

**ANSO Workshop on Women in Science**  
**“Towards a Diversity of Research and Researcher”**  
November 18, 2021, Hungarian Academy of Sciences, Budapest

**MTA Institutional Policies**  
**for Advancing Equal Opportunities for Women in Science**

The Hungarian Academy of Sciences (MTA) has made significant progress in the past several years in improving the situation of women in the various fields of science. At the initiatives of former President László Lovász and current President Tamás Freund – clear policies have been implemented to support women scholars and scientists all along their professional careers from the time they are young mothers to when they get nominated and elected to the Academy.

Let me give a short background first of the Hungarian academic structure and its implications relevant to our topic.

The Hungarian Academy of Sciences was founded nearly two hundred years ago, in 1825, with only 26 members initially; ultimately, with the general codification of the Academy in 1994, this number grew to 365 members to represent the disciplines within the humanities, the social sciences, and the natural sciences in a total of eleven so-called scientific sections. With the passing of members, new candidates get nominated every three years (this is the general rule, to which there have been some exceptions), of whom ca. 20% become corresponding members first, who then become full members six years later (again, there have been some exceptions).

It was after World War II that the first women became members of the Academy; while some were truly first-rate scholars and scientists, several were elected for professional as much as political reasons. With the Communist Party overseeing the elections, Party membership and loyalty to the ruling powers were taken for granted, and membership in one of the higher bodies of the Party (like the Central Committee) or in the cabinet was also considered a plus. With only eight General Assemblies electing women, altogether eleven women became members during the forty years between 1949 and 1989. After the regime change of 1990, elections ceased to be politically motivated; however, the male-female ratio of the members remained low, with several opportunities missed to improve this situation. Today with 30 female members out of over 350, women do not even make up 10% of total membership. This is a serious situation that is being addressed and improved.

One additional point needs to be clarified in connection with the MTA election system. In order to be eligible to be nominated for corresponding membership, the nominee must hold a certain title, “MTA doctorate,” which one earns through a lengthy approval process whereby the candidate’s scholarly publication output, as

well as the submitted major dissertation are rated; this process is then completed by a public defense of the dissertation, after which the prestigious title “Doctor of MTA” is conferred. (The title “Doctor of MTA” is the formal prerequisite of professorship, although in some cases this promotion is granted without the fulfillment of the MTA doctorate requirement.) The average age when researchers earn an MTA Doctorate varies by discipline, but ranges somewhere between forty and seventy. It also varies by gender, being awarded to men earlier than women, especially women with children.

To mend this grave problem, in 2008, then Deputy Secretary General Valéria Csépe (professor of psychology) took the lead to design and implement pioneering policies addressing the disadvantages young women scientists suffered. Among these, some opened up new opportunities for young researchers and mothers with under-age children, while others adjusted certain requirements to them for grant applications.

The next major step came in 2016, when, upon the recommendation of Oxford professor of neurobiology Péter Somogyi, the General Assembly authorized President László Lovász and the Presidium of the Academy to propose new policies for gender supportive elections and the general enhancement of female talent in the sciences and the humanities.

At the initiative of President Lovász, a new Presidential Committee began its work in 2017, the Committee for Women in Science, headed by professor of international law Vanda Lamm, at that time Section President of Scientific Section IX, of Law and Economics. When Professor Lamm got elected Vice President for Humanities and Social Sciences in 2020, I had the honor to take over chairing this Committee, determined to continue the multifaceted work of my respected predecessor.

At the initiative of the Committee, an elaborate policy was designed and implemented to get first a higher number of women scientists nominated, and then to get them elected as corresponding members. The 2019 elections could boast with a spectacularly record number of nominations, a total of 29, and an even more spectacularly record number of elections, 10. The elaborate policy, implemented after an intensive personal campaign of Professor Lamm to get all Science Section Presidents use their influence in nominations, consisted in the following: all of the eleven scientific sections received an equal number of positions (three each, a total of 33), with those additional positions (left vacant by members deceased during the previous three years) to be distributed in such a way that female nominees who got over 50% of the votes from their respective committees be given “special consideration.” This was a most elegant policy, one that did not force anything on the members, simply requested extra consideration to eligible female scientists: to “remember the ladies,” as Abigail Adams once petitioned her husband, President John Adams. (Unlike the American President in 1776, the members of the Hungarian Academy of Sciences complied with this request in 2019.)

One of the top priorities of the Academy is to reduce the gender imbalance clearly present in scientific careers at any point of the scale, intricately mapping the occupational pyramid prevalent in society at large. We know very well that while at the BA/BSc levels, female students outnumber male students, the further up we look, the fewer and fewer the women. Their number decreases progressively if we look at the MA/MSc and PhD levels; assistant and associate professors, full professors; department heads, deans, and rectors (presidents of universities); directors of various departments and sections at research institutes. All these discrepancies between male and female scientific careers need to be doctored at their respective levels.

The stages that concern the Academy fall within the range above the PhD level; therefore, we must target the process leading up to the MTA doctorate title, so that the percentage of women who earned their PhD's should not fall, as it did in 2017, from 37% to 16% obtaining their MTA doctorate title. So we decided to launch a mid-career mentoring program, with our members (Veronika Müller, Beáta Vértessy) visiting various research facilities, giving public talks and conducting one-on-one consultations within a larger mentoring process geared at researchers who feel they are in a professional jam at a post-PhD/pre-MTA doctorate phase in their careers. Special grants have been set up to encourage women scientists to continue working towards the MTA doctorate titles. Other grants help young mothers continue their careers after taking maternity leave, attend scientific conferences, and publish scientific studies. I am happy to report that a steady progress has been made in this area, resulting in dissertations that most probably would not have been finished without the incentives introduced by the Academy's leadership.

The Presidential Committee made serious efforts to encourage high-school girls to choose STEM careers as well. This is, of course, a long-term process, for the underrepresentation of women in the hard sciences, technology, engineering, and mathematics has its roots at an early age, probably around age ten. In order to make STEM careers attractive to girls, middle and high schools have been targeted, with committee members (Katalin Balázsi and Anna Kérchy) – in alliance with the “alumni clubs” within the Alumni Program of MTA, launched by President Tamás Freund in 2020 – visiting schools all around the country, actively turning the best female students towards these fields.

Our committee has issued various recommendations to resolve discrepancies in the representation of women in the many organizational bodies of research. The general occupational pyramid seems to be at work here too in that very often the ratio of female speakers in workshops and conferences exceeds considerably the number of female chairs of sessions or panels; similarly, the ratio of female members on committees and boards surpasses significantly the ratio of female chairs of those bodies (admitting women to lower positions at best, as deputy chairs or secretaries to these committees). We have not only drawn attention to these discrepancies but emphatically urged organizers of conference sessions and panels to invite women in an equal number, also advocating that conveners of committees make it possible to

vote in an equal number of female colleagues with the same qualifications as men, so that they may become not only members but also chairs and vice-chairs in these bodies.

The committee decided to undertake a somewhat sensitive task as well, when issuing recommendations on how to guarantee a gender-sensitive workplace that ensures an environment respectful to women.

Finally, in order to show how attractive careers in science, as well as the humanities are, our committee set out to sponsor publications that present outstanding women, whose intellectual achievements are truly extraordinary. We have two such publications in the oven, so to speak: one, in Hungarian (edited by Mária Palasik and Mária Schadt), portraying the life and work of one hundred Hungarian women scientists, while the other, in English (edited by Réka Cristian and Anna Kérchy), surveying the impressive careers of a dozen or so pioneering women in diverse disciplines. In addition, one of our members (Andrea Pető) staged a nation-wide essay competition inviting college and university students as well as faculty to give assessments of women with the most impressive careers in science.

The Academy in general and our committee in particular established ties with two organizations with missions in alliance with ours, the Academy of Young Researchers and the Association of Hungarian Women in Science (represented by Katalin Solymosi and Katalin Balázs in our Committee). Both of these associations have set out to redress discrepancies between the number of girls and boys choosing STEM careers, to mentor young female scientists so that they continue and expand research, and to help mothers with young children to carry the double burden of family and profession.

Professor Tamás Freund, MTA President elected in 2020, placed a high priority in his presidential program on developing a complex strategy for the career advancement of women scholars and scientists. This career development strategy spells out not only the goals and opportunities but also the ways in which the Academy can help the attainment of goals and the realization of opportunities. It is now the task not only of our Committee but every corresponding and full member to make sure the goals are attained, and all the short-term and long-term strategy enhancing women's careers in science is duly executed.

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