2018 GNet Forum Report (2018 글로벌 한인 여성 과학기술단체 네트워크 포럼)

2018 GNet Forum was organized by the Korean Federation of Women's Science & Technology Associations (KOFWST) in Seoul, Korea on October 30, 2018. The topic of this year's GNet Forum was "How to Break the Glass Ceiling in STEM." Korean Women leaders representing various STEM organizations across the globe gathered to present data from each country as well as discuss potential solutions to the "glass ceiling" problem that is so prominent in the STEM (Science, Technology, Engineering, Mathematics) fields. Dr. Hey-Kyoung Lee, the KWiSE president, represented the KWiSE at this forum.

The GNet Forum was opened by a welcome remark by Dr. Myeong-Hee Yu (유명희), the President of KOFWST. This was followed explanation of the purpose of the GNet forum by Dr. Heeyoung Paik (백희영), President of the Gender Innovation Center (젠더혁신연구소), and a brief summary of the participation of KOFWST in foreign Korean led conferences by Dr. MiHye Kim (김미혜), Professor at Choongbuk National University (충북대학).

The session began by a presentation from Dr. Jin Won Seo (서진원), a Professor of Materials Engineering at University of Leuven in Begium. She gave a brief introduction to the University of Leuven, and described that the university developed the Gender Action Plan in 2014. One of the things that resulted from this action plan is the establishment of Gender Vanguards, who are trained faculty members required to be present in assessment committees to enforce achievement of 50/50 men/women ratio in new appointees and to oversee gender neutrality for promotions. This plan improved the gender ratio of faculty members and promoted hiring of women in engineering fields. Dr. Seo emphasized that even with such strong plan in place there are still challenges ahead, and pointed out that one of the main long-term challenges are implicit bias which impacts evaluation processes.

The second speaker was Dr. Sunny Cho (조선희), a Professor at University of Alberta in Canada, who is currently serving as the President of Korean-Canadian Women in Science & Engineering (KCWiSE). She presented data demonstrating gender inequality in STEM fields in Canada as well as various stereotypes built-in to viewing women scientists. She shared her opinion that gender equality has to be educated to boys as well as girls at an early age to bring about changes in culture. Mentoring of men by female was another suggestion that could potentially change the perspectives of male colleagues. Dr. Cho brought up an interesting point that while gaining equal resources is important, there needs to be policies in place to achieve equity. She explained the equity is about fairness and getting access to the same opportunities. Examples of measures suggested was to increase transparency and providing flexible working environment.

The third speaker was Dr. Hey-Kyoung Lee (이혜경), Professor of Neuroscience at Johns Hopkins University and the current president of KWiSE. She presented data on the state of women in STEM fields in the USA that suggested there needs to be tailored approach to overcome the "glass ceiling" issue based on the specific fields. In the US, the proportion of women in biological sciences is equal, if not more, than men. Therefore, the problem in this field is not at the level of recruitment of women, but at the level of retention. Loss of women in in biological sciences is apparent in academia as a decrease through the ranks termed the "leaky pipeline." In contrast, the proportion of women in physical sciences and engineering fields are far less than men even at the earliest stages of their career and the gap continues to grow through the ranks. Hence the solution to these fields have to be both at the level of recruitment as well as retention.

The last speaker of the forum was Dr. Soonja Yeom (염순자), Professor of Information & Communication Technology at University of Tasmania in Australia. She gave a brief introduction to the University of Tasmania, and described the low percentage of women in the Information Technology (IoT) field (about 22%). She described a policy called Athena Scientific Women's Academic Network (SWAN), which is in place to advance gender equality in academia. She suggested her view that changing the way we present STEM careers may have positive outcomes. She gave an example that if internet, which is only possible through IoT, is presented as something that connects people it may gain an added value to attract female students.

Presentations were then followed by an open panel discussion. The overall theme of the discussion was that there are clearly gender inequality present in STEM fields regardless of the country, and that one of the major challenges to overcome the "glass ceiling" problem is breaking the innate implicit bias that negatively impacts the hiring and promotion processes of women scientists. There was a general agreement that there also needs to be structural support for providing flexible work schedule for women, support for maternity leave/childcare, as well as developing fair evaluation processes that considers specific needs of women scientists. In addition, mentoring of women scientists to work against set biases and to train them on leadership roles was deemed important.

Report summary by Dr. Hey-Kyoung Lee.