For

us, it's a lot of work and it would be great to have more people helping.

OTHER WEBINAR OPPORTUNITIES

We have a series of monthly webinars (past free webinars can be found on a YouTube playlist [here](#)). We are excited about cooperating with Levine and it is possible that we will have more webinars conducted by this passionate and inspiring speaker. Another webinar took place on 30 November. It was conducted by Brenden Rowan from [MERLIN](#) on "the innovation journey from research results to product". In addition, we plan another paid webinar on 23 January 2019 on "Effective leadership for successful research & innovation".

ATTEND OUR WEBINARS!

We offer precious knowledge to our members mostly for free. During the webinars, participants have a unique opportunity to ask questions and engage in post-webinar communication with the trainer. And all of this, from the comfort of your home or office! When we have a professional trainer, we ask for a small fee to cover the expense.

PAVLO BAZILINSKYY
& MARCO MASIA

EVENT

AUSTRIAN EU COUNCIL PRESIDENCY CONFERENCE ON IMPACT OF SOCIAL SCIENCES AND HUMANITIES FOR A EUROPEAN RESEARCH AGENDA

Asun Lopez Varela attended the Austrian EU Council Presidency Conference about the Impact of Social Sciences and Humanities for a European Research Agenda, in Vienna on 28-29 November.

The **Austrian EU Council Presidency's conference on SSH-Impact** was organised by ZSI, the Centre for Social Innovation, on behalf of the Austrian Federal Ministry of Education, Science and Research (representing the Austrian EU Council Presidency in the field of RTI) and the European Commission.

As many as 350 participants from 36 countries took part. The conference **responded to several**

strategic developments. The list includes:

- **The Lamy-Report which notes** that SSH can act as a driver for some missions of the next Horizon-Europe Framework
- Recommendations drawn up in the Mazzucato Report to maximise the impact through **mission-oriented policies**
- A paper prepared by the European Commission which highlights the high policy relevance of SSH research, and the integration of certain SSH disciplines and topics in other societal challenges
- The **European Parliament's move** towards a broader and clearer definition of impact by raising awareness on long-term results
- The Council of Europe conclusion that a focus on impact can advance solutions to social challenges.



EVENT



The conference was divided into three main panels, each corresponding to a theme:

- Valuation pathways
- Structures and policies
- Assessing impact.

The panels responded to the questions about valuation narratives and theories on impact generation and methods for SSH, as well as the different forms of viewing 'public value' for SSH and arts-based research. Also discussed was SSH contribution to interdisciplinary projects driven by other disciplines (and vice versa). One question raised was how SSH can contribute to the new missions proposed by the European Commission for FP9?

Also discussed were the support-structures and policies to assist the integration of SSH in Horizon-Europe framework. The questions raised: How can 'value for society' be better tackled, traced, created, captured and

exploited by transformative SSH approaches? Which support structures and mechanisms are needed for this? How can the use and impact of SSH and arts-based research to the benefit of a transformative and mission-oriented European research and innovation agenda be better traced, assessed and measured?

As regards new ways of tracing and assessing impact in knowledge production, knowledge dissemination and knowledge usage to increase relevance, outcome and impact in SSH, the following question was tabled: which assessment and measurement methodologies can be used to measure the impact of SSH research contributions at different levels (e.g. scientific impact; policy and structural impact; societal impact)?

The purpose of the conference focused on valuation and impact contributions of SSH research to the next European research framework programme 'Horizon Europe'

(2021-2027) which will be organised in three pillars: Open Science, Global Challenges, and Open Innovation. It focused on Pillar 2 of Horizon Europe: 'Global Challenges and Industrial Competitiveness' and how SSH can contribute to it.

The Global Challenges-Pillar is structured along five thematic clusters. These five thematic clusters served as structure for parallel sessions on "Health", "Inclusive and Secure Society", "Digital and Industry", "Climate, Energy and Mobility" and "Food and natural resources".

The second day of the conference delved deeper into discussions about how SSH-contributions to transformative research agendas could be implemented in day-to-day activities.

ASUN LOPEZ VARELA

EVENT

RESEARCHERS AND STUDENTS OF MUNICH SUPPORT WOMEN IN TECH



The WeLead international symposium was celebrated on 17 November 2018 at the Technical University of Munich (TUM), in Germany, with more than 200 attendees. It brought together top researchers and leaders from Germany and Spain who were eager to show the excellent work that is being done by female researchers in the fields of artificial intelligence, robotics and engineering.



"We want to show the new and old generations that the glass ceiling can in fact be broken", said Pablo Lanillos, a doctor in AI and robotics and one of the main organisers of the event, under the MSCA Selfception project. Only 20 % of directors or full professors are women in Europe. The "glass ceiling" issue is a major problem that needs to be overcome in order to achieve gender labour equality. In the fields of engineering, these figures are wor-

rying. A study conducted in England in 2016 showed that less than 10 % of the researchers in tech were women.

This event was created as a result of Munich city's response to this imbalance. Several research associations and volunteers joined forces to create the concept of WeLead, an initiative which aims to be the first of many that will be organised every year in a different

German city. Together, they want to show how women are shaping the future of technology.

Claudia Peus, vice president of TUM opened the event. She said: "We must join forces to make women in technical fields visible". Pablo Lanillos from the MSCA Selfception project, and Hila Safi from Female Tech Leaders, conducted the symposium. By pointing out some discouraging comments to which

EVENT

women in technical fields were exposed to last year, they showed there is much work to be done before gender balance is achieved.

Elena García Armada, from the Spanish National Research Council and co-founder of Marsi Bionics, presented EXOTrainer, an exoskeleton optimised for active gait rehabilitation of children suffering from neuromuscular disease.

In turn, Karinne Ramírez Amaro, a researcher at the Institute for Cognitive Systems at TUM, shared her personal experience during her studies in México regarding the number of women there. She also introduced her project Every-day Activity Science and Engineering (EASE), which aims to apply AI methods to robotics in order to generate semantic models designed to infer human activities.

What is more, Laura Leal Taixé, professor leader of the Dynamic Vision and Learning Group at TUM, gave some insights into

Deep Learning and explained the main challenges it is facing including data bias and the need of quality data.

Finally, Katja Mombaur, professor at the Ruprecht-Karls University of Heidelberg and head of the Optimization, Robotics and Biomechanics Chair spoke about the importance of understanding the fundamental principles of human movement for the development and control of human-centred robots.

The event concluded with networking opportunities. Attendees exchanged ideas and met those who promoted and supported this inspiring event, including scientists, engineers, gender equality experts, universities and companies. Moreover, they were able to obtain information about their future career in IT companies, such as Zühlke, or at universities, such as the University of Bremen. They were also given free vouchers from Uber.



Furthermore participants were asked to propose activities or measures to achieve equal access and promotion opportunities in the field of artificial intelligence, robotics and engineering. Everybody agreed that students at all levels of education, especially primary school children, should be addressed. Below is a summary of some of the proposals:

- Organising educational activities at schools to bring technical knowledge to children, especially those between the ages of 8 and 12.
- Outreach programmes in which tech companies in Munich become involved in educational activities that motivate students, especially young girls, to help them focus on their career in technological fields.



EVENT



- Promoting measures to conciliate family and technical careers.
- Organising events to overcome gender bias in the technological field, in which gender-neutral language is promoted.
- Gender balance in conference (50 % male, 50 % women).
- Changing the image of a scientist by highlighting the contributions of women to science throughout history.

From WeLead we would like to give special thanks to Female Tech Leaders, the Technical University of Munich, especially the Department of Electrical and Computer Engineering and the Institute for Cognitive Systems, the EASE Interdisciplinary Research Center in Bremen, Zühlke Engineering GmbH, the Society of Spanish Researchers in Germany (CERFA), the MSCA Alumni Association and the speakers for their strong support in the event and their help in achieving gender balance in Robotics, Computer Science and Engineering.

MORE INFORMATION CAN BE FOUND AT:

WeLead <https://weleadwomen.wordpress.com>
Twitter [@WeLeadWomen](https://twitter.com/WeLeadWomen)
Facebook <https://www.facebook.com/events/254472615255292/>

CERFA (@SociedadCERFA, www.cerfa.de)
Female Tech Leaders Munich (@FemaleTechLeaders,
<https://www.femaletechleaders.org/>)

TERESA RINCÓN
DOMÍNGUEZ

MEMBERS' ACHIEVEMENTS

THE NEXT GENERATION OF VIROLOGY EXPERTS

Pietro Scaturro recently published 'An orthogonal proteomic survey uncovers novel Zika virus host factors' in the Nature Journal. Here he explains his work about solving this new puzzle.

ABOUT PIETRO SCATURRO

I was born and raised in Palermo, Italy. I received my B.Sc. and M.Sc. degrees in Molecular Biotechnologies from the University of Bologna. This allowed me to pursue my interests in translational virology and viral-based gene-therapeutics in the laboratory of professor Gabriella Campadelli-Fiume. During this time, I also spent over 10 months overseas, specialising in advanced murine microsurgery techniques at the University of Alabama at Birmingham (USA), in the group of James M. Markert.

Following my passion for virology and virus-based therapeutics, I then joined, as an Early-Stage Marie-Curie Fellow (ITN project EUVIRNA), the group of Ralf Bartenschlager at the University of Heidelberg (Germany). It is here that I completed my doctoral studies with honours, working on tropical arboviruses and focusing on the characterisation of innovative antiviral targets and drugs alongside with fundamental molecular virology studies on Dengue virus.

After this, I joined, as a post-doctoral fellow of the Department of Proteomics and Signal Transduction, the Max-Planck Institute of Biochemistry in Munich (Germany), where I applied complex mass-spectrometry techniques and systems biology approaches to uncover novel essential flavivirus host-factors.

I am currently a senior post-doctoral fellow at the Technical University of Munich. Working in the laboratory of Andreas Pichlmair (Institute of Virology), I continue to apply advanced systems biology approaches to pursue my long-standing interest in tropical arboviruses.

SPOTLIGHT ON TROPICAL VIRUSES: NEW PUZZLES TO SOLVE

With almost no precise mechanistic details known about their life cycle when compared to other medically-relevant viral pathogens, arbovi-

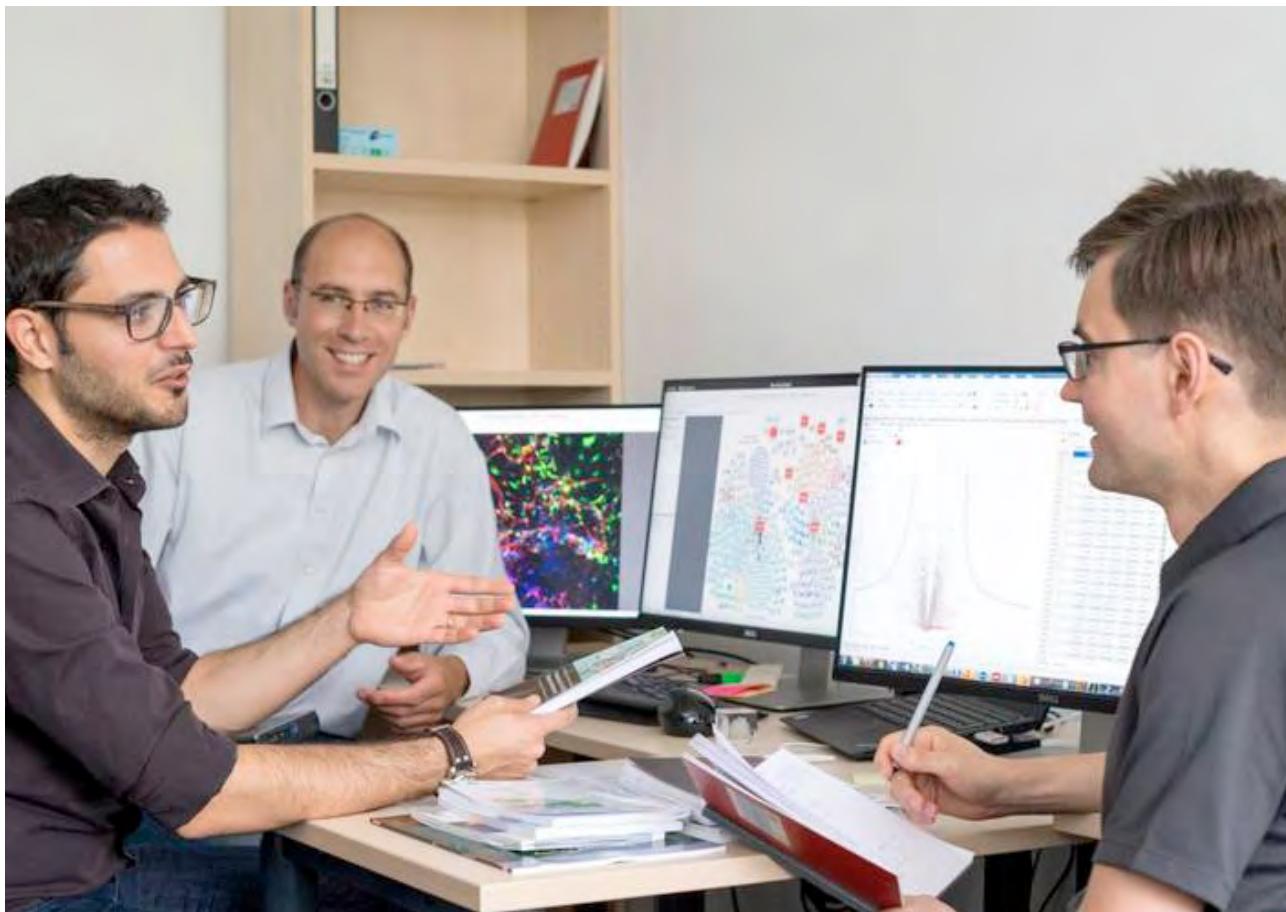
ruses are particularly interesting both from a basic research and clinical standpoint, since neither antivirals nor prophylactic or therapeutic vaccines are currently available.

The emergence of congenital Zika virus (ZIKV) syndrome in the past few years generated a public health

crisis, renewing public interests on arthropod-borne viruses, given its wide geographical distribution and its association with severe neuro-pathologies in infants.

Indeed, a significant number of women who were bitten by infected mosquitoes at the beginning of their

MEMBERS' ACHIEVEMENTS



The scientific team of the Zika virus study (from left to right): Dr Pietro Scaturro, Professor Andreas Pichlmair and Dr. Alexey Stukalov. (Image: A. Eckert / TUM)

pregnancy, subsequently gave birth to children with severe disabilities. The newborns suffered from a condition known as microcephaly. This is a medical condition in which the brain is smaller than normal, resulting in serious neurological disorders.

Despite the global attention on this worrisome pandemic, the molecular mechanisms responsible for ZIKV pathogenicity and neurotoxicity remained largely elusive.

Aiming to understand how ZIKV affects neuronal cells, I went on a “fishing expedition at the beginning of my post-doctoral experience in

Munich. I used innovative systems biology approaches to identify the multiple interconnections between ZIKV proteins and the human host's proteins. This approach aimed to identify which cellular functions are perturbed by the virus, hoping to untangle the reasons behind the neurological defects suffered by newborns and therefore accelerating possible therapeutic developments.

The results of this work have been recently published in *Nature* (Scaturro et al. [An orthogonal proteomic survey uncovers novel Zika virus host factors](#). *Nature*, September 2018, DOI: 10.1038/s41586-018-0484-5.)

ZIKV HIJACKS CELLULAR PROTEINS IMPORTANT FOR PROPER NEURONAL DEVELOPMENT

One way to understand how viruses interfere with essential cellular functions is to identify which cellular proteins they bind. Exploiting affinity-proteomics, I used each of the 10 Zika virus proteins as “baits” to fish out of neuronal cells the cellular components bound to each of them.

Besides identifying proteins previously

MEMBERS' ACHIEVEMENTS

shown to interact with other closely related tropical viruses, this approach surprisingly identified novel cellular proteins specific to ZIKV, including proteins linked to neurological disease and development. These results were particularly important given the association of ZIKV with severe neurological abnormalities. Examples of these proteins were LARP7, LYAR and the neuronal development factor NGDN, previously involved in severe neurological diseases (i.e. a primordial form of dwarfism called the Alazami syndrome) or for maintenance of embryonic stem cell identity.

This innovative approach also allowed identifying which Zika virus components are mainly binding these neurodevelopment-related proteins, therefore pointing to specific targets for the development of

novel antiviral drugs. Among these, the non-structural (NS) protein 4B showed the most prominent and specific enrichment in proteins associated with neurodegenerative disorders, retinal degeneration, neuronal differentiation, and axonal dysfunction; all associated with ZIKV infections in humans.

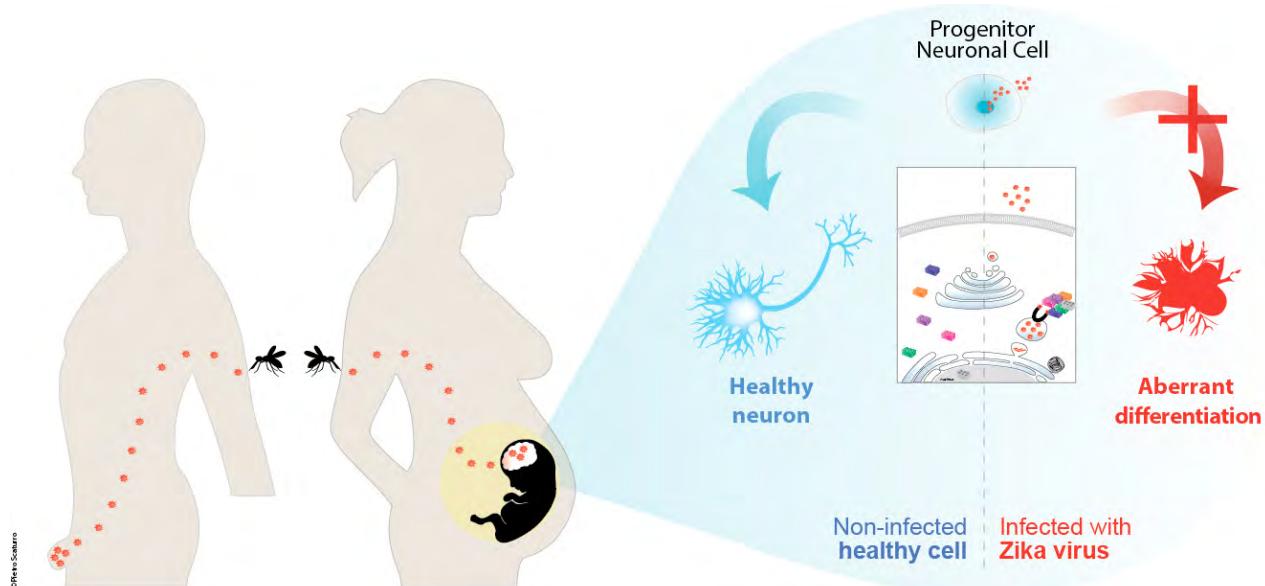
DANGEROUS SIDE EFFECTS OF VIRUS REPLICATION

Because ZIKV predominantly infects neuronal progenitor cells (NPCs) during the early stages of development, as part of this challenging study we aimed to understand how ZIKV infection perturb the normal neuronal differentiation process. Mimicking this differentiation process *in vitro* and using global proteomics

analysis, I identified proteins significantly up- or down-regulated by ZIKV during differentiation of NPCs into neurons, paving the way for a better comprehension of the cellular mechanisms underlying ZIKV pathogenesis.

CLEAR PICTURE OF THE VIRUS INFECTION

Not only absolute cellular protein levels are perturbed by viral infections. Indeed, also chemical modification of proteins, called post-translational modifications, play important roles in several pathological states. To gain insights into how ZIKV controls and executes the complex and dynamic reorganisation of cellular signal-transduction pathways, I applied a technique called phosphoproteomics to analyse neuronal



Zika virus is a tropical virus transmitted to humans through the bite of infected mosquitoes. In most cases infected individuals do not show any sign of the disease, however the virus can persist in the genital tract of infected males, where it can be transmitted sexually to other individuals for several months. When the virus infect pregnant woman, is directly transmitted to the foetus, which develops severe neurological malformations. This study identified hundreds of cellular proteins (here depicted as Lego bricks) whose functions are disturbed in infected cells, creating the foundations to understand this important disease. (Image credits: P. Scaturro / TUM)

MEMBERS' ACHIEVEMENTS

cells infected with Zika virus. This allowed profiling on a global scale how the virus tunes the activity of thousands of cellular proteins for its own benefits, and therefore identify those mechanisms potentially contributing to impaired neurogenesis associated with ZIKV infection.

NEW TARGETS IN THE ZIKV BATTLE: HOPE FOR TREATMENTS

Based on the findings from all the three approaches described above,

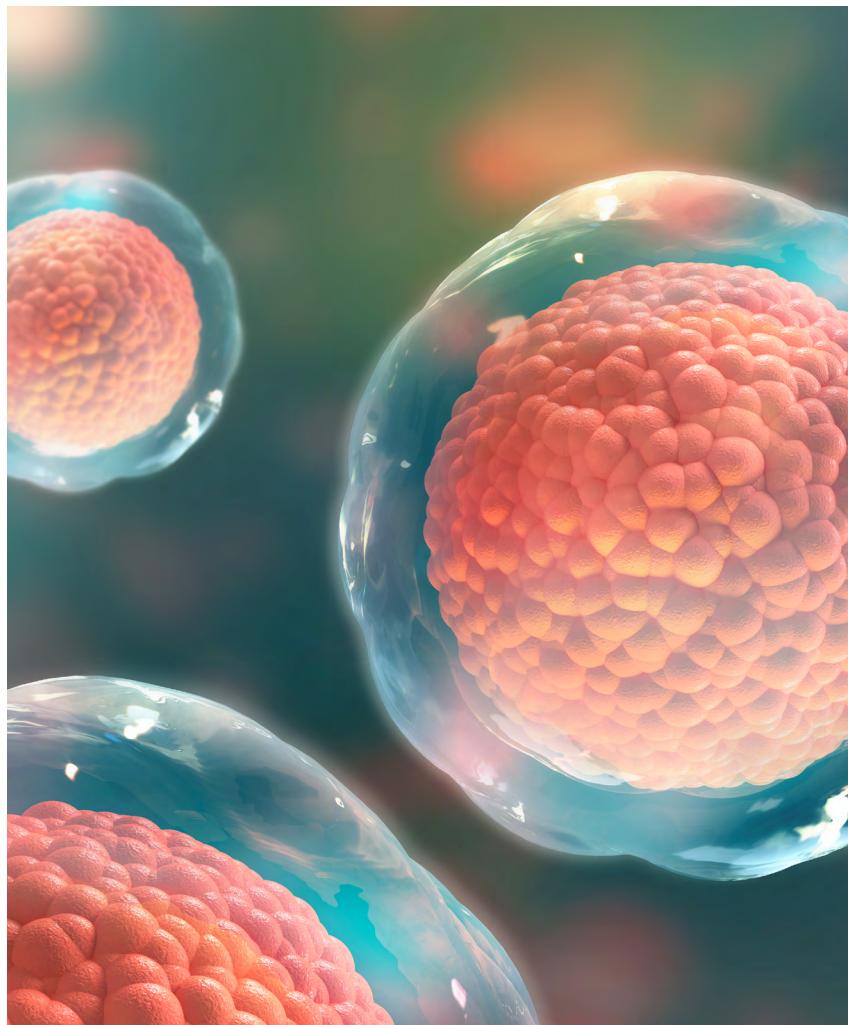
I went on to investigate a number of the newly identified Zika host factors. Using gene silencing, I discovered 14 novel cellular proteins critically required for ZIKV replication. Indeed, artificially switching off each of these cellular factors, drastically hampered ZIKV replication, confirming their therapeutic potential.

Altogether, this work suggests that ZIKV evolved multiple mechanisms to usurp, exploit or perturb fundamental cellular processes, ultimately inducing a broad spectrum of pathological abnormalities in humans. While this study is essential for guiding more focused studies ultimately

aiming at developing new antiviral strategies to fight viral diseases, it represents only a starting point. In fact, only global collaborative efforts, scientific openness across borders and international mobility of researchers will succeed in accelerating the pace of ZIKV research and find medical solutions for potential new upcoming “tropical” surprises.

LINK TO THE STUDY:

<https://www.nature.com/articles/s41586-018-0484-5>



PIETRO SCATURRO

ON GIANTS' SHOULDERS – CALL FOR BLOG CONTRIBUTIONS

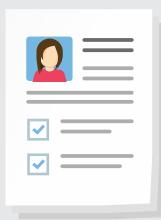
In 2019, the MCAA Blog will focus on inspirational scientists, researchers and inventors in a series of posts "On Giants' Shoulders".

For this, we need your help! Write a short piece about your favourite role model. Who inspired you to pursue an academic career? Which underappreciated scientist deserves to be in the spotlight? Let us know!

Contact us at: blog@mariecuriealumni.eu

Find our blog at: <https://medium.com/marie-curie-alumni>

GET IN TOUCH WITH MCAA MEMBERS!



Make sure you have updated your profile.



Use the map facility.

EDITORIAL BOARD

- Valerie Bentivegna
- Matthew DiFranco
- Valentina Ferro
- Gian Maria Greco
- Nehama Lewis
- Marco Masia
- Mostafa Moonir Shawrav

PUBLISHED BY

Marie Curie Alumni Association
<https://www.mariecuriealumni.eu>

Any request concerning the newsletter, including suggestions about new topics and articles, should be sent to news@mariecuriealumni.eu.