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#MCA3CNews

NEWS FROM THE MCAA

The MCAA 6th Annual [General Assembly and Conference](#) will be held on 24th and 25th of February 2019 at the [University of Vienna](#), Austria. This two-day event brings together policy makers, entrepreneurs, and researchers across disciplines from both academia and industry. The Annual Conference is MCAA's flagship event and provides a forum for presentations, workshops, debates, career fair, and networking with a focus on research careers, innovation, and science policy. The conference is open to all researchers (members and non-members) and the general public. MCAA members can register for free. Further information about [registration and fees](#) can be found at the conference website. This year's event will focus on **"Research and Innovation beyond the Information Age"** and is expected to gather more than 700 participants, including members of excellence of the academic society, European Commission, and renowned speakers.

Currently, 24 parallel sessions on a wide range of topics are planned, including Mentoring, Researchers Evaluation under RRI, Open Science, Science Communication & Science Diplomacy, Entrepreneurships, Gender Diversity, Future of Research, Project Proposals, and Researchers Mental Health. It is a unique opportunity for researchers residing in Austria to network with peers and get training in various soft-skills. Selected top speakers will provide the perfect ground for engaging and fruitful discussions of the different issues in the context of research and innovation while we are moving beyond the age of information. The president of the Austrian Academy of Science Prof. Anton Zeilinger, the CEO & CTO of Infineon Technology Austria Dr. Sabine Herlitschka, and the Director-General for Education and Culture from the European Commission Themis Christophidou have already agreed to be keynote speakers at the event.

*„Nothing in life is to be feared,
it is only to be understood.
Now it is time to understand more,
so that we can fear less.“*
Marie Curie



University of Vienna (main building)

The meeting will also provide members and non-members plenty of opportunities to meet interesting colleagues and build potential partnerships. Several national and international academic organizations, including TU Wien, VIKKI, Vienna BioCenter, jobs.ac.uk, Kazi, Johannes Kepler University Linz, Research in Germany (DAAD), IST Austria, Euro ScienceJobs, and Science Careers, already confirmed their participation at the career fair and there are more to come. Other non-academic partners, such as the Vienna Convention Bureau and Austrian Airlines are offering special deals for MCAA members who want to come to Vienna for the event. Make sure to check their offer thru the MCAA [conference website](#).

Also worth mentioning is this year's poster session in paper and digital format, which will offer the possibility for a few selected members to additionally present their work to the attendees in a 3-minute-talk.

A detailed agenda and other relevant information about this event can be found at the [conference website](#). In case you have any questions, please feel free to contact us.

We are looking forward to welcoming you at the event and shaping the progress of science with you!

Mostafa Moonir Shawrav
Vice-Chair, MCAA

MESSAGE FROM THE CHAPTER

„The way of progress is neither swift nor easy.“
Marie Curie

The Board members and I hope this year is off to a good start and that you have a very good and productive time in your personal and professional lives. During the last few months, we have been busy in finding ways as to how best improve your membership benefits. I would like to take this opportunity to share some of these ideas.

First, we have been trying to develop new strategies to foster **collaboration** among members. For this purpose, we have recently launched a mobile app called *Marie Curie Alumni Connect* to facilitate networking and initiate collaboration among members. The Marie Curie Alumni networking app connects you to other Marie Curie alumni you might not know and who match your professional needs and interests. You can visit the [app page](#) to learn more about it or you can directly [install it](#) in your mobile. Moreover, as we value face-to-face networking, we have started the *Marie Curie Stammtisch* – an informal social event, which takes place every month in Vienna. We kindly invite you to participate in the Vienna Stammtisch and not to miss the opportunity to meet and exchange experiences with other members and potentiate your networking.

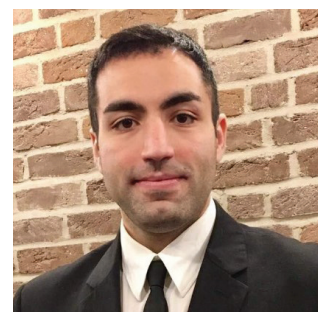
A second factor of extreme importance for the long-term and sustainable success of the Austrian chapter is members' **professional development**. Therefore, we are offering a unique opportunity that empowers you and allows you to develop your managerial and leadership skills. We have transferred power to your hands by including you in the managerial process and allowing you to partake in key decisions. There are plenty of tasks we are currently working on in the chapter (e.g., career day event, MCA³C blog, training, external collaborations and partnerships) and of which you could take the lead and develop further in a small team. You are also welcome to bring in new ideas. If you are interested, please [contact us](#).

In addition, we have started a partnership with the *learning platform Coursera* in order to offer our members the chance to earn a certificate free of charge. Until the end of August 2019 you can select and complete one course out of 3,195 courses offered in our platform. The number of available certificates are limited, so make sure to [apply](#) soon.

Further, in order to be able to best serve you, we have passed around a **feedback form**. In this form, members can express their opinion (anonymously) about the work we have been doing and also share ideas and unique perspectives about what we could do to improve our services to the MCA³C community. This form will be open throughout the year 2019. Please take some minutes to [share your views](#) with us.

Lastly, to improve the membership experience for all of us, please make sure to join us in [LinkedIn](#), [Facebook](#), and [Twitter](#). We are continuously posting interesting articles with useful information for members and others involved in the MCAA community.

I hope to see you at the MCAA General Assembly in Vienna in February. In the meantime, stay well and warm!



Mohammad Rezaei
Chair, Austrian Chapter

6TH GENERAL ASSEMBLY AND ANNUAL CONFERENCE

RESEARCH
AND
INNOVATION
BEYOND THE
INFORMATION
AGE



24 - 25
FEBRUARY 2019
VIENNA, AUSTRIA

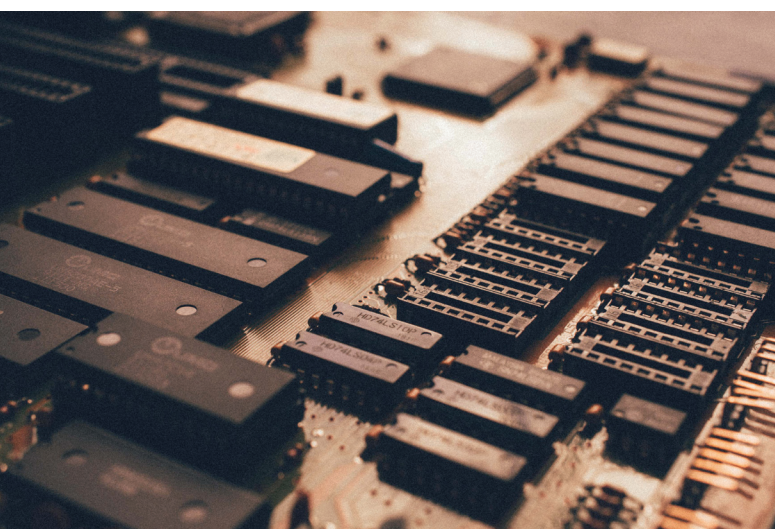
#MCAAGA2019

You cannot attend the meeting? Parts of the conference can be followed remotely via live stream or you can access the recorded sessions past to the conference at the MCAA website.

MEMBERS' CORNER

The Information Age and Beyond

Let us take advantage of this year's MCAA Conference topic and reflect about the age in which we are living and undertaking research. It has been argued that the rapid development of technology brought us to a time marked by the collection, storage and availability of an enormous amount of information in comparison to former times. In this context, there are many questions worth to ponder. What does it mean for the future of research? What are the responsibilities and consequences of living and researching in times of big-data and easier access to data and information? What are the necessary skills to survive and thrive in academia in the times to come? Reflection on these issues might require slightly different foci, depending on the field of research. Nevertheless, there are two relevant aspects which I believe deserve special attention regardless of the area of research.



The first is communication. As researchers, we must be aware of our share of responsibility in propagating scientific discovery and advancement. Especially in times in which information are readily available to broader groups, including the general public, we need to take better care of how relevant scientific information are delivered to different information consumers. Due to issues related to academic career incentives and promotions, as researchers we have generally concentrated most of our efforts in scientific communication among colleagues. It is time to broaden our communication channels and to create better communication systems to reach a wider audience and end users. In anticipation of this, some prestigious European-funded research programs, including Marie Curie and H2020, explicitly require outreach and communication strategies to be described in the grant application process.

Nevertheless, we need to be careful about how to communicate as different audiences and research products will require different strategies. In my area of research (Educational Psychology), it is not about dictating to teachers by delivering manuals of “what is best.” The focus should be on information and training with the goal of enabling them to make use of scientific information and

consequently being able to make well-informed decisions about teaching methods and materials to be used in class^[1].

The second relevant aspect to be taken into account is cooperation. In the near future, interdisciplinary work will become even more important. It is only by breaking disciplinary boundaries that we will be able to develop innovative solutions to complex problems.

Observations of interdisciplinary work show that new and contrasting perspectives can shed light into questions that otherwise cannot be addressed from inside the field. For example, the joint work between Developmental Cognitive Neuroscience and Teaching has brought new evidence on how different teaching methodologies can affect brain wiring in regard to learning to read. By contrasting brain activity of expert adult readers to beginning learners, researchers could show that specific teaching methodologies have different effects on brain wiring and some methodologies are more effective than others in building expert-like reading circuits^[2].

In conclusion, for whatever age awaiting us beyond the information age, as researchers our challenges will include developing and defining new communication and cooperation standards. In Educational Psychology, special attention shall be given to closing the research and practice gap. This will entail building a feedback system to bridge research teams and educational centers to allow a bi-directional fluid support system.

Clara Gomes-Koban
Newsletter Editor

[1] Gomes-Koban, Calet, & Defior (*accepted*). Intervention programs in Educational Psychology: Bridging research and practice. *Anales de Psicología*.

[2] Yoncheva, Y., Wise, J., & McCandliss, B.D. (2015). Hemispheric specialization for visual words is shaped by attention to sublexical units during initial learning. *Brain and Language*, 145, 23-33.

International Day of Women and Girls in Science 11 February

The MCA³C would like to thank all women and girls who are fighting for an equal world for ALL of us!

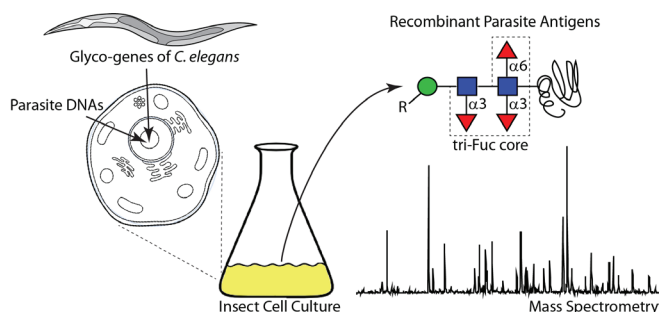
We congratulate our female members for their academic achievements, despite the odds imposed by the system against them. Each of you is a science hero!

As we are talking about interdisciplinary exchange, I have decided to ask a researcher from a very different area about the challenges he thinks his field is facing in the information age and beyond.

Shi Yan is a biochemist and glycobiologist from the University of Veterinary Medicine Vienna: „*Biochemistry studies the structures and functionalities of macromolecules. Therefore, there are two major challenges in my filed: one is to decode the precise structures of carbohydrates that are attached to proteins of a parasite and identify the antigenic ones; the second challenge is to synthese these structures using an engineered biological system so that a recombinantly produced antigen is as similar as its native form.*“

Shi Yan is currently working at the [Institute of Parasitology](#), in which he leads his first independent [research project Biosynthesis of helminth N-glycoproteins in insect cells](#) funded by the Austrian Science Fund. His field of study is called Glycobiology, which is the study of the structure, function, and biology of carbohydrates (sugars), also called glycans.

Glycosylation is one of the most common posttranslational modification of proteins in biochemistry, which directly influences biological processes, such as signalling, immunoregulation, and host-pathogen interactions. Shi's work mainly focuses on elucidating the glycosylation of a free-living nematode, *Caenorhabditis elegans*, as well as its parasitic relatives.



Interestingly, the glycoproteins synthesised by parasitic worms are often decorated with a different set of glycan structures in comparison to the ones produced by mammals. During the course of infection, the “foreign” glycans of parasites may be recognised by the host immune system and the captured antigens are further processed so that the protective immune response is triggered specifically against the parasite. However, recombinant production of such glycoproteins in conventional expression hosts, such as *E. coli* and yeast, often leads to reduced or altered antigenicities, presumably due to the incorrect sugars being put onto the antigens. It is essential to specify the native “sugar-coat” of such antigens, as this will improve their antigenicity when used as vaccines.

The research group intends to install one common feature of nematode N-glycoproteins - the tri-fucosylated N-glycan core - onto recombinant antigens of a sheep parasite by using a glycoengineering approach, which makes recombinant proteins “sweeter” and more bioactive.

More information on Shi's exciting work can be found in these selected publications:

Yan, S., Vanbeselaere, J., Jin, C., Blaukopf, M., Wöls, F., Wilson, I. B. H., & Paschinger, K. (2018). Core Richness of N-Glycans of *Caenorhabditis elegans*: A Case Study on Chemical and Enzymatic Release. *Anal Chem*, 90(1), 928-935.

Yan, S., Wang, H., Schachter, H., Jin, C., Wilson, I. B. H., & Paschinger, K. (2018). Ablation of N-acetylglucosaminyltransferases in *Caenorhabditis* induces expression of unusual intersected and bisected N-glycans. *Biochim Biophys Acta*, 1862(10), 2191-2203.

Martini, F., Eckmair, B., Štefanić, S., Jin, C., Garg, M., **Yan, S.**, Jiménez-Castells, C., Hykollari, A., Neupert, C., Venco, L., Varón Silva, D., Wilson, I. B. H., & Paschinger, K. (2009). Highly modified and immunoactive N-glycans of the canine heartworm. *Nat Commun*, 10(1), 75. - [open access](#) -

Shi Yan, PhD

University of Veterinary
Medicine Vienna
Institute of Parasitology

Research interests:
glycomics, glycobiology, parasitology, recombinant protein engineering, chemo-enzymatic synthesis



Open Call for MCA³C Newsletter Contributions

Are you interested in sharing information about you and your research project among MCAA members and other researchers outside of MCAA? Would you like to be featured in our next Newsletter?*

Contact our [Newsletter editor](#) for more detailed information on conditions and deadlines.

Do not miss this opportunity to show off your work and achievements!

*For registered MCAA members only.

CHAPTER EVENTS IN 2019

JANUARY 17th 2019

Social Event

Marie Curie **Stammtisch** in Vienna.
Meeting at 6 pm at Orient Occident
1040, Naschmarkt 71.

FEBRUARY 13th 2019

Social Event

Marie Curie **Stammtisch** in Vienna.
Meeting at 6 pm at Wiener Eistraum
at the Rathausplatz. Afterwards, meeting at
8 pm at Cafe Bierbeisl Einstein
1010, Rathausplatz 4.

FEBRUARY 24-25th 2019

Meeting

6th Annual MCAA **General Assembly
and Conference** - University of Vienna

If you plan to attend, please [pre-register](#).

MARCH 21st 2019

Social Event

Marie Curie **Stammtisch** in Vienna.
Details TBA.

If you plan to attend, please sign up.

SPRING 2019

Meeting

Chapter's **Spring Annual Meeting**.
Details TBA.

Pre-registration required.

SUMMER 2019

Workshop

Project management in Vienna.
Details TBA.

Pre-registration required.

AUTUMN 2019

Workshop

Career event in Vienna.
Details TBA.

Pre-registration required.

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The MCA³C is part of the Marie Curie Alumni Association. We encourage local networking and support members' career development. If you are still not a member of MCAA or MCA³C, you can sign up now. Membership is open to all MCAA current fellows and alumni and is free of cost.

If you prefer not to receive our Newsletter by e-mail in the future, please send us an e-mail with the heading „unsubscribe to Newsletter.“



Think before printing