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MARIE CURIE ALUMNI

June 2020

NEWSLETTER

The MCAA has now its app! Discover MCAA Connect, the 'Tinder' of professional working.

We finally know what's in the head of an Early Stage Researcher (ESR)! Ruben Riosa, from the Communication Working Group, decided to chat with some of the ESR-level members of the MCAA and shared with us the outcomes of these discussions.

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A podcast is a wonderful tool of science communication. In case you're wondering whether you should use it for your project, Federica Bressan and Matteo Manzi, confirmed podcasters, give you some tips on how to get started.

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MESSAGE FROM THE BOARD

Dear Members,

As the current COVID-19 crisis has resulted in new routines for work and everyday life all over the globe, most of us have cut down on travelling and instead established online interaction as standard practice. As a consequence, air pollution has decreased drastically. However, a spike in mental health issues has also been observed. The MCAA is working hard on adapting to the new challenges posed by the pandemic and on providing all members with adequate support. We firmly believe in the power of our community to also create synergies online.

Elected in late March, our new board and executive committee has been very busy getting up to speed on the wide range of topics the MCAA is involved in. We are pleased to present some of the results from these first few months .

The lockdown in response to the outbreak of the pandemic negatively impacted the work of many MSCA fellows as access to laboratories and other necessary resources was heavily restricted. We have launched a survey on the MCAA portal to ask current MSCA fellows how the crisis has impacted their projects. We thank all those who participated and urge everyone else with an ongoing MSCA grant to take a few minutes now to participate. We hope this effort will contribute to creating better conditions to mitigate the enormous impact the pandemic is having on some projects. An initial batch of 345 responses was analysed and sent to the MSCA unit together with our recommendations to address the different issues we identified.

As an immediate response, the MSCA unit asked reached out to the fellows who could not continue their work from home and had their projects severely compromised. They informed them to contact their Project Officer in REA in order to find a solution adapted to their situation. A deeper analysis on impacts and possible solutions is ongoing.

A second, broader survey is in preparation. We want to learn how the pandemic is impacting the personal and professional lives of all past and present MSCA fellows. We will use the aggregated results as a basis for our continuous work in supporting you in the aftermath of the pandemic.

On another note, the MCAA has grown quite extensively over the past few years and we have now reached **over 16 000** members. For the well-being of all, we need a clear ethical reference for our community. The MCAA board has, therefore, put together a preliminary team to form an **Ethics Committee**. It will work as an advisory group for the board to help tackle sensitive

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issues related to the association and our members. The committee's first formal task will be to lay down the foundation for the association's code of conduct. This code of conduct will act as a guide for all the entities including the board and working groups and chapters to support decision-making related to organisational ethics (not research ethics as of now). The preliminary founding team consists of a mix of MCAA members with expertise in ethics from different perspectives and on the MCAA itself. The four members, all active in the MCAA Policy working group and therefore with an interest in science policy issues, are:

- Stephanie Gauttier, Assistant Professor at Grenoble Ecole de Management, researching Ethics and Technology. For the MCAA she is the co-founder of REFERENT, interim vice-chair of the Policy working, group and founder of the 'Responsible Research Cultures' task force
- Gianluigi M. Riva, qualified Attorney at Law, certified Data Protection Officer, qualified ADR Mediator and MSCA PhD fellow at University College Dublin, in Privacy, Ethics and New Technology (TEAM-ITN), as well as fellow at Massachusetts Institute of Technology, Media Lab, Connection Science
- Francisco Valente Gonçalves, Senior Forensic Psychologist at Forensic & Integrity Services at EY and expert on Ethics, Standards and Bias
- Brian Cahill, a member of the Governing Board of EuroScience with a PhD in electrokinetically-driven fluid flow, previous Junior Research Group Leader at the Institute for Bioprocessing and Analytical Measurement Techniques, Chair of the MCAA 2016-2018 and current Board Member of the MCAA German chapter

We thank the four team members for having accepted the challenge and look forward to collaborating on our mission to nurture a dynamic and supportive environment within the MCAA.

Furthermore, it is wonderful to see so much creativity in the working groups and chapters to work around the travel and meeting restrictions posed worldwide. Many events have been moved online and we see that more members can join as costs and time-consuming traveling are cut out of the equation. To further support the organisation of various activities we are creating **new guidelines for events, brand identity and social media usage**. This includes, among other things, new logos and social media naming conventions to create a coherent perception of the working groups and chapters.

Some further reorganisation is also underway. We are launching a **Career Development working group** and a **Surveys working group**. We are also replacing the Chair **Management working group** with a Management working group as voted on at the board meeting on 7 June.

As you already know, our **Annual Conference**, which had been scheduled for the end of March 2020 in Zagreb, was unfortunately cancelled due to the pandemic. We are instead planning for a **Virtual Conference** to take place after the summer to enable a meeting place for the exchange of ideas within the community. This will feature a plethora of speakers and topics and be open to all members to take part in. We are excited to explore this new conference format and hope to reach out to as many as possible to help support network building even during a pandemic. The next General Assembly coming up in 2021 will be held in Zagreb to leverage all the planning and hard work of the task force. We want to direct a special thanks to all the team members of the task force that is making the MCAA GA 2021 possible!

Some further news includes the launch of a structure for increased communication of activities that are being discussed on various levels of the organisation. The executive committee, the board, the working groups and chapters, as well as members, often need to communicate quickly with the whole MCAA community about topics such as new policies, ideas, events and various other matters. For this purpose, a **News Feed** will be set up online that will have an informal tone and inform readers about the latest ventures from inside the organisation on a continuous basis. Stay tuned for more information about this!

MARINA RANTANEN,
ON BEHALF
OF THE BOARD

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NEWS FROM THE MCAA

'IT'S THE TINDER OF PROFESSIONAL NETWORKING'

There's a step change taking place in networking amongst members, thanks to a business networking app called MCAA Connect.

MCAA Vice-Chair Valentina Ferro and a few other members worked to turn a great networking idea into reality. In an interview, she tells us how it all started and looks to its future.

How did the idea of MCAA Connect originate?

The idea of using an app for MCAA members was discussed multiple times by the previous Board. In one of our first Board meetings, Marco Masia, outgoing Board member and chair of the Information and Data Access Working Group, proposed the adoption of the networking app Lounjee. MCAA member Giacomo Bastianelli, co-founder and CEO of Lounjee, had also reached out to us to propose a six-month free trial. This was a great opportunity to see if an app could be a good service to offer MCAA members.

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During this trial period, the Board explored other options, too. We looked into how much it would cost to develop a new app from scratch, or if the IT company that supports MCAA had the scope to develop it. However, we had already started gathering positive feedback from MCAA members who were testing the app. After carefully analysing the Lounjee features and how members were engaging with the app, it was easy to move forward with Lounjee and start MCAA Connect.

What is the overall purpose of MCAA Connect?

The MCAA is a vibrant community of members spread across the globe. Anyone who has participated in one of the annual conferences can understand how powerful it is to connect and network with other members. Such events offer professional opportunities, help spread ideas, engage in thought-provoking discussions, and create a support system for researchers who have lived similar experiences.

We wanted to recreate this level of engagement in the digital world. While networking with other members is already possible through the dedicated MCAA web portal, having mobile access can make the experience more enjoyable. Our members can chat with each other on their phones; they can discuss ideas, meet for virtual coffee, and even look for job opportunities!

While the process started about two years ago, the app was officially released to all members this year. With the COVID-19 pandemic and the need for self-isolation, the past and current Board made a further effort to speed up the process so that the MCAA could further support its members and provide an additional tool for much-needed social interactions.

> ***"We can say it's the Tinder of professional networking!„***

How does MCAA Connect work? What are its functionalities?

When new users sign in, they are asked to select what they can offer and what they are looking for. The choices are diverse, from 'Exchange ideas' over 'Professional networking' to 'Find a job.' The app recommends other members to connect with, based on similar interests and/or location.

You can access the suggested member profiles to find out more about them and their professional details. With a swipe to the left, the suggested contact is 'discarded' and might get proposed another time. With a swipe to the right, you can request a connection and start chatting. We can say it's the Tinder of professional networking!

What I particularly like is that a user has to start a chat in order to connect with someone. Instead of a passive connection, members are invited to interact with each other. This makes the networking aspect very effective, and hopefully will boost engagement with the whole MCAA community.

This is the most basic use of the app, and it's only the tip of the iceberg. In the upcoming months, the Board will work closely with chapter and working group chairs to explore the app's additional features. For example, it will be possible to have chapter and working group communities integrated into MCAA Connect. Chairs can then reach members using the community chat and send notifications – directly to their phone for the ones that have this option enabled – for important communications.

What is the added value of MCAA Connect?

There's a clear added value in using the app. For members, it provides an easy and fun way to connect and interact with each other. For chairs, it represents a new tool in their arsenal to simplify the amazing work they already do. Despite the fact that we are all volunteers, chapter and working group chairs are constantly organising high-value activities and events. It's one of the Board's priorities to provide them with what they need so that they can continue to offer excellence. Finally, as a Board member myself, I'm very happy with the amount of insight we can glean by looking at how members use MCAA Connect.

The MCAA prides itself in career development, offering services that range from microgrants to professional training. By studying what MCAA Connect users are looking for via their profile, the Board can really tailor the MCAA's offer to meet member needs.

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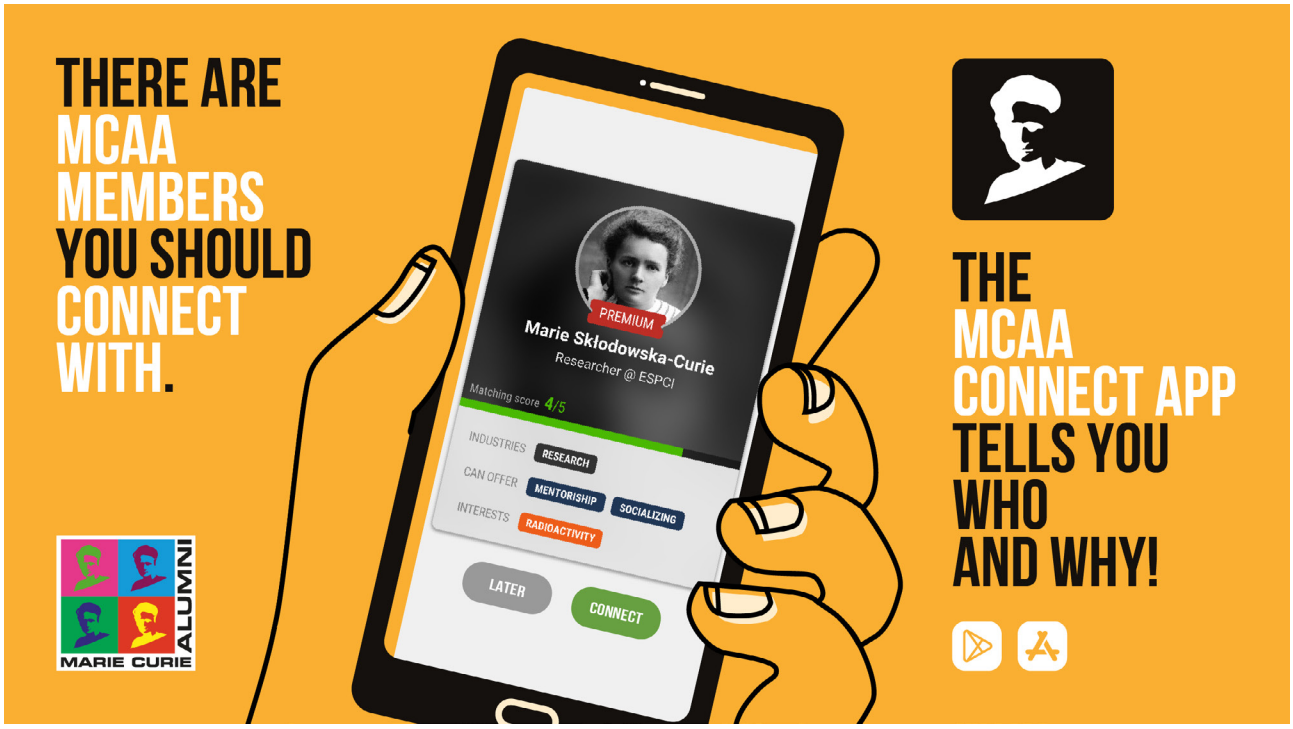

COVID-19 has brought us the benefits of online conferences and events, and I can see the MCAA offering more of these in the future.

MCAA Connect could provide the tools we need for successful virtual conferences, without sacrificing the networking and engagement components that such events typically lack.

Any new developments?

There's something very exciting on the horizon. Lounjee will soon integrate an 'Events' feature into their app. We'll be able to use MCAA Connect to create events featuring a multiday agenda, sponsor tab, speakers' bios, live streaming with chat and interactive polls, and, of course, networking features already part of the app to engage with members attending the same events. This could be a game changer for chapters and working groups that want to be more autonomous in creating events and to engage local sponsors for support. I believe it would be a great opportunity for MCAA-wide events, too.

COVID-19 has brought us the benefits of online conferences and events, and I can see the MCAA offering more of these in the future. MCAA Connect could provide the tools we need for successful virtual conferences, without sacrificing the networking and engagement components that such events typically lack.

HOW TO GET THE MCAA CONNECT APP

It's easy and safe. Just log in to the MCAA portal from your mobile device and click on the MCAA Connect news item. You'll be given the link to download the app. You can register via email or use LinkedIn credentials to sign in.

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NEWS FROM THE CHAPTERS

HOW THE POLISH CHAPTER IS COPING WITH COVID-19

Rohan in his own words

Rohan Soman has a background in Structural Engineering. He completed his bachelor studies in Mechanical Engineering at the University of Pune (India) and obtained his master's degree in Engineering Design with research in the area of damage detection in 2010 from the University of Manchester (UK). He currently works in Poland as a post-doctoral researcher in the Mechanics of Intelligent Structure Department at the Institute of Fluid-Flow Machinery, Polish Academy of Sciences (IMP PAN).

ROHAN'S COMMITMENT

Rohan contributed to the foundation of the chapter together with other MCAA members. "I felt there was a need to provide support for incoming researchers as well as to promote MSCA and MCAA as a single brand," he explains. Therefore, becoming the chair of the Polish Chapter was the ideal way to achieve these objectives and to be deeply involved in the chapter's life.

OBJECTIVES & ACTIVITIES OF THE CHAPTER

"We have 130 members, most of them based in Warsaw. We have quite a few members of Polish origin residing abroad, but who still feel connected to Poland," says Rohan.

Above all, the chapter is working to recruit new members, as well as to provide support to new members. Moreover, the chapter also aims at helping researchers receive training corresponding to the right stage of their career.

A few activities have already been carried out since last year. In December 2019, the chapter organised a proposal writing workshop. Other activities were held, including a workshop on presentation skills, as well as an event in collaboration with the Bridging Science and Business Working Group aimed at protecting and monetizing your intellectual property (IP).

An online workshop providing an overview of the funding schemes at the national and EU level was held on 19 June 2020. The webinar included a presentation of planning a research career from established researchers.

CONSEQUENCES OF THE COVID-19 PANDEMIC

Like many other researchers, Rohan's professional life has been impacted by the COVID-19 pandemic: "I have been working from home so far, but I was supposed to work in the US for three months, and this has been postponed indefinitely. Also, I just started a new national project in March and the process of acquisition of equipment has been affected, which will have a big bearing on the execution of the project," says Rohan.

The chapter's activities were also affected, Rohan adds: "The chapter

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holds a monthly 'hangout' in Warsaw, which was cancelled in April, and took place online in May. The participation was lower at the online event but provided a greater diversity of participants. In May we were supposed to hold an event aimed at popularising science in a school, as well as a related conference, but both events were postponed."

A hangout was also organised to discuss the effects of COVID-19. "We discussed the impact of COVID-19 on the different areas of research, including people doing lab work as well as simulation work," explains Rohan. The differences between the strategies used in participants' different countries of residence were also placed in the spotlight. "The hangout was interesting, as it gave insight into problems that people from different fields and stages of career and life are facing. It was clear that researchers with kids have a reduced productivity when working from home," notes Rohan. "People doing lab work have been affected adversely, as lab work is running at 10 % of capacity. Moreover, Early Stage Researchers are wondering about the extensions of their contract and about finishing the PhD work in due time. For non-EU members, their residence status is also an issue," he adds.

PLANS

Even though the chapter had to face some challenges recently, its members are working hard to propose activities. For example, together with the Austrian Chapter, the Polish Chapter is planning to provide training for young researchers, with a focus on collaboration.

Other plans include also outreach activities, which will also take place in the summer, once they will be allowed, or through online channels.

Stay tuned and continue watching the MCAA website for more information about the Polish Chapter!

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INSIDE THE HEAD OF AN EARLY STAGE RESEARCHER

You might have heard the term Early Stage Researcher (ESR), and it is likely that many of you reading this post may already know an ESR. The question we are asking today, however, is: What does an ESR think about her/his role?

In order to better understand these 'strange' creatures, and maybe get some inspiration from them, Ruben Riosa from the MCAA Communication Working Group decided to chat with some of the ESR-level members of the Marie Curie Alumni Association (MCAA) – who better to give us some insights into their feelings?

Ruben Riosa, in his own words

Ruben Riosa is an animal nutritionist currently working as a PhD student at the University of Bonn / University of Glasgow, where he is part of the MSCA ITN project MANNA. His project focuses on dairy cow nutrition and physiology. In the MANNA network he is also the scientific copywriter.

Within the MCAA, he is an active member of the Communication Working Group and a member of the Editorial Team of both the MCAA Newsletter and the MCAA magazine IRRADIUM.

Before diving into this roller coaster of emotions, let's refresh your memory about the formal definition of an ESR. An Early Stage Researcher – for the European Commission – is a person who "at the time of recruitment by the host organisation, is in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree." Pretty clear, isn't it?

To make it even simpler, we can say that an ESR is basically doing a PhD programme funded by a Marie Curie scholarship.

Still not convinced? Swati Aggarwal (from India, an ESR of the RAMP ITN) likes to define ESRs as "Energetic experimenters, Self-assertive scholars and Resourceful researchers who start loving their mobile scientist life." At this point, we should all have a common playground to start with; thus, let's find out now a bit more about this role by those directly involved.

Is an ESR 'just' a PhD student?

"I simply felt privileged. Not only that we were provided with the outstanding trainings around Europe and fulfilled ambitious research plans, but we also communicated our science to the general public using different tools (e.g. check out the 'The Beast in Yeast' video)"

This is what Marina Pekmezovic (from Serbia, an ESR of the OPATHY ITN) replied to the question "What does being an ESR mean to you?", and I think it pretty much summarises the feeling of being an ESR. You are not only conducting research during your project, but you are trained to be a better researcher by improving both hard and soft skills. Developing this full skill set

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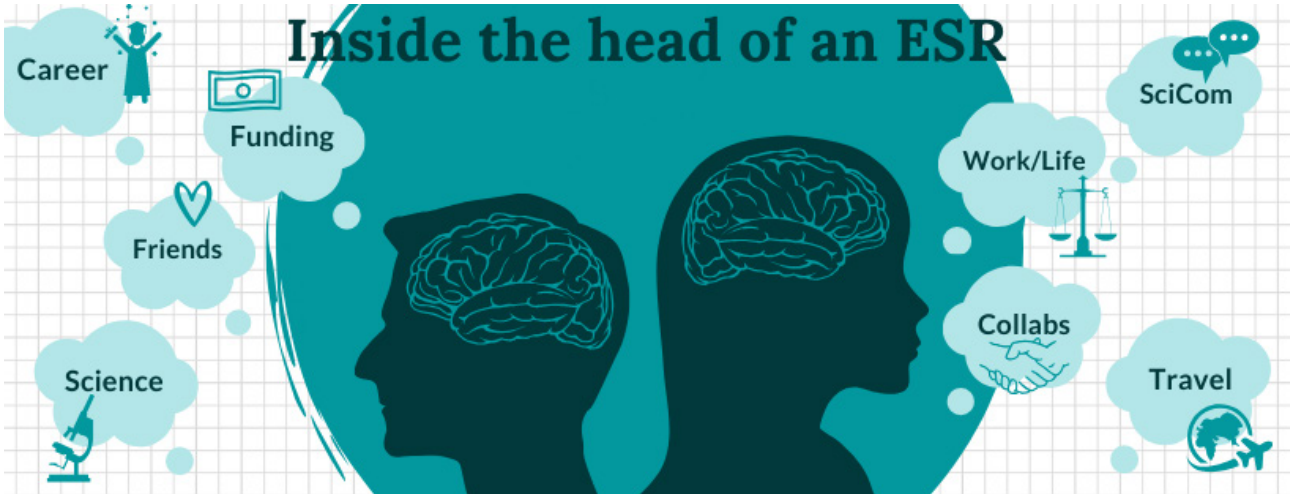

was also particularly important to Giuseppe Pronestì (from Italy, an ESR of the MAPS-LED project), who said "being an ESR did not mean just research for me. Besides teaching me how to conduct sound academic work, the programme also fostered my entrepreneurial spirit by training me to build and exploit knowledge-based networks."

There seems to be a common theme: A European project which involves ESRs is principally meant to "train researchers that can lead the future of European science, not only to award a particular title," as underlined by Jorge Peinado (from Spain, an ESR of the MANNA ITN). Being an ESR means first of all being someone who's just started their scientific career, and still needs support to find their own way; for this reason, the real advantage of being an ESR is the opportunity to "receive a great training, including access to a collaboration network," said Marina. And this network is fundamental because of this "concept of including the secondments in the different sectors (for example, from academia to industry), it increases your chances for further career improvement by giving you a valuable experience," concluded Marina. Being an ESR is not just being a "simple PhD student," it is much more than that: It is learning from top scientists, it is doing research on big topics, it gives you the opportunity to visit different universities, centres of research and/or companies.

This last point means also a lot of travelling around the European continent and beyond, as reported by Prince Oguguo (from Nigeria, an ESR of the CatChain RISE): "Thanks to the Marie Curie grant, I was able to visit India to collect data and tour factory sites for a study on how firms decide and develop new sustainable value propositions in global value chains, sometimes needing to face extra problems and difficulties." Of course, this necessity of travelling and working with different partners is not always easy to manage. In fact, "dealing with different universities' administrative systems, facing language-related difficulties or not being able to establish a place to call home during the whole duration of the project are challenges that might feel discouraging," as is underlined by Jorge.

An ESR's life can be extremely challenging: "Can you imagine yourself living in three countries in the time frame of 1 year? Yes, that happened to me. It was not the easiest, but I made it! Looking for a new flat and starting from 'zero' can be extremely tiring, but after the first or second time, you already have some 'training'," said Raquel Sofia Correia Cordeiro (from Portugal, an ESR of the Biocascades ITN), describing her experiences, something all the ESRs can certainly relate to!

Being an ESR is certainly a challenge, in that you will have to accept that you are more than a student. As Rafaela Furioso Ferreira (from Brazil, an ESR of the MANNA ITN) stated:

"We have dual identities: We are both apprentices and teachers, and we are both students and workers. We know a lot about our topic, and sometimes it feels like there is so much more to learn and we don't know anything at all."

An ESR is a young scientist, one with lots of responsibilities, multiple tasks to accomplish (and they are not always related to science –

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bureaucracy can be very annoying to deal with, but has to be done), but in the end, he or she is just a person who has to learn a lot, who is passionate about science, who is following a dream.

A MATTER OF COLLABORATION

"As an ESR, I felt that research has always been and is a collaborative effort. Yes, you can opt to do it all alone, but there's nothing to be ashamed of to admit that you don't have the right amount of expertise in a particular subject and you have to reach out to someone who can lend a hand. It's all part of learning and research, and, of course, that's all about science!"

Yron Joseph Yabut Manaig (from the Philippines, an ESR of the MANNA ITN) stressed the importance for an ESR to be open and to reach out whenever you may need help. It can be hard and stressful to perform a new analysis, implement a new protocol, or try a new technique if you have never done it before, so don't be afraid, just ask for help. An ESR is usually part of a bigger network, with many people interacting with each other, and they are ready to cooperate in order to achieve common objectives. In fact, in a project such an Innovative Training Network (ITN) the main aim is "to train a new generation of creative, entrepreneurial and innovative early-stage researchers, able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit," as reported from the Marie Skłodowska-Curie Actions website.

The objectives of a project are very well defined (at least in theory… experiences vary in this regard), and the great thing of an ITN is that every partner (a university or a company, a professor or an ESR) has a fundamental role within the network, making it possible to reach them. The objectives are usually defined as deliverables and milestones. These 'time points' are particularly important within a project, because they help you track your progress, and rely on everyone's collaboration to be achieved in the best way possible. As underlined by Marina: "I felt it is a great way to synergistically contribute to one big research aim. It was supported with funding, but also with the great motivation of all the people involved."

Each ESR has a supervisory team made up of scientists with different backgrounds and different expertise, and this is probably one of the most important aspects in an ESR career: They work in different environments, focusing on different aspects and learning different approaches to solve a problem. Collaborations make it possible, and in science collaboration is key. To summarise, "this programme is all about researching, networking and building yourself as a professional who can very well communicate their work to general public by convincing them that their money is in the right hands," Swati explained.

Moreover, apart from the scientific part, being an ESR certainly means

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meeting a lot of people who are not only directly connected with your project but are part of the whole consortium.

"Being able to meet and forge friendships with people coming from all over the world is one of the most beautiful feelings that being an ESR has provided me," added Swati.

"I will always feel an ESR. I got to know so many wonderful people, not only ESRs or teams I was working with in the different labs, but also people within the consortium. And it is great not only to be able to see and keep in touch with them but being certain that I found friends for life.

"I think my ESR experience has been defined by a sense of adventure. It was great to be able to explore a new world personally and professionally. […] A discovery process that allowed me make friends at home and abroad."

Jorge, Raquel and Prince brought up another important aspect of being part of an international team: As an ESR you'll face different cultures and you'll probably meet amazing scientists, but first and foremost you'll meet people that will help you and with whom you'll create a connection that will likely last for life. The chances of meeting people who will then remain your friends are extremely high.

And remember, in science, people will be keen to support you most of the time and will give you valuable advice to help you pursue your career, so don't hesitate to reach out and get in touch with them.

A PATH FULL OF CHALLENGES

"Research is fun. Once you really see the fun in learning, it sets things into perspective. This ability to overcome all these hardships and challenges is already an achievement itself. You seize the whole experience by challenging yourself to turn what seems to be unattainable into something that you can actually achieve."

As Yron puts it, don't be scared to put yourself in a challenging situation!

If you like science, if you are curious, if you are ready to meet people with different cultures, and visit many different universities, centres of research and companies, throw yourself into the game.

An ESR certainly faces many challenges, but what would life be without them? All these obstacles are helping to craft the ESR's experience and to become a better person, without forgetting that the final aim of an ESR is to do great research and to learn how to improve as a scientist. Jorge said: "I have already gone through difficult periods that have made me feel quite discouraged, and I'm sure that many more will come. However, I hope that my passion for science and my determination to overcome difficulties will keep me motivated and will allow me to take full advantage of being an ESR."

Passion and the determination to succeed must be your strengths, and you should always remember that you are doing this in order to become a better person, a better researcher, and hopefully enhance your future job possibilities. According to Giuseppe: "Since the beginning and up to the very end of my MSC journey I felt empowered, and gradually built the belief that such experience would shape me not only into a better professional but also into a better person." Today he found his path as an investment finance professional, always remembering that the project in which he was involved gave him "the opportunity to learn and grow up, to travel around the world and get a wider view of it, to build competitive advantages on the labour market through shaping a multifaceted professional profile, which allows me to secure a better position in different fields. In one word, empowerment!"

Being an ESR gives you different perspectives, it helps you to widen your horizon and to find out what you want to do with your career, whether you remain in academia or move into industry. Marina underlined: "I learned so much about different aspects necessary for my future and thus I feel more confident for taking the next step in my career"; this is definitely what a project should teach an ESR.

Remember that no one is a superhero, and, as a last advice for present and future ESRs, I want to quote Rafaela:

"One thing that no one tells you about being an ESR is that many times you are going to feel afraid. We are afraid that something is going wrong with our experiment, afraid that we missed some important information that we will only discover too late, and afraid that we

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are not good enough for this. Impostor syndrome is real, and we will all experience it at some point."

Feeling afraid is absolutely normal – what you need to do is to remember the good things you did, track them, and think about your "little victories – papers published or abstracts presented, grants received or even an email from your advisor saying that you did a good job," Rafaela concluded. All these little things will give you the energy to keep going and to overcome the obstacles you will encounter during your career.

Is it worth becoming an ESR?

At this point, someone who's not an ESR yet and may be thinking of applying for a position like this may think: "Is it a life-changing experience? Will I find a better job if I become an ESR?"

Regarding the first question, I, as the writer of this and an ESR, would say it definitely is. I have talked with many ESRs and none of them have told me that they were not happy about their role. Of course, some of them experienced difficulties and various problems, but overall, the experience they were having was definitely positive. It is something that will certainly change your life and will open your eyes to the world of research, which is bigger than what you may expect.

The second question is much harder to answer, particularly because I don't want to tell you that you'll certainly find a great job (I can't predict the future). However, what I can tell you is that I truly think that the experience you can gain while being an ESR is definitely something you won't find in a 'normal PhD,' and it certainly puts your career in the spotlight. Giuseppe said: "I still strongly believe that having been part of an MSC program was a crucial, if not the most important, factor to shape my professionalism and to gain competitive advantage on the labour market," and I would certainly agree with him.

A final advice I want to give you is: do not think only about a future job, think about what makes you happy, think about what you like. Being in a position that you like and doing the research that you like can be extremely rewarding, and you will be able to enjoy the majority of the days – sometimes a 'low moment' can happen to everyone. But, most importantly, when you will look back at it you will certainly feel a great sense of achievement for what you have done as an ESR.

CONCLUSION

I hope that I have given you a nice overview of the role of an ESR, but especially on the feelings ESRs can have during their project.

I would like to thank all the ESRs who helped me write this piece: Giuseppe, Jorge, Marina, Prince, Rafaela, Raquel, Swati, and Yron. Without your input I would not have been able to express all these feelings that we, ESRs, have experienced during our lives.

Inspired? Read the full story on the MCAA blog

RUBEN RIOSA

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MEMBERS' ACHIEVEMENTS

WANT TO CREATE A PODCAST AS A SCIENCE COMMUNICATION TOOL? LISTEN UP, RESEARCHERS, IT'S MORE THAN JUST SCIENCE CLASS WITH A MICROPHONE

Podcasts are a great way to get the research out there – and even involve the public. Podcasters Federica Bressan and Matteo Manzi discuss this effective medium for direct science communication.

Federica Bressan

Podcast: Technoculture (launched October 2018)

Topics: General (from religious studies and physics to politics and anthropology)

"… an incredible learning experience for me … expanded my view of the world … made me a better researcher … my network has boomed."

Favourite science podcasts: Helder (Marjolein Vanoppen), Koffie Curieus (Jonas Vandicke)

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MEMBERS' ACHIEVEMENTS

Matteo Manzi

Podcast: Stardust (launched end-2019)

Topics: Space exploration, AI

"… allowed me to see more clearly the context in which my research arises and, therefore, to see my works from the outside."

Favourite science podcasts: Artificial Intelligence (Lex Fridman), The Portal (Eric Weinstein)

Podcasts are an excellent tool to bring science to the general public, according to Federica Bressan. "But a lot of work goes into making a good podcast," she notes. "It's not self-evident that every researcher who is committed to his/her research full-time has the resources to engage in the production of a good podcast. Sometimes I think that too much pressure is put on researchers to be communicators: If you really love communication, maybe you should consider transitioning to this career full-time. Hard to keep up with both in the long run."

Matteo Manzi has another perspective on using podcasts for general public outreach. "I don't think that podcasting is the best way to involve the general public; it's nevertheless one of the best means of cross-fertilisation and science communication."

In order to do this, technical topics should be described from a detached perspective, allowing experts in other fields to translate them into their own language." Matteo continues: "For me, a podcast's primary aim is to inform the researcher's work as much as possible. Following the 'Don't Break the Chain' method by Jerry Seinfeld, in which one builds up to their 'real' goal', podcasting gives research a structured framework, allows one to

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MEMBERS' ACHIEVEMENTS

stay grounded and, indirectly, leads to good research works."

BY THE PEOPLE, FOR THE PEOPLE

Podcasting has helped to make Federica's career better-rounded. "Well, if there's anything that has made the difference in my career, it's people. You can be smart as much as you want, but you're not an island, you won't make it on your own. Teamwork, networking and sharing are all keys. And podcasts have this intrinsic element of sharing that is so generous and fertile. Podcasts are about people. They teach you about things, but most of all they connect you with communities and experts you didn't know. They incorporate the knowledge they spread in a web of human connections. This is what I love about podcasts. The power of the spoken word over inertness of web pages."

Federica also says podcasting has made her a better listener, and that she deliberately designs her podcasts so that everything revolves around her guests. "It's all about them, I'm only the facilitator. The story is not there without the person: The person means everything, how they tell the story, how they feel about the story. This importance of people in every aspect of life has always been with me, but podcasts have intensified it and brought it to the next level."

SO, DO YOU WANT TO BE A PODCASTER?

Thinking about having a go at podcasting? Matteo says just do it. "Try

to pin down the reasons you want to try it: Take a break from your daily duties, schedule three hours of your time without the internet, alone, just you and a sheet of paper. Define your aims and start doing it the next day. No shortcuts."

Federica believes that a podcast should be an extension of its creator's personality. "There's no right or wrong in podcasting. Your podcast is your baby, it should reflect your passion, humour, and communication style."

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COVID-19 PANDEMIC SHUTTERS CHICKPEA LAB

'The interruption of our projects might have an impact on our careers. We are not setting the stage for current work in our fields. But this crisis is an opportunity to promote civic responsibility.'

YESTERDAY

As part of the activities held in celebration of **European Researchers' Night** at the University of Córdoba in Spain last September, MCAA fellows had the opportunity to brief Frank Marx about their projects. Meeting in the Mudéjar Hall, with its delicate ornamental plasterwork (one of the most beautiful rooms at the University Rectorate building), they informed him about nearly finished and ongoing projects.

Marx heard about FORCE, a new project aimed to decipher the **molecular basis of flowering time in chickpeas**. As the enthusiastic new Principal Investigator, I briefed Marx about how the domestication trait defined the adaptation of the species to climatic conditions. I explained how flowering time is a major determinant of chickpea productivity. Adopting an integrative approach by combining computational plant biology and genetic resources exhibiting phenotypic diversity would allow us to understand how genetic variants combine to provide adaptation to specific environments. In the long run, we could use that knowledge for introgression of new traits into adapted genetic backgrounds. I tried but could not contain my excitement.

Fast forward four months. On 13 March, we were sent home from our lab (as was the case with many other research institutions around the world). That morning, I picked some notebooks, papers, and notes from my desk. On this day, with the official numbers of COVID-19 cases reaching 4 000 and 120 confirmed deaths in Spain, all lab work and teaching activities were put on hold. I left the University without knowing I would not be able to return to my office in the following two months, maybe even more…

The FORCE project's chickpea plants in the growing chamber at the University of Córdoba, February 2020.

TODAY

I feel fortunate that national confinement measures happened at the onset of my project. If this were to happen in more advance stages, it would have definitely put at risk the grant agreement. As FORCE is heavily dependent on laboratory work, I was very much concerned at the beginning of the lockdown. However, I obtained permission from the University to keep working once a week on the growing chambers, watering the plants, and keeping them alive. At least, I may have data for the time when the lockdown is over. Since my activities require a limited physical presence, I have come to think about the MSCA fellowship in a more social perspective, which is also a core principle of the programme.

At the time of writing this article, the coronavirus has spread to almost

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every country in the world and has undermined public healthcare systems and destroyed the interconnected global economy in just a blink of an eye. Our free movement before the coronavirus crisis now feels like a distant memory. The most highly valued experiences (those connected with our loved ones and friends) are being missed. In light of the pandemic, any academic achievement feels like an irrelevant victory.

As nations confront the worst public health emergency of our lifetime, politicians across the globe invoke a battle terminology to describe the pandemic and our response. But pandemics are not wars. And we are not soldiers. The case for invoking wartime imagery is a matter of keeping the morale high. The only real question is whether belligerent schemes work. If the pandemic is framed in military terms, the gravity of the public-health crisis is communicated, the personal sacrifice is recognised, and a national response may be galvanised. So, why object?

LESSONS FROM THE CRISIS

Actually, many object. On Spain's national public radio RNE I listened to a citizen commenting that "sports are allowed as long as they are practiced individually, it means we are winning the fight against coronavirus." It actually means that any person exposed to the virus experiencing serious symptoms may have a chance at finding a hospital bed. It means people have better access to healthcare.

Dr Frank Marx and Marie Curie fellows meeting at University of Córdoba on 27 September 2019.

Flattening the curve is a public health strategy not to fight against the invisible enemy but to slow the spread of the infection. The use of war metaphors in biology is not particularly helpful as they often lack precision and clarity. When misconceptions are rooted in the collective imagery, they act as barriers to understanding. My take on this crisis is that we must promote trust in science. Being trustworthy depends, most of the time, on honesty and transparency. The novel coronavirus that causes the infectious disease is not an enemy, but a biological agent driven by natural selection. Until a vaccine or an effective treatment is available, it is here to stay and interact with human evolution.

MSCA fellows have worked hard to achieve this funding and career-building opportunity. The interruption of our projects might have an impact on our careers. We are not setting the stage for current work in our fields.

But this crisis is an opportunity to promote civic responsibility. Our communications through these difficult times to broader audiences represent our commitment to public engagement. In this way, we do pursue an important objective in our research projects and contribute to the knowledge-based economy and society.

Jose V. Die is a plant geneticist and computational biologist working at Córdoba University's Department of Genetics-ETSIAM. He is a researcher in the project H2020-MSCA-IF-2018 "FORCE, Molecular basis underlying the QTL responsible for the genetic control of flowering time in chickpea: an integrative approach."

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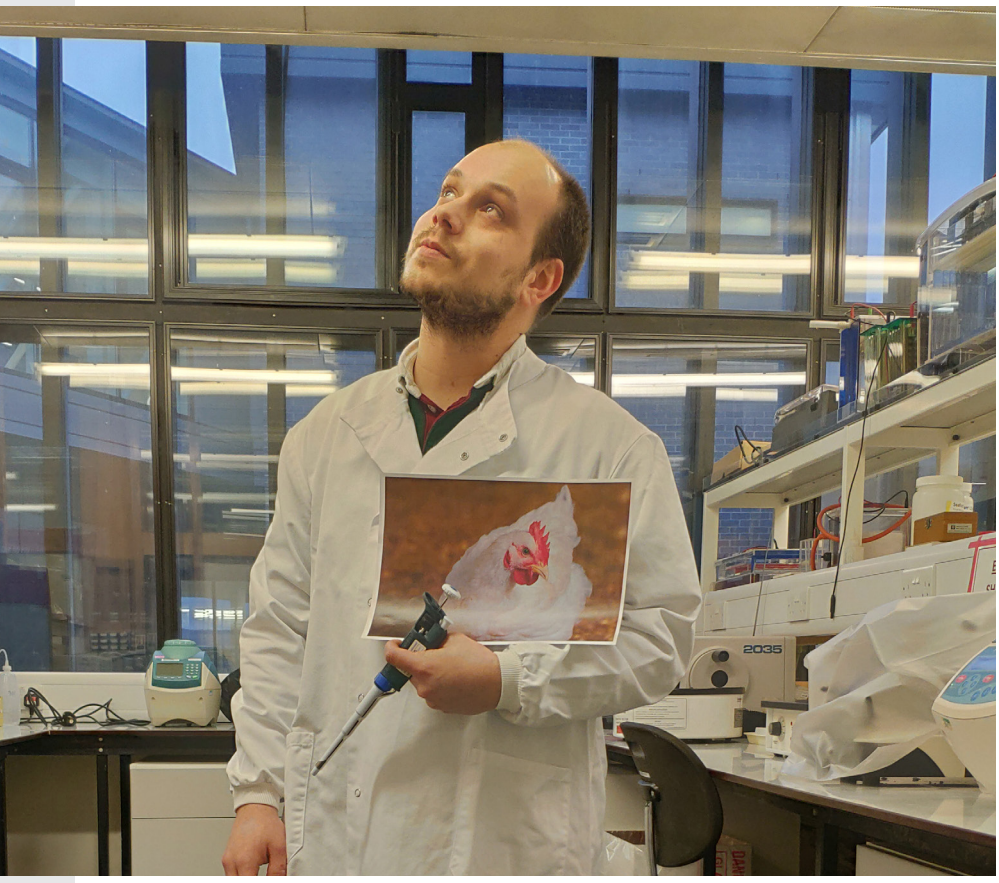
MANNA: DYNAMIC PROTEOMICS: A NOVEL STRATEGY FOR DISCOVERING EARLY MARKERS OF GROWTH AND DISEASE AND ASSESSING THE EFFECT OF NOVEL FEED COMPOUNDS ON BROILER CHICKENS

Discover Project 4 of the MANNA network, about the relative new field linking chicken nutrition to protein dynamics, and how this can replace the use of antibiotics in production.

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 Europe, on innovative technologies applied to animal science and nutrition. The MANNA joint doctoral opportunity is offered by the Marie Skłodowska-Curie Innovative Training Network programme, funded by the European Commission's Horizon 2020 programme. This is the fifth of a series of articles on the MANNA doctorate programme, through which we will discover in detail its projects and the related Early Stage Researchers (ESRs) working on them.



WHO I AM

My name is Jorge Peinado Izaguerri. I was born and raised in Zaragoza, a beautiful city in Northeast Spain that thrived during the Roman Empire and where you can visit one of the most astonishing cathedrals in Spain, the Basílica de Nuestra Señora del Pilar. My family actually comes from a charming village nearby called Villadoz, a place where I spent a lot of time during my childhood and where I developed my passion for farm animals and the agricultural world. I received my bachelor's degree in Biotechnology as well as my master's degree in Molecular and Cellular Biology at the University of Zaragoza. My honours projects for both degrees were developed at the Veterinary Faculty and at the Estación Experimental Aula Dei research institute, both in Zaragoza. I am currently an ESR working on the

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project titled "Protein synthesis rates, effect of diet, health and innate immune response in chickens", which is supervised by Tom Preston from the University of Glasgow (UK), Mangesh Bhide from the University of Veterinary Medicine and Pharmacy in Kosice (Slovakia) and Chris Chadwick from the company Life Diagnostics (USA). Additionally, our project includes AcuVet (Spain) and AbAgri (UK) as industrial partners.

PROJECT OVERVIEW

Among food animal sources, poultry is of a great importance due to its efficient meat production and the quality of the produced meat. But the poultry industry faces several challenges, the most important being the removal of antimicrobial growth promoters from its production. Antibiotics have been used extensively over the last 60 years to improve chicken growth and production efficiency as well as the animals' immunity. The ban on the usage of antibiotics in the European Union due to antimicrobial resistance concerns has made it necessary for the poultry industry to find alternatives. Dietary supplementation with novel feed compounds that have a beneficial effect on chicken performance and health status has been proposed as an alternative to antibiotics. Several feed additives like prebiotics[1] or phytogenic compounds[2] have reported great potential by modulating chickens' microbiota and gut health as well as showing immunomodulatory effects.

As the concrete effects of these compounds need to be assessed, dynamic proteomics has been proposed as an innovative approach for doing it. Dynamic proteomics is the application of novel high throughput proteomics[3] tools to the study of protein dynamics. Protein dynamics is an area of specialisation that has been historically limited due to the necessity of isolating individual proteins in order to measure their fractional synthesis rates (FSR). However, the development of chromatography and mass spectrometry that have resulted in the advancement of OMICs tools have increased its potential as an approach capable of identifying novel markers of disease and growth. In addition to its throughput limitation, the study of protein dynamics has historically been an expensive approach because it requires isotopic labelled amino acids as tracers for measuring protein synthesis. Thus, the use of deuterium water as an isotopic tracer has been proposed as an alternative, being cheaper as well as having many other benefits compared to the use of labelled amino acids.

This project aims to develop a novel approach for measuring protein FSR on broiler chickens, using deuterium water and proteomic tools to assess the effect of novel feed compounds on chicken growth and health status.

[1] Prebiotics are non-nutritional feed ingredients that benefit gut microbia.
[2] Phytogenic compounds are natural bioactive compounds derived from plants.
[3] Proteomics is the large-scale study of proteomes – sets of proteins produced in an organism, system, or biological context.

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MY PROJECT SO FAR

The first milestone in our project was the performance of the in vivo trials that provided the samples which will be analysed during the rest of the project. The task was successful, with two different in vivo trials carried out at the University of Glasgow in which samples from several chicken tissues relevant for the study of growth and immune status were collected. The chickens' diets we used during our experiments were designed in collaboration with the company Nutrition Science during a visit to their facilities in Ghent (Belgium). We decided that the feed additives that we would like to include in our experimental diets were lemon pectin and a cucumber extract.

The first analysis we carried out was the measurement of body water deuterium enrichment, necessary for the calculation of protein FSR. This also allowed us to evaluate the quality of our samples with regards to isotopic enrichment as well as to design a plan for the analysis of our samples. At the moment, proteomic analyses are being performed at Glasgow Polyomics in order to measure peptide isotopic enrichment, which will allow FSR calculation. Proteomic data will be analysed using "Skyline", a software in which I received training during a visit to Emoke Bendixen's lab at the University of Aarhus (Denmark).

Our approach to measuring multiple proteins' individual FSR needs to be validated by the conventional measurement of these proteins' FSR through gas chromatography-mass spectrometry (GC-MS) after their isolation. As part of this process, we have performed the analysis of plasma-free amino acid isotopic enrichment as well as an albumin-bound amino acid analysis at the Scottish Universities Environmental Research Centre (SUERC). During the upcoming months we will continue our proteomic analyses while we try to isolate additional proteins at the University of Veterinary Medicine and Pharmacy in Kosice in order to calculate their individual FSR. Additional plans involve the analysis of acute-phase proteins in collaboration with Life Diagnostics and AcuVet, and the assessment of FSR importance in the field of animal nutrition, in collaboration with AbAgri.

HOW BEING PART OF AN MSCA ITN HAS IMPACTED ME

Being part of an MSCA ITN is an integral training opportunity that goes far beyond science. Having the opportunity to actually work with different people and at different labs around Europe and even the US teaches you a lot about similarities and differences in the way people apply science. Moreover, due to the nature of an ITN, you get to know these people personally, learn new languages, and share ideas that are not exclusively related to science, which expands your way of thinking and contributes to your development as a person. Even the worst aspects of an ITN, like the extra administrative workload, having to change your home on a regular basis or having to meet deadlines for two different universities are training opportunities that will probably prove their value in the future. Being able to gain experience not only from the resources that an ITN offers you but also from the challenges that it presents you are the keys for getting the most out of this opportunity.

I feel incredibly lucky for being part of MANNA. Having the opportunity of learning from experts in animal nutrition and about OMICs technologies from all around Europe as well as having access to two different universities' training resources is a privilege. Additionally, thanks to MANNA, I have been able to meet such an amazing group of ESRs, the majority of whom I now consider good friends and amazing scientists.

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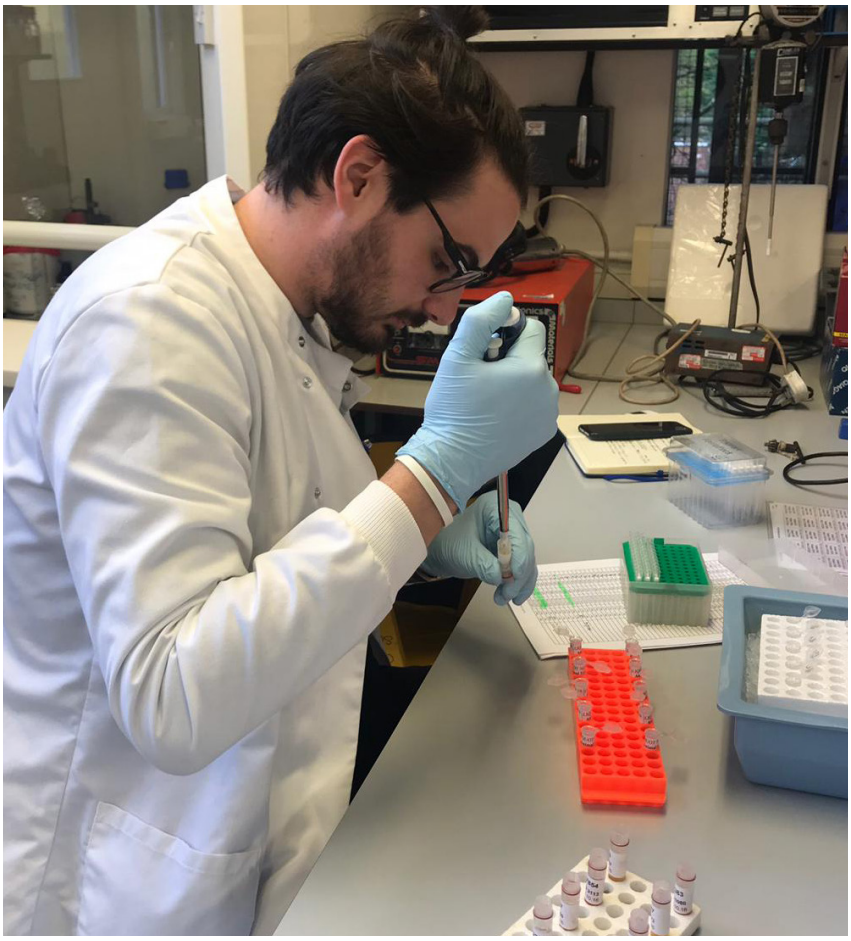
MANNA: CAN AN AMINO ACID SUPPLEMENT IMPROVE THE HEALTH OF A COW AROUND CALVING TIME?

Discover Project 5 of the MANNA network. You will find out that calving can be stressful, from a metabolic point of view, even for a cow.

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 Europe, on innovative technologies applied to animal science and nutrition. The joint doctoral opportunity is offered by the Marie Skłodowska-Curie Innovative Training Network, funded by the European Commission's Horizon 2020 programme. This is the sixth in a series of articles on the MANNA doctorate programme through which we will discover in detail its projects and the related Early Stage Researchers (ESRs) working on them.



WHO I AM

My name is Ruben Riosa and I was born in Italy – the country famous for "pizza, pasta, and the mandolin", which is somehow true. I received my bachelor's degree in Breeding and Animal Sciences at the University of Udine and then I moved to the University of Milan for my master's degree in Science and Technology of Animal Sciences, where I focused on the physiology and nutrition of dairy cows. During my master's studies, I spent three months as an Erasmus scholar in one of the French National Institute of Agricultural Research (INRA) centres of research, where I took part in a project that became the topic of my master's thesis. It was a life-changing experience. From that point on, I decided that I wanted to do a PhD abroad. Was I crazy? Posterity will judge. So here I am, as the ESR for Project 5 of the MANNA network, working under the supervision of Helga Sauerwein (University of Bonn), Richard Burchmore (University of Glasgow) and Claudia Parys (Evonik Industries) on a project titled "Assessment of the effects of increased intakes of the amino acid methionine during the first weeks of lactation and during early pregnancy in dairy cows."

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PROJECT OVERVIEW

The 'transition period' in dairy cows is the period of roughly 6 weeks before and after calving. This period is extremely critical because a lot of changes are taking place from a metabolic point of view and some intervention is necessary in order to reduce the incidence of pathologies related to calving in cows. There are multiple options to improve the health of the animals during this period, ranging from different management techniques to various feeding strategies. One of the most common is the supplementation of feed with methionine (Met).

Methionine is the first limiting and essential amino acid in dairy cows, meaning that the animal cannot synthesise it by itself and it needs to be added in all the diets. Moreover, Met can enhance milk production and protein synthesis, while its supplementation is also highly recommended to optimise feed cost and reduce nitrogen expulsion, which is fundamental from an environmental point of view.

Past researchers tended to focus their attention on how Met supplementation affected fertility, milk production and milk composition. However, few studies focused on the molecular level and therefore did not explain how the supplementation of Met changes the metabolic pathways this amino acid is involved in. Recently, the development of new technologies such as the OMICs techniques made it possible to study and to go deeper into this aspect. This is why we decided to apply OMICs in my project, as well as in other MANNA projects.

The main aim of my project is to use various OMICs techniques, especially the most relevant ones, of metabolomics[4] and proteomics, to identify the most important metabolites that change around calving due to Met supplementation.

MY PROJECT SO FAR

During my first year at the University of Bonn, I focused on the interpretation of the data collected during an animal trial (i.e. milk production and composition, clinical evaluation of cows), done in collaboration with the University of Veterinary Medicine of Vienna. I applied various machine-learning[5] algorithms in order to find the most interesting (from a researcher point of view) subgroups of cows to focus my attention on. This led me to concentrate on some specific aspects such as diet (control vs Met-supplemented cows), body fat reserve of the cows[6], clinical status (healthy or cows with endometritis[7]) and finally fertility. From all these features, I selected the most relevant cases we had in our database in order to create a single subgroup of cows which could be representative of the whole population. This would also permit me to analyse a limited number of samples, fundamental in terms of a cost-efficient use of the complex analyses we are using.

During my second year at the University of Glasgow, I did a metabolomic analysis on the selected samples in order to have a complete overview on how the metabolites were changing based on diet treatment and on cows' clinical condition. Subsequent to this analysis, I will follow up with a proteomic analysis on a subset of these samples in order to have a better understanding on how the proteome changed within the most significant pathways I discovered via the metabolomic analysis.

During my last year of my PhD I will do some validation analyses of the OMICs results, merge the different results in order to have a comprehensive overview of the situation, and hopefully, publish some papers on the results, which is always an important aspect for a researcher.

[4] Metabolomics is the large-scale study of small molecules, commonly known as metabolites, within various biofluid (urine, blood), cells, tissues, or organisms.
[5] Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention (from SAS analytics website: https://www.sas.com/en_us/insights/analytics/machine-learning.html).
[6] Body fat reserve is a very important parameter to study because it permits you to evaluate one part of the health status of your animal. Particularly around calving, it is a great tool to see how many reserves the animal loses (or not) due to calving, and thus understand how metabolism responds to that.
[7] Endometritis is an infection of the lining of the uterus. It can be subclinical (no signs or symptoms) or clinical (presence of purulent or mucopurulent vaginal discharge).

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HOW DOES BEING PART OF AN MSCA ITN IMPACT ME

Having a chance to participate in an MSCA ITN such as the MANNA programme is truly an honour. It allows me to be in an environment full of leading experts in their fields. It also enables me to visit different universities and labs to enhance my knowledge and gain more experience. Moreover, being able to travel around Europe and to meet people coming from different nationalities is as important as the research itself, because I feel I have grown as a person. It is also amazing to have this opportunity to move freely and collaborate with other passionate scientists. The network that MANNA created is fantastic, and I am happy to be able to share my research with my fellow ESRs and all the supervisors, which have become a sort of 'family', in which everyone is keen to help each other.

In conclusion, I cannot but mention the opportunity that MCAA is giving me to be an active member of the communication workgroup and a member of the editorial team: I feel honoured to work with an amazing group of people who are passionate about communicating science and give their best to engage old and new readers. Communication is a fundamental topic in science, and I really hope that we will be able to continue to deliver important messages to the community.

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RESEARCH

HOW CAN WE GET CHILDREN TO EAT BETTER? MSCA PROJECT IS EMPOWERING YOUNGSTERS TO DEVELOP HEALTHIER EATING HABITS

The Marie Sklodowska-Curie Action (MSCA) project Edulia is responding to Europe's urgency in tackling childhood obesity. Project leader Paula Varela explains how to successfully promote healthier eating habits by getting away from established teaching practices and focusing instead on an innovative child-centred approach.

The 4-year project is looking into new approaches to urge children to enjoy and actively choose healthy foods based on the relationship between sensory perception, pleasure, food choice and behaviour. "Our aim is to better understand how multiple factors act as barriers to children's healthy eating and how to tackle them," says Paula Varela, a senior scientist at the Norwegian Institute of Food, Fisheries and Aquaculture Research and professor in sensory and consumer science at the Norwegian University of Life Sciences.

NATURALLY DRIVING BETTER FOOD CHOICES IN CHILDREN

"Edulia goes beyond the traditional approach of 'teaching children what is healthy'," Paula adds. This will be done by exploring social marketing and nudging strategies, studying peer and family social interactions and social media marketing, identifying factors that influence what and how much is eaten, and developing products that can drive healthy eating through sensory pleasure. The project involves about 1 150 children and almost 2 000 parents in its research activities.

Eleven early-stage researchers are studying two crucial periods. One is early childhood (infancy to preschool), which is key to the development of preferences. The other is pre-adolescence (9-13 years), a pivotal time for forming habits and making decisions. In addition, they are addressing interactions with parents and peers involving food behaviour.

In addition to project coordination, Paula is also the main supervisor for one of the fellows and co-supervisor of another. From a scientific perspective, she focuses on the methodological aspects of child research and healthy product development by supervising a project that will introduce new methodologies for studying intrinsic and extrinsic parameters that influence children's food choices.

BALANCING FOOD PLEASURE AND NUTRITIONAL NEEDS

Now at Edulia's midway point, several peer-reviewed papers have been published following an initial focus on recruitment. Findings show that peers', and to a lesser extent siblings', influence on children's and adolescents' healthy eating behaviour, is more often negative than positive. Other findings show that children have a good ability to identify the basic tastes in unfamiliar foods, but this ability is lessened when combinations

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of dominant tastes occur. The presence of sweet taste has a strong and positive effect on children's liking, and no correlation was found between children's taste identification ability and liking. Another study reveals that pre-adolescents are able to use specific emojis to describe how they feel about recalled foods. Emoji selection varied across foods elicited by different eating contexts. Gender and age affect the frequency of emoji selection across eating contexts. Younger pre-adolescents (9-11) tend to select more food-related emojis than older ones (12-13).

Edulia innovates by developing, testing, and understanding key principles of interventions that target a positive and enabling food environment for children. "This environment can only be achieved when there's direct input from children in product development to reflect their tastes and perspectives, when there's insight into individual differences in responding to healthy foods to better target interventions, as well as when healthy eating is self-motivating, 'normal' and effortless," explains Paula. "Another strong innovative aspect of Edulia is that it develops healthy foods directly targeting child preferences, rather than asking parents."

FOSTERING TOMORROW'S BRIGHT YOUNG MINDS IN THIS SPECIALISED DOMAIN

"Beyond all these, the foremost contribution will be the creation of a workforce of excellence in the cross-disciplinary topic of children's healthy eating, contributing to a sustainable benefit for the EU," continues Varela. In light of recent policies and recommendations at European and international levels, setting up this new network of highly skilled scientists is timely.

Edulia will fill gap between academic research and practitioner knowledge and help to create an expert labour force to tackle the problem of children's unhealthy eating from a multidisciplinary perspective involving sensory science, nutrition, statistics, psychology, consumer behaviour, social marketing, and food product development. "Ultimately, this will benefit industry, academia, policymakers and families," concludes Paula.

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THE HELLO PROJECT: ONGOING ACTIVITIES AND DISSEMINATION ACTIONS

The MSCA-IF Heritage energy Living Lab onsite (HeLLo) project's main objective is to create a structured dissemination programme that opens the doors of the laboratory beyond academic boundaries. MSCA research fellow Luisa Dias Pereira, and Marta Calzolari tell us more.

Historic buildings constitute a significant amount of the EU existing stock. The energy refurbishment of heritage buildings – the area covered by the MSCA-IF project HeLLo[8], is related to the EU's policy priority for the reduction of fuel consumption. Currently, there is a lack of specific tools for these types of interventions. There is also a scarcity of data about the state of the art. As a result, heritage buildings are mostly excluded from core strategic plans of the EU Member States. This translates into a missed opportunity in terms of moving towards a net zero energy future.

GENERAL GOAL

HeLLo's overall mission is to spread awareness about the most common energy retrofit solutions and to increase knowledge of their application in historic buildings. HeLLo defines the following specific objectives:

- To check the compatibility of energy retrofit technologies already certified and applied to new buildings on historic constructions;
- To create a structured dissemination programme that opens the doors of the laboratory life beyond academic boundaries.

[8] https://cordis.europa.eu/project/rcn/215475/factsheet/en

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HOW IS IT BEING ACHIEVED?

Results are being achieved through a twofold strategy. First, a true experimental laboratory in which energy retrofit technologies are tested and their real performances are quantified. Second, a project of *dissemination laboratories* that offers an experimental experience in order to make known the world of investigation by the practice of the living lab.

As the dissemination project is itself an integrated part of the research, the experience is being addressed to different **target groups**, including the scientific community and professionals, public authorities, enterprises, and end users. For each of these groups, different dissemination tools/labs, time and strategies have been foreseen:

- **SCHOOLab:** field work with students
- **SOCIALab:** HeLLo social media networks profile (IG @hello.h2020.unife; FB @Hello_h2020_unife)
- **ONSITELab:** onsite lab tours in Palazzo Tassoni (Ferrara, Italy), the in situ case study of the project
- **VIDEOLab:** action videos of the project and its activities
- **PRESSLab:** press releases and articles in journals in which the host institution handles a section
- **ONLINELab:** the project's website
- **PUBLAb:** scientific publications
- **CONFLAB:** organisation of scientific events, such as workshops or conferences

ACTIVITIES AND OPEN LABS

Some of the HeLLo activities developed since the beginning of the project (1 October 2018) are presented below:

SCHOOLAB

New metering box construction

ONSITELAB

CONFLAB

HeLLo activities developed since the beginning of the project (1 October 2018)

[9] E. Lucchi, L. Dias Pereira, M. Andreotti, R. Malaguti, D. Cennamo, M. Calzolari, V. Frighi, Development of a Compatible, Low Cost and High Accurate Conservation Remote Sensing Technology for the Hygrothermal Assessment of Historic Walls. Electronics. 8, 643 (2019)

[10] https://www.youtube.com/watch?v=AZdVeA8TBBI&feature=youtu.be

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PUBLAB[9]

electronics

MDPI

Article

Development of a Compatible, Low Cost and High Accurate Conservation Remote Sensing Technology for the Hygrothermal Assessment of Historic Walls

Elena Lucchi [1,*], Luisa Dias Pereira [2], Mirco Andreotti [3], Roberto Malaguti [3], David Cennamo [1], Marta Calzolari [2] and Valentina Frighi [4]

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SOCIALAB

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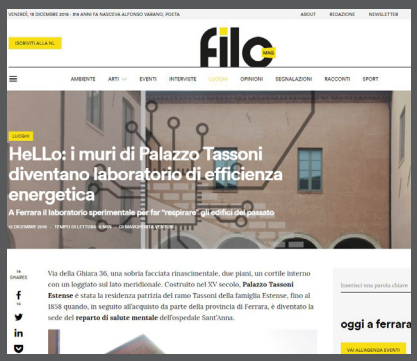
ONLINELAB

Hellomscaproject.eu

VIDEOLAB[10]

HeLLo presentation video

PRESSLAB



HeLLo featured at FILO magazine

The HeLLo project was one of the 35 MSCA projects selected to participate at Science is Wonderful! 2019, a dissemination event hosted in Brussels last year, connected to the European Researcher night[11].

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[9] E. Lucchi, L. Dias Pereira, M. Andreotti, R. Malaguti, D. Cennamo, M. Calzolari, V. Frighi, Development of a Compatible, Low Cost and High Accurate Conservation Remote Sensing Technology for the Hygrothermal Assessment of Historic Walls. Electronics. 8, 643 (2019)

[10] https://www.youtube.com/watch?v=AZdVeA8TBBI&feature=youtu.be

[11] The HeLLo project has received funding from the EU's H2020 research and innovation programme under the Marie Skłodowska-Curie GA 796712.

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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.

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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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