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NEWS FROM THE MCAA

The fifth MCAA Conference and General Assembly (C & GA) will be held on February 2nd and 3rd, 2018, in Leuven, Belgium. The host for this event is the University of Leuven. Highlights are the **MCAA Board election** and the **guest speaker** Bernard Feringa, who won the Nobel Prize in Chemistry in 2016 for "the design and synthesis of molecular machines." Do not miss this opportunity to be involved and help shape the face and future of MCAA. Registration is now open and detailed information about the agenda and location can be found on the MCCA website. We would like to remind current MSCA fellows that reimbursement from their MSCA project to participate on the MCAA C & GA is possible. The MCAA Austrian Chapter Board will be joining this event. We hope to see you there!



MESSAGE FROM THE CHAPTER

CHAPTER YEAR 2017 IN RETROSPECT



MCA3C booth at the "European Researchers' Night" 2017 in Vienna.

This has been a very busy year for the Austrian Chapter. The new Chapter Board, composed by Mostafa Moonir Shawrav (Chair), Mohammad Rezaei (Vice-Chair), Clara Gomes-Koban (Secretary), and Matthew DiFranco (Past Chair - Advisor) has been working intensively since January 2017 to assure the further development of the Chapter. Following the official Austrian model for the foundation of an association* and having an official Board composed of more than just one person, in our case more than only a Chapter Chair, has largely contributed to the Chapter's productivity.

In regard to our activities, apart from the regular Chapter Meetings, we were able to organize one workshop on soft-skills entitled "Presenting with Impact," one joint event with i2c Technical University (TU) Wien on "Sciencepreneurship," and various social events in different Austrian cities. We also participated on this years' "European Researchers' Night" in Vienna. At our booth, visitors were able to learn about Marie Curie's life and had the chance to win a book by participating on a "Marie-Curie-Quiz" especially designed for the event. In addition, members of the Chapter Board were present at the "New Horizons 2017: Rethink Europe" in Passau, the celebration of the 10 years of the European Research Council in Vienna, and the MCAA Board Meeting in Porto.

As to our management strategy plan, one of our priorities this year was to establish contact with relevant agencies in Austria and neighboring Chapters in order to identify potential future partnerships. Numerous steps have been taken to initiate the discussion about possible

* <https://www.help.gv.at/Portal.Node/hlpd/public/content/22/Seite.220300.html>

cooperative work with agencies that share similar goals, for example, the MSCA National Contact Point, Austrian Science Fund (FWF), Institute of Science and Technology Austria (IST), and renowned Austrian universities.

The newly established partnerships are showing their fruits and a number of activities and joint events are in negotiation, such as a "Proposal Writing" workshop with FWF, a seminar/workshop for MSCA ITN and IF with the Austrian Research Promotion Agency (FFG), a "TEDx" event with the MCAA Communication Working Group, and a "Start-up" event with MCAA Bridging Science and Business Working Group and i²c TU Wien. We invite our members to take advantage of the upcoming career development events and to help us spread the word to colleagues that might be interested in participating.

In addition, in collaboration with the Vienna Convention Bureau and the University of Vienna, the Chapter could prepare a bid to run for the 2019 MCAA General Assembly. The bid is supported by Vienna's City Major and City Hall, among others. We are already looking forward to the MCAA Board decision, which is expected to be officially announced in December 2017.

Marie Curie's 150th birthday in November 2017 gave us another reason to bring the research community in Austria and our members together and a small celebration took place in the TU Wien.

Finally, we would like to congratulate our members Dr. Yolanda Salinas (Post-doc at Johannes Kepler University Linz) and Jana Kemnitz (PhD student at Paracelsus Medical University Salzburg) for winning the "Austrian Chapter Member of the Year 2017" award. Thank you for your help in organizing various Chapter's events and for your invaluable support in conveying our Chapter and MCAA mission to your local research communities.

As usual, we would like to encourage our members to become more active in the Chapter and we hope to count with your continued support in the next term. We can only wish the next year to be just as positive and productive.

The Austrian Chapter Board



Participants at the i²c/MCA³C co-joint event "Sciencepreneurship" in September 2017 in Vienna.

MEMBERS' CORNER

„SOME HEADS HAVE TAKEN TWO HEADS BETTER THAN ONE“**

(by CLARA GOMES-KOBAN)

The use of expressions such as collaboration, networking, intersectional, translational and the like have been on the rise in the peculiar world of academia. For this reason, the idea of an isolated person in a white coat doing experiments in her/his own basement now sounds old-fashioned. Nevertheless, it is only recently that the research community started pondering about this process of change and what it really means for the research profession.

One of the underlying factors which has led to the breakout from the basement and an expansion of boundaries could be seen to be a by-product of the research work itself. As interesting questions usually open up innumerable roads for further enquiry, the advancement of knowledge generated by rigorous and ethical research has led to a growing complexity of the phenomena under study. In addition, the types of problems have changed as the course of history has brought greater challenges to our times. Consequently, to understand and solve these problems multiple areas of expertise are required^[1]. Thus, playing the “lone ranger” turned out not to be the most effective strategy to unveil the secrets of the complex universe we live in nor to understand the complexity of the human mind. Additionally, environmental issues such as politics and economy seem to play a role in pushing researchers to increasingly look for partnerships. It has been reported that the more limited the resources and the stronger the competition for funding, the more research groups will be motivated to engage in collaboration^[2]. In this process of change, the fast development of technology has been serving as a facilitating factor by softening barriers formerly posed by physical distance and data management.

But, what does it really mean to collaborate? According to the Oxford online dictionary, the most common definition of the concept “collaboration” would be “the action of working *with* someone to produce something.” Guided by this rather general idea, the most common reported types of collaboration found in academia are sharing data, equipment, and article authorships. Accordingly, co-authorships have been increasing steeply in the last years^[3,4]. Nevertheless, some authors argue that these quantities only partially

** English proverb originally written in 1546 by John Heywood that means “two heads are better than one.” Interestingly, in Japanese a similar meaning phrase refers to three heads being better than one (source “In Ghostly Japan” by Lafcadio Hearn, 1971). I guess they are a little bit ahead of us...

describe collaboration, as they do not differentiate between levels or types^[5]. One consequence of this rather superficial use of the term collaboration is that researchers are not able to benefit much beyond multiplying paper citations and getting access to expensive or specialized equipment^[4].

A much less discussed level of collaboration seems to be the one involving additional intensive intellectual interaction. Some authors argue that researchers tend to be less aware of this epistemic value of collaboration^[2] which could potentially bring more innovative solutions and overreaching and enduring benefits to the development of science. Apart from the wonderful exercise of having one's paradigms being challenged and the opportunity to learn from the experiences of others, joint efforts in larger and international research groups can have a greater impact in policy making and societal awareness.

Nevertheless, the encounter of various theoretical, technical, and personal backgrounds has its challenges. Successful collaborative endeavours will involve the understanding of a wide range of factors related to human social interaction and the environment in which it occurs. Considering it only at the individual level, there are two main questions that emerge which are worth reflecting upon. The first one refers to the set of skills, which will be increasingly useful for researchers to develop. The second concerns effective strategies to initiate, arrange, and manage collaborative work.

In regard to the first question, there is a tendency towards attributing increasing importance to the so-called "soft-skills." In contrast to "hard-skills," which are subject-specific expertise (e.g., data analysis, programming etc.), these more interpersonal related skills would include communicating clearly in oral and written form, managing people and projects, being able to work effectively in a (homogenous or heterogeneous) team or group, among others. Ironically, the "soft-"skills are the hardest ones to learn, as underlying these skills we find abilities that are highly related to personality traits and self-beliefs, both human attributes which are more resistant to change. For example, a certain minimum level of extraversion and self-confidence will be necessary when managing working groups or presenting ideas to others. In addition, such abilities as communication, people management, and working in a team are not always explicitly taught or fostered at the beginning of the academic path. Consequently, many young researchers are either left alone to learn by doing, or are lucky enough to have a supervisor or mentor, who can guide them in the development of a repertoire of strategies.

This leads us to the second question about how to successfully collaborate and network. Collaboration will sometimes be fixed parts of research projects attached to specific grants acquired by an institution. In this case, responsibilities, rights, and other issues involved in managing the working groups will probably be pre-established and the recruited researchers will “only” need to follow them. One example of such type of fellowships is the *Marie Curie Initial Training Network*. Nevertheless, especially for young researchers and PhD students, authorships in large research groups and projects might still be an issue that will need to be discussed internally between members.

On other occasions, collaborative work will need to be initiated by the researcher. One more natural way to connect with potential partners will inevitably be through face-to-face contacts during events and conferences. This might be somewhat intimidating for young and more introverted researchers, but unfortunately, there is no way around it. Nevertheless, there are ways of preparing yourself to make the best of out of a conference experience in terms of networking and at the same time not exceeding your individual limits. For example, if you are intimidated by “big names,” informally talking to students who work closely with them might be a good way to start.

In sum, be it between departments, universities, or disciplines, building and maintaining an appropriate network of contacts will be increasingly important for undertaking a career in research. Therefore, setting yourself to be competitive for the future will mean investing time in learning and developing skills beyond the area-related technical skills, such as learning to communicate your research to different audiences, being able to manage heterogeneous groups, and being able to build and maintain a fruitful work-related network. Furthermore, universities and other educational agencies are advised to develop and offer more systematic training on these skills, as ultimately, those who do will be the ones who will benefit the most from the result of the combination of heads.

In this newsletter, we would like to introduce our member Dr. Yolanda Salinas, who won the “Austrian Chapter Member of the Year 2017” prize. When asked about her opinion on collaboration she said: “I really believe that quality work comes from the interaction with other expert research groups, in my case, in the medical field. For example, the acceptance of my recent research proposal was the result of combined efforts and expertise from various colleagues, especially from Prof. Teasdale and myself, and the support provided by Prof. Brüggemann, head of the Institute of Polymer Chemistry at JKU. Therefore, I think that active collaborations are the key for future developments in research, even more nowadays as we live in a multidisciplinary world.”



Yolanda Salinas Soler is a Post-doc researcher at the Institute of Polymer Chemistry at Johannes Kepler University in Linz. She is currently working on her first independent research project funded by the Linz Institute of Technology to develop novel degradable nanoparticles. Nanomaterials have a promising future in medical applications. The medicine carried by nanoparticles must deal with drug absorption, distribution within the body and accumulation in cancer tissues. Nevertheless, current nanocarriers, such as liposomes or emulsions, present

disadvantages in terms of structural integrity or drug loading and release control.

Developing drug delivery systems based on **mesoporous silica nanoparticles** (MSNs) overcomes those drawbacks as well as higher preparative and regulatory hurdles related to those systems. MSNs are uniform in morphology and size, present tuneable composition, and unique parallel porosity. In addition, a facile chemical modification of MSNs silane-based surface with a wide range of responsive organic moieties is possible, for example, to act as pore-blockers or molecular gates, facilitating the control of the open and closed pore outlets on demand, and hence, reducing the unpleasant side effects of conventional systems. Moreover, in the recent years it has become commonly accepted that the development of fully biodegradable nanomaterials is required to avoid the concerns of accumulation of retained materials, in particular for long-term use or high dose therapies such as chemotherapy. More information on Yolanda's interesting work can be found at her [university website](#) and in this selected publication:

Brüggemann, O., Teasdale, I., & Salinas, Y. (2017). Functional polymers for controlled drug delivery and tissue engineering. In R. Hagelauer and G. Pomberger (Eds.), *Whitebook Medical Technology*, (pp. 24-25).

Area of research interest: functional nanoparticles for medicine applications.

[1] Farrar J. (2017). We hail individual geniuses, but success in science comes through collaboration. *The Guardian*. Retrieved from <https://www.theguardian.com/commentisfree/2017/sep/30/we-hail-individual-geniuses-success-in-science-collaboration-nobel-prize>

[2] Wray, K. B. (2002). The epistemic significance of collaborative research. *Philosophy of Science*, 69(1), 150-168.

[3] Leydesdorff, L. & Wagner, C. S. (2008). International collaboration in science and the formation of a core group. *Journal of Infometrics*, 2(4), 317-325.

[4] Adams, J. (2012). The rise of research networks. *Nature*, 490, 335-336.

[5] Katz, J. S. & Martin, B. R. (1997). What is research collaboration? *Research Policy*, 26(1), 1-18.

UPCOMING EVENTS IN 2017/18

Join us at the next planned Chapter events!

NOVEMBER 25th 2017
Meeting

Chapter's **Autumn Annual Meeting** in Linz.
Please [pre-register](#).
Deadline November 23th 2017.

March 2018
Workshop

Workshop on "**Proposal Writing**" in collaboration with FWF in Vienna.
Details TBA.
Pre-registration required.

Spring 2018
Meeting

Chapter's **Spring Annual Meeting**.
Details TBA.
Pre-registration required.

Summer 2018
Workshop

Workshop on "**Project management**" in Vienna. Details TBA.
Pre-registration required.

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<https://www.mariecuriealumni.eu/groups/mcaa-austrian-chapter-mca3c>



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 in the future, please send us an e-mail with the heading "[unsubscribe to Newsletter](#)."

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