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NEWSLETTER

The 2021 MCAA Annual Conference will take place 5–7 March. Maja Mise, from the GA task force, tells us why you shouldn't miss it.

The MCAA and the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE) signed a Memorandum of Understanding (MoU) in July 2020 to strengthen European Research & Innovation (R&I) activities in artificial intelligence (AI).

page 05

Join us in welcoming a dozen new faces to MCAA's global community. From Bulgaria to Ireland and from Argentina to Switzerland, a dozen new Working Group and Chapter chairs have been recently elected.

page 10

CONTENTS

Editorial page 02
Getting together in times of crisis page 03
AI research and innovation page 05
Chairing in times of COVID-19 page 07
Meet our new Chairs page 10
Ireland Chapter page 11
Research Funding WG page 13
North America Chapter page 15
Brazil Chapter page 18
Spain-Portugal Chapter page 20
Bulgaria Chapter page 22
Hungary Chapter page 24
Italy Chapter page 26
Policy WG page 28
Switzerland Chapter page 30
Austria Chapter page 33
Argentina Chapter page 35
From Brazil to Europe page 37
Transnational human rights violations page 39
MANNA: Project 8 page 41
MANNA: Project 9 page 44
TRA VISIONS 2020 page 47

EDITORIAL

THE RESILIENCE OF THE MCAA COMMUNITY

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Community resilience is usually defined as the ability of a community to learn from and respond to adverse situations.

This issue of the Newsletter comes out right before the two most important events of the year for our Association: the General Assembly and the Annual Conference. The General Assembly is where, as MCAA members, we come together to analyse our past activities and plan our future steps. The Annual Conference is where we open the doors of our house and invite the world in. A key aspect of both events has always been their physical dimension. They were venues where we could exchange opinions and criticisms, enjoy laughs and drinks, share plans and dreams. Of course, those are all activities that don't necessarily need people to be physically present in the same room, maybe with the exception of sharing drinks. Still, there was some added, unique value in the physical dimensionality of our events.

It has been two years since we last met in person as a community. A lot has changed since then. The world around the MCAA has changed and it has forced us to learn and adapt. Last year we were forced to drastically reduce the scope of our main events. A quick look at the programme of this year's Annual Conference and it becomes clear that we have come a long way. We have been able to face the adversities and react accordingly. The rich programme of the event is the result of the great work of the GA task force members, and of all the session organisers, speakers, and partners. But it is also the tip of an iceberg. It is the most evident part of a wider process that has been running deep in our community. A testament to the many members who decided to keep donating their time and resources, and to the many others who decided to step in and actively offer their contribution to the daily life of the Association.

The past year saw the election not only of the general Board of our Association, but also of the Boards of many Chapters and Working Groups. This is why this issue of the Newsletter hosts a series of interviews with their Chairs, thanks to an initial suggestion by Esther Hegel, Ordinary Board Member. They are people with very different backgrounds, at very diverse stages of their life and career, but all joined by the common intent of strengthening our community. Their stories exemplify the stories of the many members who, in face of the adverse condition we have been facing, decided to keep working together, decided to keep believing in the MCAA's idea.

The MCAA is a community that keeps finding its strength in its own members. This issue of the Newsletter, with the stories of some of them, is a celebration of our community resilience. The same resilience that we will celebrate in a few days during our Annual Conference.

GIAN MARIA GRECO
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ISSN 2663-9483

NEWS FROM THE MCAA

GETTING TOGETHER IN TIMES OF CRISIS

Save the date! The 2021 MCAA Annual Conference will take place 5–7 March. Maja Mise, from the GA task force, tells us why you shouldn't miss it.

MCAA members are looking forward to the upcoming annual conference, particularly since last year's event was cancelled due to the COVID-19 outbreak. Members are no doubt eager to come together for the MCAA's biggest networking event of the year.

This year's digital format will ensure participation of a large number of MCAA members. "This conference format has a great potential since it allows the attendance of members from all around the world," says Maja Mise, who is on the General Assembly task force organising the Annual Conference. "If we consider that the MCAA now has more than 17 000 members, it would be challenging to organise a physical on-site conference with so many potential attendees."

Participants will also have the opportunity to network from their office or living room. Even social activities like virtual drinks are on the cards.

RESEARCH IN TIMES OF CRISIS

The theme of the conference "Research in times of crisis" reflects on how challenging events and extraordinary circumstances impact society, especially research and academia. "The COVID-19 pandemic has shown that research has an

ISSN 2663-9483

NEWS FROM THE MCAA

important role in society, not only in public health, but in economic and social policies," says Maja.

Science communication will also top the agenda. "The COVID-19 pandemic also showed the importance of science communication. We all remember the 'flatten the curve' graph that was widely shared in media news, social media, and politicians adopted the phrase. That showed clarity and transparency of science communication methods. So, communicating science and research will be one of the main topics of the MCAA Annual Conference," adds Maja.

THE ROLE OF OPEN SCIENCE

According to Maja, the COVID-19 pandemic also revealed the incredible importance of Open Science, not only Open Access publishing, but also open peer-reviews. "Those have been crucial for evaluating vaccine data, but also the Open Research principles of findable (accessible), interoperable and reusable data in the fight against SARS-CoV-2 virus and COVID-19. One of the sessions at the MCAA conference will deal with these issues, and the importance of open and transparent research," she says.

Other sessions, such as "Mental health and research careers: tips and tools" and "Accessible Communication in Times of Crisis" are also being planned.

VIRTUAL NETWORKING

Maja emphasises that organising a 100 % virtual event can be challenging, particularly the setting up of online networking events. "We are lacking physical contacts, chats in halls between sessions and coffee breaks, and socialising in pubs afterwards, and all other perks of on-site conferences. However, the taskforce team will prepare virtual social events, such as a pub quiz," she says.

To enhance networking, attendees will also be invited to participate in Working Group and Chapter meetings.

Maja strongly encourages MCAA members to attend this year's annual event. "We all know this has been a very difficult year for researchers, particularly Early Career Researchers and postdocs who are spending lockdowns away from their families. The COVID-19 pandemic fundamentally changed the way we do research. Also, researchers' lives have become more isolated than ever before with working remotely. So, let's take advantage of the online format of the conference and really bring together all our members," she concludes.

MCAA EDITORIAL TEAM

Want to share, exchange and interact with your peers? Attend the MCAA Annual Conference! Register here

Meet the Annual Conference taskforce:

Azra Frkatović, Damir Dominko, Dragomira Majhen, Iva Škrinjar, Luksa Popovic, Marina Skelin, Martina Petrovicl, Mladen Banovic, Maja Mise, Samira Smajlovic, Sandra Vidovic

ISSN 2663-9483

NEWS FROM THE MCAA

EUROPE AS A GLOBAL LEADER IN AI RESEARCH AND INNOVATION

The MCAA and the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE) signed a Memorandum of Understanding (MoU) in July 2020 to strengthen European Research & Innovation (R&I) activities in artificial intelligence (AI).

CLAIRE founder Holger Hoos and Ricardo Chavarriaga, who heads the CLAIRE office in Zurich, explain the importance of this collaboration.

From its official establishment in 2014, the MCAA endeavours to generate a synergy of integrated intelligence. This can be artificial or natural, from intuition or experience, from discovery or creation. The MCAA addresses intelligence from all possible standards by fostering networks and presenting opportunities in research and career development. As such, the MCAA happily embraces the incorporation and the possibility of integrated AI to its objectives. This partnership certainly benefits both the MCAA and CLAIRE, and we look forward to developing innovative opportunities to collaborate.

Mostafa Moonir Shawrav, MCAA Chair

Why is this partnership important?

CLAIRE and the MCAA are both strongly engaged in leveraging European talent in R&I. Both organisations are firmly rooted in the belief that knowledge and technology should be aimed at the benefit of society. Given these convergent ideas, it seemed very natural to seek ways to join forces to achieve our common goals.

The value of this partnership became clear to the leadership of both organisations, resulting in the signing of the MoU.

How will CLAIRE leverage this global network and benefit from sharing communication resources with the MCAA?

Both CLAIRE and the MCAA are committed to supporting their members by providing them with relevant

ISSN 2663-9483

NEWS FROM THE MCAA

information and opportunities for training, as well as means for sharing experiences and ideas. Given the shared interests of both, the benefit of keeping CLAIRE's members aware of activities organised by the MCAA became manifest. Thanks to this MoU, internal communication channels within CLAIRE are now available for the promotion of MCAA activities. The newly established communication channels between the two networks facilitate the participation of CLAIRE experts in MCAA events, as was the case with the panel titled At the interface of AI, Neuroscience and Policy which was held during the MCAA 2020 Virtual Conference.

How would you describe MCAA's contribution to AI research in Europe?

AI methods and techniques are currently being deployed across all academic fields. In order for Europe to maintain and benefit from excellence in the development and application of AI, it is important to create efficient communication between AI experts and the various fields of application. Complementarily, the promotion of human-centred approaches for AI also requires broader awareness of AI in society.

The MCAA gathers some of Europe's best and most visible researchers, several of which are already involved in AI. Seamless communication between the CLAIRE and MCAA communities can be a catalyst for creating effective tools to achieve our common goal of bringing responsible AI solutions to a wide range of applications. An important role of CLAIRE and the MCAA lies in the representation of the interests of their members vis-à-vis public bodies in Europe. Given the significant societal and economic impact of AI, public commitment and support for excellence in R&I is of the utmost importance. Therefore, joint efforts by CLAIRE and the MCAA to convey this message and to advocate for sustained support and funding of human-centred, trustworthy AI is of great importance.

Will this partnership also assist in fighting COVID-19?

At this moment there are no explicit joint activities focused on COVID-19. In March 2020, CLAIRE established its COVID-19 taskforce to coordinate volunteer efforts to help tackle the effects of the pandemic using a broad range of AI techniques. Presently, we are building upon the lessons learnt over the last months to devise a more permanent approach to address the present and long-lasting effects of COVID-19. Possible collaborations with the MCAA are being explored.

What new opportunities do you see opening up with this MoU?

One of the most important assets of European R&I is the excellence and diversity of human talent. CLAIRE is currently deeply committed to enhancing the opportunities it offers to AI researchers at different stages of their careers. In this sense, the experience of the MCAA in providing training activities in career development, technological innovation and social implications of technology are of great interest

to us. Our goal is to build upon the current MoU and to start proposing concrete joint opportunities to our members starting in early 2021.

"From its official establishment in 2014, the MCAA endeavours to generate a synergy of integrated intelligence. This can be artificial or natural, from intuition or experience, from discovery or creation. The MCAA addresses intelligence from all possible standards by fostering networks and presenting opportunities in research and career development. As such, the MCAA happily embraces the incorporation and the possibility of integrated AI to its objectives. This partnership certainly benefits both the MCAA and CLAIRE, and we look forward to developing innovative opportunities to collaborate."

MCAA EDITORIAL TEAM

ISSN 2663-9483

NEWS FROM THE WORKING GROUPS

CHAIRING IN TIMES OF COVID-19

Valerie Bentivegna (Chair of the Communication Working Group) and Pavlo Bazilinskyy (Chair of the Bridging Science and Business Working Group) tell us how they have adapted to the 'new normal' amid the pandemic.

Valerie, in her own words

I feel like I was born to be part of an international research programme! I was born in the US, raised in Belgium (so I have dual nationality), and now reside in the US. As a high school student in Belgium, I participated in several week-long international gatherings with partner schools through the Comenius exchange programme. I was bit by the global mobility bug at a young age. After that, I earned a bachelor's degree in BioEngineering (KULeuven), participated in the Erasmus Mundus Master Programme for an MSC in Nanoscience and Nanotechnology (KULeuven & UJF Grenoble Joint degree), spending the second year of my Master's in France. Finally, I pursued a PhD in Life Sciences at the University of Dundee in Scotland, where I was an Early Stage Researcher in the International Training Network project PHOQUS. My area of research during my PhD work was developing novel methods to study the onset and progression using 3D tissue models. More recently, I applied my tissue engineering skills at an organ-on-a-chip start-up company.

Now I am focussing on science writing. In my spare time, I produce and perform science comedy in Seattle and virtually since the pandemic.

ISSN 2663-9483

NEWS FROM THE WORKING GROUPS

Pavlo, in his own words

I was born in Ukraine. I earned my Bachelor's degree from Mikkeli University of Technology in Finland. I then received the Erasmus Mundus double Master of Science in Dependable Software Systems from the University of St Andrews in Scotland and Maynooth University in Ireland. I joined an MSCA International Training Network project at TU Delft in the Netherlands, where I obtained a PhD. My project was in the area of automated driving. I am involved with startups and currently chair MCAA's Bridging Science and Business Working Group. I am also active within the Erasmus Mundus Students and Alumni Association, where I am the director of the Research and Innovation unit.

Valerie and Pavlo are both proud of their achievements within their Working Groups despite COVID-19 and the restriction measures put in place to contain the pandemic. During this time of closures and cancellations, the events have shifted to a virtual format.

According to Pavlo, his working group has been focussed mostly on reorganising events. He explains: "All our plans for 2020 crashed, as we had a big emphasis on conducting two large-scale events within the 'Researchers meet Innovators' series. We also planned to conduct a session during the GA. We attempted to refocus the events to the online reality, but it was deemed inefficient and we redirected a few subtopics of the planned events into webinars. We decided to postpone the organisation of large events for later, when the world comes back to the (new) normal."

The Researchers meet Innovators series of workshops, however, was a success, gaining a particularly high level of exposure. "Our events would often attract more than a hundred attendees," says Pavlo. "Last year, we organised a number of webinars conducted by MCAA members, as well as external speakers."

Valerie is also pleased to mention that, thanks to the active involvement of Gian Maria Greco, the MCAA content (newsletters and magazine) has become more accessible. Good practices have been established, as well as guidelines. "We will continue these efforts by organising workshops on accessibility for websites and virtual conferences," she says. As regards the recent special edition newsletter on diversity, Valerie highlights the importance of sharing stories about underrepresented researchers.

"Finally, we organised a very successful Science Slam training and some of the participants took part in a science comedy show during the virtual conference," she says. "Let's have more of that, please!"

According to Valerie, the pandemic had a limited impact on the activities of the Communication Working Group since a large part were already taking place online. "We were always a very virtual group, communicating mostly by emails and the Slack channel, as we were spread out over several time zones. Personally, I think the pandemic did allow me to re-evaluate how to structure my time and the projects we were

ISSN 2663-9483

NEWS FROM THE WORKING GROUPS

planning, and it also allowed us to embrace organising virtual events," she adds.

BUILDING RESILIENCE

Probably the biggest question amidst the pandemic is how to build resilience in times of COVID-19. For Pavlo, the solution is based on crowdsourcing and distributed research. "The pandemic actually gave a foundation to test the resilience of these methods. Within the Bridging Science and Business Working Group, we are discussing how guidelines may now be updated to make research of members of MCAA more flexible," he explains.

According to Valerie, flexibility is paramount. "I'm not sure continuity should always be the priority, allowing for flexibility in changing situations, reframing priorities, and putting mental health and wellbeing before research productivity is key to maintain resilience in the long-term," she concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

Join us in welcoming a dozen new faces to MCAA's global community. From Bulgaria to Ireland and from Argentina to Switzerland, a dozen new Working Group and Chapter chairs have been recently elected.

Our Editorial Team caught up with all 12 new Chairs to ask them about their decision to take up their new post, as well as the new challenges they face amidst the COVID-19 pandemic and their future plans.

Rescheduling events and putting them online due to the COVID-19 pandemic restrictions, as well as finding ways for the MCAA community spirit to shine through despite COVID-19 challenges are just a few of the recurring issues.

There's also a common understanding shared by all new Chairs: Empathy, kindness and support are key to safeguard research and researchers in times of crisis, particularly amidst budget cuts and uncertainties.

MEET THE CHAIRS.
CLICK ON THEIR NAMES TO READ THE FULL INTERVIEWS

Barry Hayes
Ireland Chapter

Christian Weber
Research Funding Working Group

Cristina Blanco Sío-López
N. America Chapter

Gledson Emidio
Brazil Chapter

Joaquin Capablo
Spain-Portugal Chapter

Maya Dimitrova
Bulgaria Chapter

Petra Dunkel
Hungary Chapter

Riccardo Biondi
Italy Chapter

Stéphanie Gauttier
Policy Working Group

Theodota Lagouri
Switzerland Chapter

Veronica Nabbosa
Austria Chapter

Virginia Helena Albarracin
Argentina Chapter

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

BARRY HAYES – IRELAND CHAPTER

Barry Hayes, the new chair of the Ireland Chapter, says funding and stability are key to ensure an efficient research environment. We caught up with him to discuss his plans.

> ***I think it's very important to promote the MSCA fellowships and make best use of the MCAA network.***

Barry, in his own words

I'm from Waterford, a small city on the south east coast of Ireland. After receiving my PhD in electrical power engineering from the University of Edinburgh, I was a Marie Skłodowska-Curie Actions MSCA-funded postdoctoral researcher in Madrid, where I researched sustainable energy technologies and electricity grids. I've also spent time as a visiting researcher in the US and in England. These mobility experiences were really influential for my research career. I'm now an assistant professor at University College Cork in Ireland, where I lead a growing research team of two postdocs, three PhDs, and several Masters students, and I teach power engineering topics. It's always extremely busy, but I love my job so it never feels like work.

Barry's MSCA project definitely boosted his career and he is grateful about this. This is why he is happy to be a part of the MCAA. "I think it's very important to promote the MSCA fellowships and make best use of the MCAA network, which is a unique network of extremely talented researchers with an international perspective. Also my MSCA postdoc mobility really helped me in my career, so it's a chance to give something back," he explains.

ISSN 2663-9483

MEET OUR NEW CHAIRS

SECURING A STABLE FUTURE FOR RESEARCHERS

In his new role as MCAA Ireland Chair, Barry has big plans. “The goals are to grow the number of active members, and to share knowledge and experiences on the topics that are important to all MCAA Ireland members, regardless of discipline. These include how to find research funding, and how to find high-quality, stable jobs in research and academia,” says Barry.

Due to the COVID-10 pandemic, 2020 was a year of challenges. “It has obviously made all of our local and national events impossible in the traditional sense, and the last 12 months have been very quiet in terms of MCAA Ireland activities. We’re trying to address this by looking at options for virtual events, and we’re really keen to start in-person events up again as soon as we’re able,” explains Barry.

PREPARING FOR LIFE AFTER COVID-19

Despite the pandemic, Barry is keen to conduct activities for the Chapter in 2021. “The MCAA Ireland Chapter has been involved in organising local social events and an annual event with guest speakers focusing on career progression. We’re hoping to keep these events going, either virtually, or in person in the second half of 2021,” he adds.

Barry is also quick to note that COVID-19 and all the related restrictions and limitations are temporary. “It will pass,” he says. “Having access to emergency funds to support researchers through the pandemic (especially those finishing PhDs) is crucial to maintain continuity. There are now some grants available for this in Ireland, but these are not enough to meet the demand. A quick and effective vaccine rollout would also help a lot!”

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

CHRISTIAN WEBER – RESEARCH FUNDING WORKING GROUP

Christian Weber had worked closely with his predecessor Gábor Kismihók on the Research Funding Working Group. We ask him about his plans now that he's at the helm.

> ***To realise the MCAA's potential to grow we need to ensure sustainable funding of individuals and for the MCAA as a whole.***

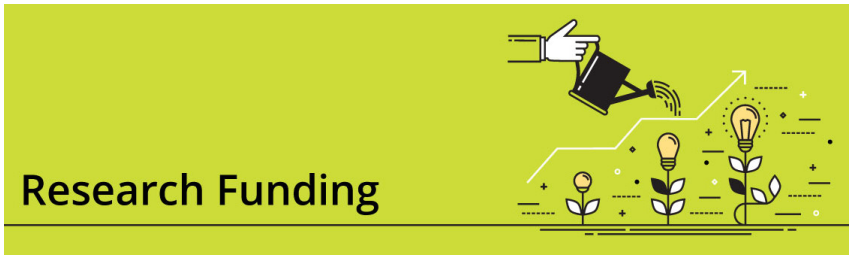
Christian, in his own words

I'm from Germany. I had the great chance to spend three years in Hungary at the Corvinus University of Budapest and the Corvinno Kft within the Eduworks Innovative Training Networks (ITN), researching on the rating and utilisation of domain knowledge for technology enhanced learning. Now I'm back at the University of Siegen in Germany, working as a postdoc at the Institute of Knowledge Based Systems and Knowledge Management. Widening my scope of rating domain knowledge to building and using knowledge graphs, I am now researching on establishing knowledge graphs as enablers for smart algorithms at the verge between quantitative and qualitative sources of information.

Many Artificial Intelligence and smart(er) technologies can profit from that, e.g. machine learning and recommender systems. I'm bringing my research into use in a range of applications and funding areas as technology enhanced learning (individualising learning), industry 4.0 (root cause analysis and context along the value chain) or fault detection (contextualising and diagnosing in open systems). This makes my workdays both rich in variety and open minded – something that the ITN mobility and the mix of cultures and domains fostered greatly.

ISSN 2663-9483

MEET OUR NEW CHAIRS



Christian's journey with the MCAA started with his experience as the Research Funding Working Group's Vice-Chair. He worked closely with Gábor Kishmihók, the previous chair. "What unifies us both is the experience with national, European and international research funding applications and their implementation across domains," says Christian. "Research funding is always different in different domains and therefore it is a profit that we both think beyond domain limits to foster interdisciplinary research, which is exactly where MCAA succeeds – having excellent researchers and bringing them together."

FOSTERING FUNDING

Asked about his future plans for the Working Group, he explains: "As MCAA we are a strong partner in science already but together with the working group I want to make us a strong partner in research projects too. This is an ever growing potential of MCAA and one major way to turn this into a sustainable force is to foster the funding of individuals, but also acquire research funding for the MCAA as a whole."

Christian has set three main goals.

- Informing MCAA members about research funding and sharing and organising lessons learned;
- Being the first contact point for external and internal research funding;
- Interfacing between partner requests of project consortia and the MCAA board to be a partner in research funding and supporting the organisational process.

RESEARCH FUNDING AS AN INTEGRAL PART OF THE ACADEMIC FUTURE

Christian is proud to mention a few accomplishments of the Working Group. "Under the work of the group, MCAA was established as a partner in four successful research proposals, acquiring funds for the MCAA to employ members of the community to add to science under the label of MCAA," he says.

In addition, members of the working group have been invited as regular speakers in science and research funding events, helping the MCAA community to build a vision on how research funding is an integral part of the academic future.

It goes without saying that the working group has also suffered from the COVID-19 pandemic. "COVID-19 comes with explicit but also many implicit and often unconscious impacts, which we may only be able to fully unpack looking back onto the crisis," muses Christian.

CONTINUITY AS A RESILIENCE STRATEGY

"We were as a group all fortunate to have the resilience of the past mobility and often also the extra stability of longer running contracts in our home institutions," adds Christian. "As such my impression is that we mastered the crisis very well in terms of the impact onto the working group."

From the start of the pandemic the Working Group has also set ambitious but realistic goals, with a limited number of task forces, but with well-connected members.

For Christian, resilience can be developed through continuity. "The true resilience of this crisis is to keep our ground or to discover factors of stability we didn't consider before to build us a familiar yet different ground to stand on", he says. "Final continuity comes from finding our personal narrative of how science and maturity grew together through this crisis and how they grew through one another," he concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

CRISTINA BLANCO SÍO-LÓPEZ – NORTH AMERICA CHAPTER

NORTH AMERICA CHAPTER

New Chair of the North America Chapter, Cristina Blanco Sío-López aims to shed light on welfare and mental health, the great challenges faced by today's researchers.

> ***I wish to offer inspiring and empowering opportunities for all MSCA fellows amid the unprecedented challenges of the COVID-19 context.***

Cristina in her own words

I'm a passionate Spanish historian specialised in European Integration History and I am currently a Marie Skłodowska-Curie Global Fellow and Principal Investigator (PI) of the EU H-2020 research project 'Navigating Schengen: Historical Challenges and Potentialities of the EU's Free Movement of Persons, 1985-2015' (NAVSCHEN) at the European Studies Centre (ESC) – EU Jean Monnet European Centre of Excellence (JMEUCE) of the University of Pittsburgh and the Ca' Foscari University of Venice.

I previously was Assistant Professor in 'European Culture and Politics' at the University of Groningen and 'Santander' Senior Fellow in European Studies at the European Studies Centre (ESC) – St. Antony's College of the University of Oxford, where I remain a Senior Member. Earlier on, I worked as PI, Lecturer and Leading Researcher in European Studies at: the CVCE – University of Luxembourg; the Robert Schuman for Advanced Studies (RSCAS) in Florence; the DG Enlargement of the European Commission and the European Parliament in Brussels and at the US Congress in Washington, D.C.

I am also a Member of the Global Young Academy (GYA) and Co-Leader of the GYA project 'The COVID-19 Pandemic and Art', as well as a Member of the Spanish Young Academy, where I represent the field of History.

ISSN 2663-9483

MEET OUR NEW CHAIRS

I obtained my PhD in History and Civilisation (European Integration History) at the European University Institute of Florence (EUI), for which I received the FAEY 'Best PhD Thesis European Research and Mobility Award'. My current MSCA GF research project NAVSCHEN aims to produce the first dedicated historical analysis of all worldwide available primary sources on the transnational roots, debates and conditions for the implementation of the EU's free movement of persons.

The project's overall objective is to highlight the value of critical historical analysis and the normative legacies on human mobility rights in the European integration process. In a nutshell, NAVSCHEN aims to address the current challenges of the EU's migration and asylum policy-making from a Human Rights perspective by looking back in order to see beyond.

For Cristina, her commitment to becoming the Chair of the North America Chapter is above all altruistic. "I wish to offer inspiring and empowering opportunities for all MSCA fellows amid the unprecedented challenges of the COVID-19 context, so that their experience in the region (and beyond) makes a determinate difference in their future career development and in the unfolding of their personal potential, their 'becoming'," she explains.

TRANSFERABLE SKILLS IN THE SPOTLIGHT

Cristina wishes to organise activities within the Chapter that will contribute to the development of transferable skills, such as:

- exploring research publication opportunities with major university presses; publishing houses and high impact journal representatives in North America;
- helping fellows develop soft skills and research presentation skills;
- connecting researchers to enhance future common projects;
- helping senior MSCA Global Fellowship achieve a distinctive professional development skill set based on actionable new capacities and networks;
- contributing to the visibility and impact of Early Career Researchers;
- building bridges for joint enriching actions between the EU and North America;
- bringing expert advice on job searches within and outside the academic sector in the pandemic context and offering a welcoming ground for the diffusion of multifaceted creative expressions beyond the fellows' fields of research (curriculum B).

ISSN 2663-9483

MEET OUR NEW CHAIRS

MENTAL HEALTH AND WELFARE IN JEOPARDY

When mentioning the impact of the COVID-19 pandemic on research so far, Cristina highlights the numerous negative consequences. "The closure of labs, archives, libraries and departments for a long time has impacted not only the rhythm of our work and creativity; it has also affected the natural exchanges as part of a highly interactive research and academic ecosystem and the building of collaborative networks normally leading to future common ventures," she says.

In addition, mental health and a well-rounded approach to researchers' welfare remains the most important concern as regards the pandemic so far. Therefore, the Chapter launched this first activity on 'Rising above: The Impact of COVID-19 on our MSCA projects'. "We have more questions than answers in a collectively uncertain terrain, but some of us have gone through and overcame experiences which can helpfully shed light on others fellows' paths," explains Cristina.

THE POWER OF KINDNESS

To overcome the crisis we are currently living, Cristina emphasises kindness as a cardinal value. "Fellowships tend to revolve about conventional notions of 'prestige' and 'productivity', but this last year has shown us that kindness is key to anchor emotional health and to learn to admire 'the other', thus transforming competition into collaboration," she says.

Could the pandemic be a blessing in disguise in some aspects? "This time for introspection can also gift us the discovery of all the versions of ourselves we want to become, both autonomously and in conversation with any former 'other' version," concludes Cristina.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

GLEDSON EMIDIO – BRAZIL CHAPTER

Gledson Emidio is currently leading the Brazil Chapter with one major objective: raising awareness about the opportunities offered by the Marie Skłodowska-Curie Actions (MSCA) within the Brazilian scientific community. Learn more about his strategy.

> ***We look for activities which can enhance the MCAA and MSCA awareness among the Brazilian scientific community.***

Gledson in his own words

I am a Brazilian analytical scientist working with sensors and data analysis for improving how we produce the things we eat, use and take. I applied for my Marie Skłodowska-Curie Actions (MSCA) fellowship when I was living in Lisbon, working for a consultancy company helping pharma and biopharma industries to optimise their processes. I moved to Scotland and spent five years there. It is a place where I have made great friendships and experienced memorable moments, thanks to the excellent conditions offered by the MSCA fellowship, the University of Strathclyde's vibrant environment, and Glasgow's friendly vibe. I am currently in Brazil doing a postdoc at the Brazilian Agricultural Research Corporation.

When Gledson recalls what motivated the creation of the Brazil Chapter, he concludes that his experience in Scotland played a major role. "I became the Chair of the ABEP-UK, the oldest Brazilian association of postgraduate researchers abroad, which is completing 41 years this year. It was a great learning experience having to liaise with Higher Education stakeholders in the UK and Brazil," he explains.

When he went back to Brazil, he founded the MCAA Brazil Chapter

ISSN 2663-9483

MEET OUR NEW CHAIRS

with a few MSCA Fellows and the help of Euraxess. The obvious next step to him was to apply as the Chair of the Chapter.

INCREASING MSCAS' VISIBILITY

Increasing the visibility of the Chapter is one of Gledson's main objectives. He explains why: "Marie Curie Actions are not well known in Brazil. Our ambition is to improve the Brazilian participation and approval rates in the programme. In this scope, we try to establish partnerships with the main Brazilian stakeholders, organise events, and offer training activities. We look for activities which can enhance the MCAA and MSCA awareness among the Brazilian scientific community," he adds.

Due to the pandemic, 2020 has been a particularly tough year for researchers, according to Gledson. The Chapter had for example to cancel the 2nd Latin America conference. Fortunately, the event has been postponed and will take place online next March. "We lost several opportunities to meet people face-to-face, which is valuable to improve connections. But at the same time, we were able to bring our events to a bigger audience when we switched to the online format," says Gledson.

RE-INVENTING RESEARCH ENVIRONMENTS

According to the Brazil Chapter's Chair, we should not disregard that such a crisis, like the one we are currently living with the COVID-19, gives

room for reflection on how research could be envisaged in the future. "I think we cannot lose this opportunity to discuss how to build kinder and better science environments. I hope we can finish the year having offered opportunities to our community to discuss ways of improving the research culture, especially here in Brazil, where such discussion is still very incipient. It would be great to have more volunteer members who could occasionally help us plan and organise our actions. We invite all members and their specific interests," adds Gledson.

To build resilience and to maintain continuity in research, empathy is vital for Gledson. "We need to respect people's needs if we want to have more sustainable careers and research outputs of better quality," he concludes.

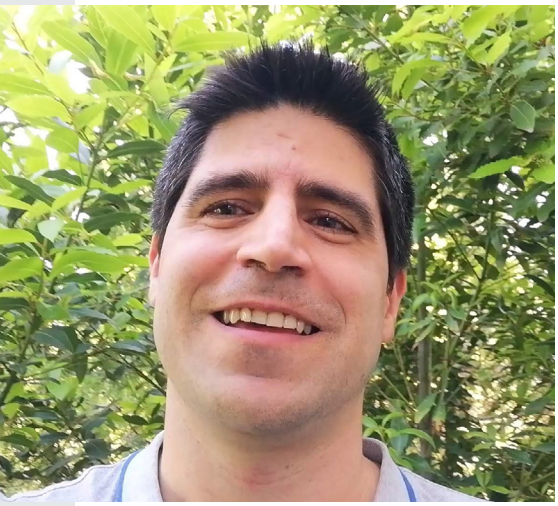
MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

JOAQUIN CAPABLO – SPAIN-PORTUGAL CHAPTER



Joaquin Capablo has experience that combines skills from both academia and industry. He strongly believes that these competences will help him to lead the Spain-Portugal Chapter and he told us why.

> ***In the COVID-19 context, the key way to build resilience is hard work, innovative practices and persistence.***

Joaquin, in his own words

I am Spanish, born in Zaragoza, with my family coming from Somontano, Huesca region. I have studied Chemical Engineering at the University of Zaragoza, with an Erasmus experience in Germany (FHTE Esslingen).

After a short student internship, I enrolled as a PhD student at LIFTEC (a CSIC research centre in Zaragoza), in the frame of the University Professor Training programme (FPU), including during the doctoral period stays at some other research centres (CHEC-DTU, IREC, FURV) and some teaching experience in the Fluid Mechanics Area of the University of Zaragoza.

After the PhD, I was awarded a Marie Curie fellowship to work for two years in Italy as Experienced Researcher in an Industria Academia Partnership and Pathways (IAPP) project (Green Kitchen), in which Whirlpool, SUPSI, the Polytechnic University of Milan and the University of Wroclaw were involved as partners. The main aim of the project was the investigation of innovative technologies and eco-design strategies in the field of home appliances for drastically improving the efficiency in the use of resources.

ISSN 2663-9483

MEET OUR NEW CHAIRS

After the PhD, I was awarded a Marie Curie fellowship to work for two years in Italy as Experienced Researcher in an Industria Academia Partnership and Pathways (IAPP) project (Green Kitchen), in which Whirlpool, SUPSI, the Polytechnic University of Milan and the University of Wroclaw were involved as partners. The main aim of the project was the investigation of innovative technologies and eco-design strategies in the field of home appliances for drastically improving the efficiency in the use of resources.

Since 2014, I work in Pamplona at BSH Home Appliances (Bosch Group), in the Heat Pump Competence Centre, dealing with innovation projects involving thermal, fluid and kinetic analyses of advanced technologies applied to vapor compression cycles.

For Joaquin, tapping the potential of the Spain-Portugal Chapter was behind his motivations to apply as a Chair. “I have developed my career in some research centres at international level, from both academia and industry, so this global perspective can be helpful to successfully accomplish the Chair functions,” he explains with enthusiasm.

Joaquin has already established the clear goals that he aims to reach within the Chapter:

- Encouraging local networking among MCAA members on the Spain-Portugal basis, facilitating connections between MC fellows and alumni, and supporting activities that will add value to them;
- Increasing the exchange of knowledge among people from different countries, sectors of the economy, and scientific disciplines;
- Boosting cooperation and mutual understanding among MCAA members and external stakeholders;
- Providing excellent conditions to generate constructive debate for researchers and citizens.

INCREASING MEMBERSHIP

In 2021, Joaquin plans to increase the networking among Chapter members through specific social events. In addition, experiences between industry and academia will be promoted through appropriate forums.

Soft skills will represent the core activities of the Chapter with the development and enhancement of the knowledge in synergies, taking into account both scientific and non-scientific disciplines.

“We aim to engage with new potential members for the MCAA and ensure they become more actively involved in activities,” adds Joaquin.

ADDRESSING THE CHALLENGES CAUSED BY COVID-19

Due to the COVID-19 pandemic, the events led by the Chapters have been conducted online. “Virtual events will surely be a must for most of the activities to be performed in the next months. Let's hope that with a bit of luck, we will be able to organise face-to-face activities soon,” he says.

Nevertheless, leading a Chapter during a pandemic implies being creative in addressing the pitfalls. “In the current times of uncertainty within the COVID-19 context, the key way to build resilience are hard work, innovative practices and persistence,” says Joaquin. Being agile is key to adapting to any situation.

“Once the new strategies and goals are decided and implemented, an agile approach is recommended to monitor the development of this new scenario, to learn from it, and to periodically review and readjust it, if necessary,” he concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

MAYA DIMITROVA – BULGARIA CHAPTER

Maya Dimitrova is the new chair of the Bulgaria Chapter. Despite the COVID-19 pandemic, she hopes to tighten the links between the members of the Chapter.

I must admit that COVID-19 has brought bigger challenges than I expected when I became the new Chair.

Maya, in her own words

Originally from Bulgaria, I obtained two Masters of Science (MSc) degrees in psychology - from St Petersburg University, Russia, in 1985, and from Warwick University, UK, in 1995.

I have always been interested in the formal aspects of psychological research. My PhD is in Applications of Principles and Methods of Cybernetics in Different Areas of Science, which is an engineering subject in Bulgaria.

I am currently working at the Institute of Robotics of the Bulgarian Academy of Sciences and on my MSCA project as a "robopsychologist" in Bulgaria (to quote Isaak Asimov's book).

In 2017, a consortium including my institute as the largest beneficiary won a RISE project "CybSPEED: Cyber-Physical Systems for Pedagogical Rehabilitation in Special Education", involving partners from Greece, Spain, France, Bulgaria, Japan, Chile and Morocco.

I have been collaborating with the researchers from Japan, involved in CybSPEED, since 2006.

ISSN 2663-9483

MEET OUR NEW CHAIRS

Firstly, Maya wishes to congratulate the previous Chair's engagement. "Dr Anife Ahmedova invited most of the members and was a creative leader and supportive to every new member," she says.

Secondly, she describes her own decision to apply as the new Chair as a compromise. "My personal wish was to elect a young Chair, full of energy! However, most of the young alumni moved to other EU countries for career purposes. I hope that young researchers will start returning to Bulgaria after their individual fellowships abroad," she explains.

As the new Chair, Maya is keen to enhance motivation for scientific research among the members of the Chapter, to promote MSCA ideas and to expand the Chapter's network of connections and activities. "We aim to keep in touch during the lockdown and to exchange experience with other Chapters," she adds.

INTERNATIONAL MEMBERSHIP

Maya is particularly proud to have enhanced the international reputation of the Chapter. "Since I became the Chair, new members joined the Bulgaria Chapter - mainly young researchers and researchers from other countries, such as Japan, Greece and Spain who are active participants in the CybSPEED project," she explains. Seeing these good results, Maya hopes to build on the active and vibrant communication and events, initiated and ran by the previous Chair, with her help.

Maya recognises that leading a Chapter in times of COVID-19 has not been easy. "I must admit that COVID-19 has brought about bigger challenges than I expected when I became the new Chair," she says.

THE IMPORTANCE OF PERSONAL CONTACTS

Despite the difficulties, the Chapter has managed to organise online activities. "In October 2020, we set up an online course about artificial intelligence (AI) and robotic applications, and invited one of our members, Dr David Nunes from the University of the Basque Country, to speak," explains Maya. An informal meeting to share personal experiences during the lockdown also took place.

Maya underlines the challenges of the current situation. "There are real difficulties in inviting people to be more active within the Chapter. One of the reasons resides in the obstacles that researchers face these days, another difficulty is due to the fact that I don't know all the members of the Chapter very well," muses Maya. To overcome these obstacles, she is planning to work more in improving personal contact with the members. "The current situation is also a big challenge for the way we think and communicate science," she concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

PETRA DUNKEL – HUNGARY CHAPTER

HUNGARY CHAPTER

Petra Dunkel had the opportunity to be a member of two MCAA Chapters (France and Hungary). Now that she has become the Chair of the Hungary Chapter, she is leading the path towards its digital transformation.

> ***Going online is the motto of this year.***

Petra, in her own words

I was born and raised in Budapest, Hungary. I am a pharmacist by training, I obtained my degree at the Faculty of Pharmacy, Semmelweis University in Budapest.

As I was interested in chemistry, one of the reasons for choosing this training was the high number of chemistry-related subjects. I prepared my Master of Science (MSc) thesis from organic chemistry and pursued my PhD studies also in this field, at Semmelweis University.

My thesis was about the extensions of an interesting ring forming reaction. During my PhD studies, I had the occasion to spend shorter research periods in Italy (University of Milan) and Slovenia (University of Ljubljana), as part of bilateral projects.

I obtained a Marie Curie - Intra-European Fellowships (IEF) grant in 2013 to France (Paris Descartes University), with Peter Dalko as supervisor. Our project (LIGHTLAB-TOOLS) aimed at the development of novel so-called 'caged compounds'.

ISSN 2663-9483

MEET OUR NEW CHAIRS

After the postdoctoral period in France, I went back to Hungary and took a position in an industrial research laboratory.

Following this highly formative experience, finally, in 2018, I returned to Semmelweis University, where I am an assistant professor at the Faculty of Pharmacy.

From a research point of view, I continue working on light-activatable molecules, supported this time by prestigious national funding (ÚNKP-19-4 New National Excellence Programme of the Ministry for Innovation and Technology; János Bolyai Research Scholarship of the Hungarian Academy of Sciences).

When Petra obtained a Marie Curie - Intra-European Fellowships (IEF) grant in 2013, she decided to become a MCAA member. She initially joined the France Chapter, and, subsequently, when she went back to her country of origin, the Hungary Chapter.

INSPIRATION

When she attended the MCAA General Assembly in Venice in 2016, Petra was struck by the fruitful collaborative spirit and decided to become involved more deeply in the association's activities. "On the one hand, my motivation to apply as a Chair of the Hungary Chapter was due to my wish to work on the continuation and hopefully growing of our Chapter. On the other hand, MCAA is expanding rapidly and it would be interesting to be a part of this process and see from behind the scenes how the association could handle the novel challenges," she explains.

As the new Chair of the Chapter, Petra aims to increase the engagement and activity of its members, find the tools and ways to meet and interact with each other, collaborate more with other chapters, and offer relevant networking and training opportunities for the members.

BECOMING DIGITAL

For Petra, the main current challenge is to continue online the activities led by the Chapter. "Going online is the motto of this year," she says.

The Chapter had the opportunity to organise a digital Researchers' Night in November 2020 and plans to adapt its strategy in 2021. "For example, there was a session at the Researchers' Night 2019 about the impact of mobility on research careers. We are planning to organise the session this year under video interview format," adds Petra.

LIFE-BALANCE

To tackle the pitfalls caused by the COVID-19 pandemic, time management and finding an optimal work-life balance is more important than ever, according to Petra. "Everyone should work out their own resilience strategy depending on the conditions. Personally, keeping under control the stressful/worrying influences (i.e., checking less the number of confirmed COVID cases or the news) is one of the areas I should definitely work on," she says.

Although there are many parts of her work that can be done by a computer, the core activities of synthetic chemistry are based on laboratory experiments. Therefore, Petra hopes to be back to a full laboratory life very soon.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

RICCARDO BIONDI – ITALY CHAPTER

Riccardo Biondi has been an active member of the MCAA since its creation. He told us how his previous experience helps him to chair the Italy Chapter.

> ***I thought that the best way to share my experience with other fellows was to apply as the Chair of the Italy Chapter.***

Riccardo, in his own words

I am Italian and came back to my home country some years ago. I got my Master's degree in electronic engineering and my PhD in atmospheric physics. I am expert in remote sensing of atmospheric extreme events such as thunderstorms, tropical cyclones and volcanic eruption clouds.

Mobility has been the leitmotif of my life: I worked as a scientist for a few years at the University of Perugia (where I got my Master's degree), then moved to the European Space Agency to provide administrative support. But science was what I liked the most and I moved back to this research field in Denmark and the US.

After this experience, I worked for a UNESCO institute which supports developing countries, before moving to Austria for my Marie Curie Individual Fellowship.

I worked on my MSCA project at the Wegener Centre for Climate and Global Change in Graz, Austria, where I studied the capabilities of GPS to understand the structure of the thunderstorms and tropical cyclones.

ISSN 2663-9483

MEET OUR NEW CHAIRS

Following my MSCA project, I came back to Italy with an AXA Research Fund at the National Research Council, and finally to the University of Padova with another grant.

Currently, I am a researcher at the Department of Geosciences of the University of Padova where I act as a work package leader of two H2020 projects and I develop new projects for future challenges.

Chairing an MCAA Chapter is not something new to Riccardo, as he has been previously leading the Austria Chapter.

When he went back to his country of origin, several MSCA recipients based in Italy contacted him to ask for advice. "I remembered the experience of being the Austria Chapter's Chair as nice and productive. So, I thought that the best way to share my experience with other Fellows was to apply as the Chair of the Italy Chapter and to organise the Chapter as a practical support to all the Italian MSCA Fellows wishing to come back to their country and to all the MSCA Fellows living in Italy," explains Riccardo.

Riccardo has four main objectives for the Chapter:

- Supporting young Alumni with practical information. In this scope, a "Welcome to Italy" guidebook will be created to explain what to do once in Italy with the health system, the pension scheme, contracts, maternity/paternity leave, unemployment, etc.;
- Boosting the career of experienced Alumni with the organisation of networking events aiming at encouraging future cooperation and exploring funding opportunities;
- Improving communication (internal and external);
- Improving the impact of the Marie Curie Alumni Association Italy Chapter (MCAAIC) on national policies. "One of the previous Chairs of the Chapter, Angela Bellia, obtained from the Italian Ministry of Education, University and Research the commitment to recruit MSCA global fellows for a tenure track professorship. The objective is now to extend some of the benefits to all the MSCA fellows," explains Riccardo.

Like many other Chapters' Chairs, Riccardo hopes to increase the number of active members of the Chapter to tap into its potential. "The Italian community is the largest one among MSCA Alumni, but this is not reflected on the number of the Chapters' members. This is showing that the Chapter must involve them in a more effective way, therefore we want to increase the active participation of the Alumni to our activities and make them feel that the Chapter can bring them benefits and have an impact on the future generations of researchers," he adds.

Due to the COVID-19 pandemic, events carried on in 2020 were all virtual, and this is going to be the case in 2021 as well. "We all miss in-person meetings, but in some ways, the virtual activity allows more people to get involved in the events. In the past, you could take part in the meeting, only if you were able to get to the venue. Otherwise, you were not in," says Riccardo.

Despite the difficulties caused by the pandemic, Riccardo considers that digital activities bring benefits to the Chapter. "We formed a Chapter Board made up of six scientists who have never met before and who are from different Italian regions. Thanks to technology, we constantly keep in touch through WhatsApp, e-mail, GoToMeeting and social media, and we are able to work and collaborate as much as in 'regular' conditions," he adds.

Technology is therefore key in building resilience. "Keeping in touch with colleagues thanks to the current technologies (conference platforms and high-speed connections), and especially having a strong collaborative network definitely helps to reduce the negative impact of the current situation," he concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

STÉPHANIE GAUTTIER – POLICY WORKING GROUP

Stéphanie Gauttier has a clear vision on how to chair the Policy Working Group. For her, providing continuous support to the MCAA members is key.

> ***There are always MCAA members who are up for an online gathering and who will support you!***

Stéphanie,
in her own words

I am an Assistant Professor at the Grenoble School of Management in France. I came back to my home country after 11 years in Russia, Ireland, and the Netherlands.

In Russia, I worked in the marketing industry while doing my part-time PhD in France. I moved and continued the PhD while on a researcher contract in computer science and education with the Innovative Training Networks (ITN) association in Ireland. After defending my thesis, I joined the philosophy department of the University of Twente in the Netherlands, for a temporary postdoc position.

There, my role was to think of how research on ethics and technology can have an impact on policy. From there, I applied to the Individual Fellowships (IF) on ethics and technology. I terminated the IF early to take on my current, and luckily permanent, position.

My research still focuses on the role of ethical considerations in our decisions to use technology in general, as well as their political implications. It has been a journey of interdisciplinary and international mobility for sure!

ISSN 2663-9483

MEET OUR NEW CHAIRS

Stéphanie is passionate about Policy and particularly Political Sciences. She explains her commitment towards the MCAA: "I had the privilege to work on science for policy in my postdoc and to be part of a project commissioned by the Scientific Foresight (STOA), it seemed therefore natural to join the MCAA Policy Working Group."

Now that Stéphanie is leading the Policy Working Group, the activities she conducts are based on the following motto: "The WG is not focusing on science for policy. Rather, it looks at policy for science," she says.

CREATING A STIMULATING ENVIRONMENT FOR RESEARCHERS

The aim of the Working Group is, therefore, to promote research policies that enable researchers to flourish personally and academically. "We work a lot on understanding how to create responsible environments in that regard. We are also very interested in ethics and how to promote Open Science, Open Data. We want to make sure our members and the future generations will be able to evolve in an environment that both respects and enables them to do the best research they can," explains Stéphanie.

So far, the Policy WG has been quite successful in activities that aimed at raising awareness for a better research culture, sustainable research careers, and at setting up mental health peer-to-peer mentoring networks.

"This year, we will resume the mentoring action, we will collect evidence on the issues faced by our fellows and on what constitutes a good research environment. It is vital that we voice the concerns and issues of our researchers, and that MCAA leads conversations on this topic," adds Stéphanie.

BEING TOGETHER, ONLINE

With the COVID-19 pandemic, the members of the Working Group have been meeting up online on a regular basis. And online activities will be carried out, as Stéphanie says: "We'll soon have our first 'Wine O'clock policy talk', a session where people come to Zoom and share a glass of wine around a presentation by a member on policy and good discussions. We hope this will help members to network with each other and figure out how to influence policy."

For Stéphanie, adaptation is key. "There are always MCAA members who are up for an online gathering and who will support you and exchange, so don't be afraid to ask for informal gatherings, it keeps the mood up," she concludes with enthusiasm.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

THEODOTA LAGOURI – SWITZERLAND CHAPTER

> ***MCAA can play a role as a mediator to help its members.***

Since her commitment within the Switzerland Chapter, Theodota Lagouri has been continuously working on ensuring its continuity. She shared with us her main objectives and expectations as the new Chair.

Theodota, in her own words

I am a Greek research scientist with a PhD in Physics from Nuclear and Atomic Physics Laboratory of Aristotle University in Thessaloniki.

I am currently working as a researcher at the Experimental Physics Department at the European Centre for Nuclear Research (CERN) in Geneva, Switzerland .

Since about 25 years, I am working in experimental high energy physics and participate in the ATLAS experiment at the Large Hadron Collider (LHC) at CERN. I am (co-)author of more than 200 scientific papers with hundreds of citations each, published in top peer-reviewed scientific journals and also in numerous international conference proceedings.

I am a member of the Hellenic High Energy Physics Society (H-HEP) and the American Physical Society (APS).

Since 1996, I have been a mobile scientist, firstly as an Erasmus student in Helsinki, Finland, and afterwards as Marie Curie Postdoctoral Fellow.

ISSN 2663-9483

MEET OUR NEW CHAIRS

I have worked as experienced researcher in different EU countries, at the Max-Planck Institute in Germany, Automoma University of Madrid in Spain, CERN in Switzerland and Yale University in the US.

The last 15 years, I am based at CERN in Geneva, Switzerland.

I have been a Marie Curie Fellow, experienced researcher in different MSCA programmes and frameworks like Individual Fellowships (IF), Return Grants (RG) and Research Training Networks (RTN).

I have been an active member of MCAA since its creation. Since then I was secretary of MCAA GEMS Working Group and the communication (social-media) manager of MCAA GEDI Working Group. Recently, I was appointed as the Chair of the MCAA Switzerland Chapter in the fall of 2020.

Theodota's experience with the Switzerland Chapter started when she became its Secretary. It became afterwards important for her to apply as the Chair. "I believe that Switzerland Chapter should exist and prevail, given also the anticipated difficulties between the EU's and Switzerland's relationship in terms of free mobility, which could affect the life and future career of all scientists and researchers," she explains.

A BUSY AGENDA

As the new Chair, Theodota aims to develop networking activities and bring the MCAA members in contact with similar groups or organisations gathering mobile scientists in other EU universities or institutes. She intends also to focus on international organisations like CERN in Switzerland and France and outside the EU, for example in the US.

The 2021 agenda of the Chapter is already busy, as Theodota explains:

ISSN 2663-9483

MEET OUR NEW CHAIRS

"I've planned several meetings and webinars until August 2021 between our Chapter and other Working Groups like the Communication WG, the Science and Policy WG and the GEDI WG. We plan also to organise inter-Chapter meetings to share common interest seminars and workshops," she says.

Theodota has also plans for the Chapter's most active members. "I'm going to build a board of up to five members, each one acting as contact person and leader of an activity related to specific MCAA working groups."

DIGITAL TOUCH

Theodota has also created social media accounts for the Chapter on Twitter, LinkedIn, and Instagram. "These have already several followers. In addition, we have a new Slack domain to chat interactively within our Switzerland Chapter members," she adds.

Even if online activities have risen due to the COVID-19 pandemic, Theodota was already familiar with digital technologies and could therefore ensure a smooth transition. "We had our first virtual, and very successful, Chapter meeting last December and more frequent meetings and webinars are planned to follow. In addition, we have several social media platforms and chats for our communications available. Therefore, I am optimistic to convert these challenges into new opportunities for inclusion of more active members," she says with enthusiasm.

Digital meetings and activities are expected to be carried on, according to Theodota. "We need to get more used to online communication and work remotely. In some research areas, this is more easily feasible and effective. Unfortunately, this is not always possible in other areas," she muses.

MCAA AS A MEDIATOR

The MCAA has a major role to play in this context. "MCAA can play a role as a mediator to help its members. Especially since many mobile scientists are foreigners in their host countries, among them being a lot of women researchers and other minority groups, who right now face extra challenges to be able to continue their research," she concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

VERONICA NABBOSA – AUSTRIA CHAPTER

AUSTRIA (MCA3C) CHAPTER

For Veronica Nabbosa, the local level is crucial in research. We discussed her vision for the Austria Chapter.

> ***I wanted to be there for others and to better connect with the local community in Austria.***

Veronica, in her own words

I am a Ugandan by nationality but I spent almost six years in China (Hong Kong and Shanghai) as well as two years in several parts of Japan. I have been travelling so far in a total of 20 countries on all continents, except South America, and have worked or studied with people from various parts of the world.

I earned my Bachelor's in International Trade, Master's in E-Business Management and this year, I will complete my PhD in Digital Business. My research focuses mainly on Management Information Systems and International Management. My current research on the PERFORM project is focused on data privacy within digital retail at the Institute of Digital Business for the Johannes Kepler University Linz in Austria.

Veronica feels comfortable in multicultural environments and this is why she decided to become actively involved in the activities of the MCAA. In this scope, she applied as the Chair of the Austria Chapter. "I was motivated to take up this responsibility due to my interest in people from diverse cultures. I am familiar with the challenges of working or studying in a foreign country. I wanted to be there for others and to better connect with the local community in Austria," she explains.

ISSN 2663-9483

MEET OUR NEW CHAIRS

LOCAL ACTIVITIES IN THE SPOTLIGHT

As the new Chair, Veronica aims to contribute to the local community in the areas of environmental conservation and other scientific fields, such as healthcare and information technology.

Scientists working on their PhD will also be given specific attention from the Chapter, as Veronica explains: “We are organising a career development workshop, where we wish to reach out to scientists who will obtain their PhDs in 2021-2022, to guide and inform them on the possible next steps for their career.”

Furthermore, the Chapter is also currently working on community projects focusing on the environment and other scientific topics.

To face the challenges caused by the COVID-19 pandemic, the Chapter has developed online activities to enhance communication among its members. “We organised a fabulous online party at the end of 2020 and we keep interacting with our members on various communication channels,” explains Veronica.

For Veronica, the local level is crucial to build resilience and to maintain continuity in research, as local communities are not necessarily aware of the latest scientific publications and conferences. Eventually, filling this gap should help to gather scientists with citizens.

MCAA EDITORIAL TEAM

ISSN 2663-9483

INTERVIEWS

MEET OUR NEW CHAIRS

VIRGINIA HELENA ALBARRACIN – ARGENTINA CHAPTER

Virginia Helena Albarracin wishes to enhance science in Latin America. She shared her vision with us, as the new Chair of the Argentina Chapter.

The key for building long-term collaborations among scientists is not only the quality of our work and professional aptitudes but also our ability for empathy and care for our peers.

Virginia, in her own words

I'm Argentinian, from the Northwest, a province called Tucuman, I have worked and studied in Argentina and abroad with different scholarships: CONICET in Argentina, Fulbright in the US, German Academic Exchange Service (DAAD) and Marie Skłodowska-Curie Actions (MSCA) in Germany, European Research Council (ERC)-associated scholarship in Israel. My MSCA Incoming Fellowship was at the Max-Planck Institute for Chemical Energy Conversion in Mülheim an der Ruhr (2011-2013) and Return Phase in 2014 in my home lab in Argentina.

Last year, I was awarded the Georg Forster Experienced Researcher Scholarship to continue with my projects in Germany at the Phillips University in Marburg, but due to the pandemic, I had to postpone my trips.

ISSN 2663-9483

MEET OUR NEW CHAIRS

I am a Biologist, holding a PhD in Biochemistry. My research projects are in molecular microbiology and my areas of expertise are molecular biology, omics and electron microscopy. Currently, I am an Independent Researcher and Director of the Center for Electron Microscopy (CIME) belonging to CONICET, and the National University of Tucuman.

For Virginia, developing a collaborative spirit in science is crucial. That is why she decided to apply as the Chair of the Argentina Chapter, as she explains: "In these pandemic times, the collaborations and networking in online training or meetings are key strategies to help scientists stay motivated and work in interdisciplinary projects, especially those related with COVID-19."

BUILDING SCIENCE IN LATIN AMERICA

The Chapter needs, therefore, more active members, who can understand that the engagement with MCAA could help them boost their professional careers and build a better science in Latin America. To implement this vision, Virginia has set up four main objectives for the Chapter:

- Enhancing communication among members, recruiting new members and building networks to present joint proposal to EU funding schemes;
- Raising awareness about MSCA in Argentina and providing a platform allowing more Argentinian scientists to learn about MSCA and how to apply;
- Improving the professional skills of Latin American researchers;
- Providing a high-impact dissemination platform for young scientists to promote their work and to empower their communication skills.

As for the other Chapters' chairs, 2020 has been a challenging year to carry on the Chapters' activities. Getting digital became the new motto, even for those who weren't familiar with digital platforms.

However, Virginia highlights that once the technological pitfalls were tackled, digital meetings brought some added value. "We can participate (or have attendants/speakers) in events where before was impossible without proper funding or time," she says.

A RECIPE OF SUCCESS

Virginia emphasises that enhancing quality relationships is a good way to maintain continuity in research. "Building meaningful connections between alumni is a great way to build resilience," she says. "The key for building long-term collaborations among scientists is not only the quality of our work, and professional aptitudes but also our ability for empathy and care for our peers. This is a great moment to put it in practice," she concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

MEMBERS' ACHIEVEMENTS

FROM BRAZIL TO EUROPE, A POSTDOC MOBILITY EXPERIENCE

Marcos Ferasso had the opportunity to spend one year in France in the framework of his postdoc. He tells us how mobility boosted his career and how he would like to see his country's research environment evolve.

Marcos, in his own words

I am an Early Career Researcher, currently working as assistant professor at a Brazilian university named Unochapeco. I am also invited professor for the Doctoral School of Wroclaw University of Economics and Business (Poland). Moreover, I have built my research network in Peru, United States, Portugal, Spain, France, Finland, Poland, Italy, Pakistan, Nigeria, India and China thanks to my postdoc training and international experiences. I am Brazilian and I conducted most part of my education in Brazil, but with international exchange experiences abroad. My research field encompasses innovation management, focusing on innovation ecosystems, innovation and technological strategies, SMEs, cross-national studies, networked healthcare organisations, and circular economy. The research project I presented to be funded by Marie Skłodowska-Curie Actions (MSCA) covered the topics of industrial clusters and networked biotech companies for my postdoctoral stay in Marseilles (at KEDGE Business School). I was also selected for the Prestige Programme (Ministry of Education of France and Campus France), but the proposal was not implemented.

Asked to describe the research environment in Brazil, Marcos stresses the competitive atmosphere. "We have two main funding agencies (CAPES and CNPq), and the scholarships are very competitive due the high number of scholars that are applying for funding," he explains.

Researchers can face other challenges related to national budget and funding. "We have a national culture that is not completely supportive to research and academics," he adds.

ISSN 2663-9483

MEMBERS' ACHIEVEMENTS

Marcos also notes that it is difficult for researchers to find employment in Brazil. “Compared to the French context (where even companies are hiring such professionals), we have a lot of things to be done in Brazil to avoid the 'brain drain',” he notes.

WORKING IN EUROPE

Marcos was happy to spend one year in Marseille (France) to obtain his postdoc thanks to funding from the KEDGE Business School via formal contract. “This experience is different from the Brazilian post-docs, where you receive a scholarship for your research stay/training at a Brazilian institution (or abroad),” he explains.

Marcos highlights the importance of this postdoc mobility experience, compared to other professional stays abroad. “I am really thankful for this opportunity,” he says. “I could improve my research skills and I could feel better prepared as a young researcher on an international level. Even though I was in the US for my doctoral exchange period, and in France for my Master’s exchange period, I could enjoy a greater experience with the postdoc.”

Even though this postdoc experience was challenging, as it can be difficult to evolve in a foreign environment far from family and friends, Marcos recalls the nice working environment. “I was able to better feel the levels of experiences, skills and knowledge that are required from professors and researchers, not only in France but as in most European countries.”

What’s more, Marcos had the opportunity to explore other cities in Europe. He was invited to give lectures at Aix-Marseille Université (Aix-en-Provence), Università Degli Studi di Milano (Milan), and at Wroclaw University of Economics (Wroclaw). “I hope in the future – after the COVID-19 pandemic – to be invited to join more European teams and to deliver more lectures,” he adds.

BACK TO BRAZIL

For the mobile researcher like Marcos, returning home has meant viewing the local scene with fresh eyes. “Even if Brazil’s academia could be considered well balanced in gender matters, I can see that women suffer more… there is still a feeling that women can do less than men, which is absurd,” says Marcos.

He also refers to the LGBTQIA+ community and supportive environments. “Institutions are advertising to be an inclusive environment, but in most cases they are not. We witnessed a growing social inclusion at Brazilian institutions by giving the opportunity to all the social classes, but there is much more to be done to balance social inclusion as well,” he concludes.

MCAA EDITORIAL TEAM

ISSN 2663-9483

RESEARCH

HOW TO RESPOND TO TRANSNATIONAL HUMAN RIGHTS VIOLATIONS

MCSA Fellow and Principal Investigator Francesca Lessa has explored past atrocities in South America. Her findings are benefiting lawyers, prosecutors, activists and international human rights bodies.

The Marie Skłodowska-Curie project Operation Condor tackled the transnational dimension to past human rights violations perpetrated by South America's dictatorships during the 1970s and 1980s. Leading this endeavour was Francesca Lessa who explored transnational crimes by using Operation Condor as a case study.

Operation Condor was a secret transnational network of intelligence and joint operations that regimes in Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay established in late 1975 to persecute political opponents in exile in South America and beyond.

Holding a PhD in International Relations from the London School of Economics and having worked on various research projects at the University of Oxford relating to human rights and transitional justice, Lessa explains why this project is so important. She says: "Responding to transnational human rights violations has become a pressing issue recently in human rights scholarship and practice. This is in light of ever-growing transnational phenomena, including human trafficking and refugee crises around the world, that cause unprecedented human rights violations."

IMPORTANT CONCLUSIONS ABOUT TRANSNATIONAL REPRESSION IN SOUTH AMERICA

Lessa investigated the different ways South American transnational human rights violations in the 1970s have been investigated over the

ISSN 2663-9483

RESEARCH

years and identified potential lessons learnt to inform policy and responses for today's cross-border crimes. She analysed the victims of Operation Condor and transnational repression in the 1970s, and assessed the response of Argentina, Chile and Uruguay's justice systems to cross-border atrocities since the return to democracy in the 1980s.

Research has fed into the book 'The Condor Trials: Transnational Repression and Human Rights in South America'. The manuscript is being revised ahead of publication in late 2021. "Relying on multinational archival research, legal analysis and interviews conducted in South America, Italy and the US between 2013 and 2019, the book enhances our understanding of the inner workings of transnational repressive ventures by authoritarian governments in 1970s South America," explains Lessa. "It probed in detail the Operation Condor trials that took place in Argentina, Chile and Italy, as well as similar prosecutions in Uruguay from the mid-2000s to the present."

Created for the purposes of the project, the Database on South America's Transnational Human Rights Violations maps and compiles cases of victims of cross-border atrocities between 1969 and 1981. Through empirical data, the database reveals that Uruguayans represented the largest group of victims by nationality, and Argentina was the main theatre of transnational repressive operations at that time.

The project will benefit scholars, researchers, students and human rights practitioners in South America and abroad. "The mapping of transnational atrocities in 1970s South America and the close study of subsequent accountability efforts revealed both the extent of the atrocities committed and the crucial role that justice seekers, especially victims, survivors and human rights activists, have played since the 1970s in unravelling the secretive inner workings of Operation Condor and denouncing the crimes perpetrated," comments Lessa. "Furthermore, the persistent efforts of these transnational networks of justice seekers enabled emblematic prosecutions to eventually take place in the past decade and half in Argentina, Chile, Italy and Uruguay, amongst other countries."

JUSTICE IS BEING SERVED

Research findings have already had significant impact. In 2018, Lessa transmitted three new archival documents to lawyers involved in the Italian Operation Condor trial in Rome. A lawyer filed these documents before Rome's First Assize Appeals Court. They were subsequently admitted as evidence since the Court considered them new and relevant to proceedings during the appeals phase. In July 2019, the Court overturned 18 of the 19 acquittals dictated at first instance and condemned 24 former South American military and civilian officials for 38 murders committed during Operation Condor.

In April 2018, Lessa presented preliminary findings from the database to the Inter-American Commission on Human Rights in Washington. In May 2019, the Inter-American Commission used some of these findings in deciding the Julien Grisonas case. In Report 56/19, the Commission held that Uruguayans accounted for half of the victims of regional repression in South America. This finding was exclusively based on the project that broke down cases by nationality, crime type and perpetration country. No other state or agency had systematised this information before.

In early 2020, the Public Prosecutor's Office in Rome asked Lessa to testify in new criminal proceedings at the investigative stage regarding two homicides committed in 1976 and 1977. She submitted numerous archival documents gathered during the project.

Operation Condor and the transnational atrocities committed in 1970s South America and the associated process of achieving justice have been the subject of much interest and fascination. Lessa contributed to an in-depth report by 'The Guardian' in September 2020. Her research also attracted attention from South American media outlets in Chile, Uruguay and Argentina.

MCAA EDITORIAL TEAM

ISSN 2663-9483

RESEARCH

HOW CAN THE SOW'S MILK DIRECTLY AFFECT THE MEAT QUALITY OF THE PIGLETS, MOLECULARLY?

Discover Project number 8 of the MANNA network. You will find out how dietary lipids in sows' diet change the expression of genes, proteins and metabolites on piglets' muscles.

The European Joint Doctorate in Molecular Animal Nutrition (MANNA) is an EU network whose mission is to provide a Double Doctorate-level training programme, valid throughout all Europe, on innovative technologies applied to animal science and nutrition. The MANNA Joint Doctoral project is a Marie-Skłodowska Curie Actions Innovative Training Network (MSCA ITN) funded by the European Commission under the Horizon 2020 Programme. This is the 9th in a series of articles on the MANNA doctorate, through which we will discover in detail its projects and the related early-stage researchers (ESRs).

WHO AM I?

My name is Yron Joseph Manaig and I was born and raised in the Philippines — an archipelago country that is composed of 7 641 islands, so imagine how rich my is country in terms of natural resources and beaches. I obtained my bachelor's degree in Agriculture, with a major in Animal Science, at the University of the Philippines Los Baños. At the same university, I did a master's degree in Animal Science that is more focused on animal nutrition. In my dissertation, I determined the feeding value of soybean lecithin oil and the interactive effects of

ISSN 2663-9483

RESEARCH

supplemental fat sources and carcass modifiers on production performance, carcass characteristics, meat quality and belly characteristics of growing-finishing pigs.

I am currently ESR number 8 working on the project titled "Effect of dietary lipids on porcine meat quality (intramuscular fat content and composition)", which is supervised by Armand Sanchez Bonastre (Universitá Autonoma de Barcelona (UAB), Spain), Giovanni Savoini (Università degli Studi di Milano, Italy), and Jonathan Statham (RAFT Solutions, United Kingdom).

PROJECT OVERVIEW

Meat quality traits, including sensorial, nutritional and human health, are receiving increasing interest. Genotype and nutrition affect fat content, composition, uniformity and oxidative stability, while water-holding capacity and colour are affected by almost all the above-mentioned factors. Sensory qualities (i.e. eating quality and appearance of the meat) are determined by tenderness, flavour, juiciness and colour. According to PIC ([1]), a 'high-quality' meat cannot be solely defined as it is. It is a combination of subjective and objective measurements that vary across markets. Moreover, it is consumer perception that drives the demand of what quality of meat should be produced as it is the main goal of pork production. Studies have also shown that tenderness, juiciness and flavour have high positive influence on the preference of the consumers (Aaslyng et al., 2007; Choi, Lee, Jin, Choi, & Lee, 2014; Nold, 2006; Rosenvold & Andersen, 2002). Knowledge of the genes affecting these traits is essential to improve the quality of pork-derived products, without affecting the productive performance.

Increased meatiness and reduced fat content have now become the trend of the modern pork industry, mainly due to animal selection programmes and improvements towards leanness. Such a trend has caused lack of tenderness, juiciness and flavour of the pork as it is hard to sustain these qualities in lean pigs. Intramuscular fat is defined as the fat within the muscle — invisible at low levels but becoming visible at high levels and generally called 'marbling' (Matthews, 2011). Marbling affects tenderness, juiciness and flavour, all indicators of pork quality. It is also correlated with aroma volatiles and essential fatty acids (FAs) (Choi et al., 2014). The lipid content of the meat has the most significant 0effect on its sensory properties.

This project aims to determine on how the sow's milk directly affects the meat quality of the piglets on a molecular level using OMICs technologies — genomics ([2]), transcriptomics ([3]), proteomics ([4]) and metabolomics ([5]). This includes the identification and validation of quantitative trait loci ([6]) (QTLs) and candidate genes' polymorphisms for FAs, integrating information from muscle transcriptome analysis as well as genotypes and phenotypic records from different breeds, proteins, and metabolites' differences between supplemented dietary lipids.

MY PROJECT SO FAR

I spent my first year at UAB to perform the genomics part of the project, which involves the extraction of RNA and miRNA from UAB breeds that have been characterised phenotypically for extreme values for the omega-6/omega-3 FAs ratio. We have obtained differentially expressed genes, miRNAs, ontologies and biological pathways that are related to metabolic regulation and muscle development. We have also found gene–miRNA interactions that are related to lipolysis and protein degradation. This year, we have focused on establishing the animal experiment at the Centro Zootecnico Didattico Sperimentale of the

1 PIC – Pig Improvement Company.
2 Genomics is the study of whole genomes of organisms and incorporates elements from genetics.
3 Transcriptomics is the study of the transcriptome — the complete set of RNA transcripts that are produced by the genome using high-throughput methods, such as microarray analysis.
4 Proteomics is the large-scale study of proteomes — sets of proteins produced in an organism, system or biological context.
5 Metabolomics is the large-scale study of small molecules, commonly known as metabolites, within various biofluids (urine, blood), cells, tissues and organisms.
6 Quantitative trait locus (QTL) is a locus that correlates with variation of a quantitative trait in the phenotype of a population of organisms.

ISSN 2663-9483

RESEARCH

University of Milan. The research involves the use of 6 sows with an average weight of 300 kg from the day of detection of the beginning of pregnancy until the 28th day of lactation (weaning). They will then be divided into two homogeneous groups of two diets containing different ratios of omega-6 and omega-3 FAs. Muscle samples will be collected and be subjected to the aforementioned OMICs analyses — genomics and transcriptomics in Barcelona, proteomics in Milan and metabolomics in Glasgow.

HOW BEING PART OF AN MSCA ITN IMPACTS ME

Being part of an MSCA ITN is both a privilege and a responsibility. I am privileged because of the learnings and opportunities that the programme has given me — working between universities, research centres and laboratories, researchers, and even countries; this made me learn two additional languages too! The immense amount of collaborations and networking involved in a project can make you think and feel responsible to excel and deliver for the betterment of science and society. It sets your perspective that what you do now could impact today's science and in the future.

Being part of MANNA has been nothing but a fulfilling experience. I always consider research as a fun activity. This makes me realise that learning is discovering that nothing is impossible. Moreover, I have also met an amazing group of ESRs and supervisors who I can call my 'extended family' in Europe. They have always been helpful and supportive in and outside of our project.

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ISSN 2663-9483

RESEARCH

MANNA: INTESTINAL EPITHELIAL CELL MODELS – A PROMISING TOOL TO EVALUATE THE EFFECTS OF IMMUNOMODULATORY NUTRIENTS IN GUT HEALTH AND DISEASE

Discover Project number 9 of the MANNA network. You will find out how dietary nutrients shape intestinal barrier function through transcriptomics and proteomics.

The European Joint Doctorate in Molecular Animal Nutrition (MANNA) is an EU network whose mission is to provide a Double Doctorate-level training programme, valid throughout all Europe, on innovative technologies applied to animal science and nutrition. The MANNA Joint Doctoral project is a Marie-Skłodowska Curie Actions Innovative Training Network (MSCA ITN) funded by the European Commission under the Horizon 2020 Programme. This is the tenth of a series of articles on the MANNA doctorate, through which we will discover in detail its projects and the related early-stage researchers (ESRs).

WHO AM I?

My name is Tamil Selvi Sundaram and I was born and brought up in Chennai, one of the main metropolitan cities of south India. I graduated with a bachelor's (B. Tech) in Biotechnology from Anna University, Chennai. To explore and experience the challenging international environment, I moved to Germany where I pursued my master's in Environmental Protection and Agricultural Food Production at the University of Hohenheim, Stuttgart. During my second year of study, I had an opportunity to work as a student research assistant in the development of a hydrogel-based 3D cell culture scaffold ([7]) at the Leibniz Institute of Polymer Research (Dresden). Later, I did my master's thesis at Helmholtz Centre for Infection Research (Braunschweig), where I assessed the antibacterial activity of secondary bile acids on *Clostridium difficile* infection in a mouse intestinal ex vivo model. I acquired strong interest in the development of intestinal cell models to access host–pathogen/drug interactions in intestinal diseases. MANNA provided me with the right platform to expand my knowledge in this area through state-of-the-art OMICs technologies. I am currently the ESR of Project number 9, working on the topic titled "Establishing in vitro intestinal epithelial cell models in animal nutrition", which is supervised by Antonella Baldi (University of Milan), Juraj Pistl (University of Veterinary Medicine and Pharmacy in Košice), and Maria Filippa Addis (Porto Conte Ricerche).

PROJECT OVERVIEW

Intestinal epithelial layer (IEL) at the gut lumen and tissue interphase is a key player of host-innate immunity. IEL is a dynamic component of the gastrointestinal tract that blocks the entry of luminal pathogens and antigens by forming a physical barrier and also secreting certain antimicrobial peptides. Besides, IEL maintains the intestinal homeostasis by orchestrating the functions of overlying gut microbiota and underlying immune cells. Hence, the integrity of IEL is of paramount importance in the maintenance of a healthy gut. Infections and weaning in farm animals can detrimentally affect the barrier function and predispose to intestinal failure. Dietary nutrients such as omega-3 polyunsaturated fatty acids (ω-3 PUFA) and modified citrus pectin (MCP) are known

[7] Cell culture scaffolds are artificially created structures to support cell growth in a three-dimensional environment.

ISSN 2663-9483

RESEARCH

to exhibit anti-inflammatory and anti-oxidative activities. However, their mechanism at the level of IEL inflammation is uncertain. My current study is focused on establishing intestinal epithelial cell (IEC) models of pig and chicken and to characterise the anti-inflammatory activity of ω-3 PUFA and MCP by cell-based assays ([8]), transcriptomics ([9]) and proteomics ([10]) analyses. The outcome of this study will enable us to decipher the molecular mechanism of these nutrients for efficient utilisation in pig and chicken diets.

MY PROJECT SO FAR

During my first year at the University of Milan, I characterised the anti-inflammatory and anti-oxidative properties of ω-3 PUFA against different stress conditions in the porcine IPEC-J2 cell model (Sundaram, Giromini, Rebucci, & Baldi, 2020). Based on these results, cell samples were collected for further transcriptome analysis at the University of Veterinary Medicine and Pharmacy in Košice and secretomics ([11]) at Porto Conte Ricerche. In my ongoing second year in Košice, I have isolated and assessed the quality of RNA from these cell samples for further cDNA library preparation, next-generation sequencing ([12]) and data analysis. In parallel, I

have developed a primary IEC model from 19-day-old chicken embryos. Following, the IEC model was characterised by flow cytometry and immunocytochemistry. Moreover, preliminary results on the cytoprotective activity of MCP against the lipopolysaccharides challenge was obtained from XTT assay ([13]). Further, IEC samples will be collected for OMICs analysis.

HOW BEING PART OF AN MSCA ITN IMPACTS ME

Being part of an MSCA ITN has been a great opportunity for me to grow as an independent researcher in a challenging environment. This MSCA ITN provides me with a huge platform to utilise and integrate

[8] Cell-based assays are in vitro assays used to measure the cellular response such as proliferation, viability and cytotoxicity after treatment with various stimuli.
[9] Transcriptomics is the study of the transcriptome — the complete set of RNA transcripts expressed in a cell, tissue or organism.
[10] Proteomics is the study of the proteome — the entire protein complements of a cell, tissue or organism.
[11] Secretomics is the study of the secretome — the entire set of proteins that are secreted into the extracellular space of a cell, tissue or organism.
[12] Next-generation sequencing refers to high-throughput DNA sequencing technologies that allows the query of an entire genome, for known and unknown genes.
[13] XTT is a colorimetric assay for the quantification of cell proliferation, viability and cytotoxicity.

ISSN 2663-9483

RESEARCH

expertise of different laboratories and industries across Europe to meet greater scientific goals. In particular, incorporation of industrial secondments with cutting-edge technology is a significant career booster for a budding researcher like me to acquire insights into translational research. Furthermore, this network organises regular training involving leading scientific experts to improve both technical as well as interpersonal skills. Last but not the least, MANNA provided me a wonderful opportunity to travel around, meeting like-minded, enthusiastic researchers to collaborate and exchange knowledge.

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ISSN 2663-9483

MEMBERS' ACHIEVEMENTS

TRA VISIONS 2020 WON BY MARIE CURIE ALUMNUS

Sakdirat Kaewunruen, UK member of Marie Curie Alumni Association, was recently awarded the Rail Winner of TRA VISIONS 2020 Senior Researcher Competitions. TRA Visions is the largest competition in Europe that recognises researchers contributing to excellence in transport research and development in road, rail, waterborne, airborne, and cross modality. The awards for both young and senior researchers, equivalent to mini-Nobel prizes or field medals in transport, showcase the very best research and recognise the brightest talents and leaders in the transport industry.

The EU-funded competition TRA VISIONS 2020 has announced its senior researcher winners at the TRA VISIONS 2020 Award Ceremony which was held online on 29 September 2020 (view here). These annual awards are presented to leading transport researchers to recognise their contribution to their mode of transport based on EU-funded projects.

The TRA VISIONS 2020 Senior Researcher Competition received 81 entries from researchers based in 20 countries from all over Europe. Entries were submitted for the five transport modes: road, rail, airborne, waterborne, and cross-modality. The rail winner was Sakdirat Kaewunruen, Senior Lecturer in Railway and Civil Engineering at the University of Birmingham for his research on environment-friendly, resilient, and smart rail infrastructures. The prestigious TRA Visions Competitions run every 2 years and the next one will be in 2022.

RISEN (RAIL INFRASTRUCTURE SYSTEMS ENGINEERING NETWORK)

Sakdirat Kaewunruen is the coordinator of RISEN (Rail Infrastructure Systems Engineering Network), which is an MSCA-RISE project which focuses on environment-friendly, resilient, and smart rail infrastructures. The goal of the project is to enhance 'future rail capacity and adaptability to climate change and extreme events stemming from either natural or human-made hazards.' RISEN's frontier research reinforces both bottom-up and top-down life cycle management, maintenance, and operation to provide safe and seamless railways. So far, RISEN has supported more than 50 Marie Curie researchers, who have collaborated with many world-class institutions, and have contributed to over 250 technical publications – all of them being open access, making it a very sustainable legacy for life-long learning of all mankind as well as the next generation engineers and practitioners. At the same time, these outcomes provide new practical solutions to any rail disruption for the industry. Our research solutions have already been implemented in

ISSN 2663-9483

MEMBERS' ACHIEVEMENTS

the industry by our industrial partners in Portugal, Finland, Germany, the Netherlands, and France. RISEN outcome has already made a global impact through the development of several international standards for railways.

OBJECTIVES OF THE PROJECT

Social and economic growth, security and sustainability in Europe are at risk of being compromised due to aging and failing railway infrastructure systems. This partly reflects a recognised skill shortage in railway infrastructure engineering. This project, RISEN, aims to enhance knowledge creation and transfer using both international and intersectoral secondment mechanisms among European Advanced Rail Research Universities/SMEs and Non-EU, world-class rail universities including the University of Illinois at Urbana Champaign (US), Massachusetts Institute of Technology (US), Southwest Jiaotong University (China) and University of Wollongong (Australia), Tsinghua University (China), University of São Paulo (Brazil), Railway Technical Research Institute (Japan) and Iranian University of Science and Technology (Iran). This project adds a research skill mobility and innovation dimension to existing bilateral collaborations between universities through research exchange, joint research supervision, summer courses, international training and workshops, and joint development of innovative inventions. It spans from 2016 to 2021. However, RISEN activities are currently suspended due to COVID-19. It is expected that the project will be recommenced after mid-2021.

RISEN aims to produce the next generation of engineers and scientists needed to meet the challenge of providing sustainable, smart, and resilient railway infrastructure systems critical for maintaining European competitiveness. The emphasis will be placed on the resilience and adaptation of railway and urban transport infrastructures using integrated smart systems. Such critical areas of the research theme will thus be synergised to improve response and resilience of rail infrastructure systems to climate change, extreme events from natural and human-made hazards, and future operational demands. In addition, researchers will benefit from the co-location of engineering education, training and research alongside world-class scientists and industry users through this initiative. Lessons learnt from rail infrastructure management will be shared and utilised to assure integrated and sustainable rail transport planning for future cities and communities.

SAKDIRAT KAEWUNRUEN

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The MCAA Newsletter is the main communication channel for and about the MCAA community. It provides information about the activities of our national chapters and working groups, as well as events, projects and partners.

The MCAA Newsletter is published by the Marie Curie Alumni Association (ISSN 2663-9483).

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

INSTRUCTIONS FOR SUBMISSION

We welcome articles on any activity related to MCAA, local chapters, initiatives, events and so forth.

We especially welcome articles on MSCA projects, where one can either provide a general overview of a project or present initial/mid/final results.

Articles should be max 750 words, written in a clear, lay language, and possibly provide one or two images (copyright-free and high definition).

Articles should be sent to news@mariecuriealumni.eu.

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