

Win4Science Spotlight Series: **Prof. Mari Kaartinen**

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Prof. Mari Kaartinen describes research as “a game of persistence”. Win4Science sat down with her to ask for advice on navigating this game, and to discuss her scientific journey as a researcher.

Originally from Finland, Prof. Kaartinen completed her MSc in Organic Chemistry and PhD in Biochemistry before coming to McGill for her post-doctoral training and she has remained here since. While it has been a long journey, Prof. Kaartinen said that she “loved being in the lab” and that “the science was leading [her] towards where [she is] right now.”

Since 2002, she has been an Associate Professor in the Faculties of Dentistry and Medicine where she and her research team investigate a group of enzymes called transglutaminases, and their role in bone health and obesity. She has accumulated over 60 publications, more than 2500 citations, and currently holds two prestigious grants from CIHR (the Canadian Institutes of Health Research).

The success of her research has not gone unnoticed. In 2014, Prof. Kaartinen was chosen by her colleagues to Chair a Gordon Research Conference (GRC) 2018 on Transglutaminases in Human Disease processes in Switzerland – an extremely prestigious position – only a quarter of GRC conferences had ever been chaired by women at that point. Prof. Kaartinen says this was her mid-career highlight because she felt that she “had come to a stage of [her] career where [she was] being respected [by her colleagues]”. When first asked to chair the GRC, Prof. Kaartinen admits she wasn’t sure she would have time, but she agreed to it and she could “only see that good things have come from that [decision]”.

Through this and many other experiences, her biggest piece of advice for young women in STEM is: “Don’t be afraid to say yes [...] you will rise to the occasion,” and “push yourself to try the new and unexplored” or to “speak up [...] claim your seat at the table”. Prof. Kaartinen believes that one should take every opportunity because “there are already existing structures that may inhibit you, don’t [...] inhibit [yourself]”. She also says, “not to be afraid to fail – failure is a chance to learn something”. On a more personal level, Prof. Kaartinen is also very proud of her role in mentoring her research team, saying that she loves seeing the moment where “it clicks” and her students become independent, emphasizing that a “good supervisor helps the student find their path and do it their way.”

Despite her impressive resume, Prof. Kaartinen admits that there are still obstacles, especially for early career women in science where independent positions are limited and obtaining and maintaining research funding is a major challenge. Prof. Kaartinen cited certain barriers, including age restrictions and “career characteristics that are considered [...] positive even though they may have nothing to do with the science itself” where grant applications place focus on the scientist rather than solely on the science. Specifically, longer CVs, more publications, and more funding are considered indicators of quality science. This makes it difficult for new researchers and new ideas to take the stage in their respective fields. To remedy the situation, Prof. Kaartinen mentioned that Canadian funding agencies are aware of these obstacles and have in recent years implemented career-stage appropriate evaluations and bias training.

Moving forward, Prof. Kaartinen hopes to see that women embrace and go after their scientific ambitions with a positive and optimistic attitude. The world of science is changing towards better awareness and greater diversity, thus, new opportunities will arise.

In continuing her career, Prof. Kaartinen plans to keep pushing the boundaries of our knowledge on bone health and obesity while serving as a teacher and a mentor to diverse scientists at all stages of their scientific training.

To read more about Prof. Kaartinen’s research visit her lab’s [website](#) or follow her lab on Twitter (@mari_kaartinen and @kaartinenlab).

