# Millennia2015 International <br> seminar 2011 <br> Séminaire international 2011 de Millennia2015 <br> Foresight analysis of the 37 variables of Millennia2015 + Session Women and eHealth Analyse prospective des 37 variables de Millennia2015 + Session Femmes et eSanté <br> Processus de recherche prospective et conférences internationales <br> Liège 2008 <br> Paris 2012 <br> New York 2015 

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Hello everybody,
Thanks for having me here. I'd like to tell you about a new international workgroup we are launching at this very moment and which is focused on the variable 21, namely "Women in Science and Research".

What motivated me to initiate such a workgroup? Well, a few observations: for instance, there are very few women in the STEM fields (this is Science, Technology, Engineering and Maths). In Europe, women account for less than 10\% of all full professors in STEM. I recently attended the very first edition of the European Gender Summit in Brussels and in her keynote Prof Marja Makarow, Chief Executive of the European Science Foundation, mentioned the following statistics: with the current legislation and pace of women attending full professorship positions, $50 \%$ of women are expected in 400 years...

But this is just the tip of the iceberg. The question is not only to complain about the little proportion of women having full tenures, but also to why this number is so small. Many studies have been done so far and thus we learn that for instance family life has a huge effect on female scientists. Thus, we know that the drop-off of females at the end of their PhD is higher in comparison to their counterparts or that, in the case of a couple of scientists, the women are much more often prone to have part-time jobs than their husbands.

Which leads us to another observation about a persistent problem that is the pay gap. In the STEM fields, this is also the case: women earn between $7 \%$ and $16 \%$ less than their male counterparts for equivalent background and positions.

So, where does all this bring us? To make a long story short: studying how things are is not enough, but we need to act.

The longer version may be told through a few sentences. Thus, the most recent public consultation from the EU identified several dimensions that would allow addressing the future of gender in science and research. The first one is that the gender dimension
must be included as a way to improve research quality. Also, greater clarity is needed with regard to institutional leadership in science, which is who plays which role and who has responsibility for what aspects of gender equality is not at all obvious now. Furthermore, the consultation made it clear there are needs for gender experts to work alongside scientists in creating research that better identifies and capitalizes gendersensitive analysis. Lastly, all stakeholders and key players have to take action: a special emphasis is on policy intervention at the highest EU level for the implementation at national and institutional levels as well as on funding opportunities to target "gender in research" issues.

Thus, we intend to first contribute a comprehensive and as exhaustive as possible map of recent developments. This consists of data and their subsequent analyses in order to illustrate evolution of policies and educational trends in the last 20 years. Here, we will examine the educational path leading to a research career and discuss the vexing question of comparative research productivity of male and female scientists. The focus is mainly on female participation in science and research in Europe and the Middle East. The outcomes of this study will be presented at the Millenia2015-UNESCO joint conference in 2012. I am happy to announce that we have had 6 contributions so far, from various contributors originating from different countries.

Second, this knowledge base will be used for the clear definition of precise strategies. We thus intend to go beyond the theory that accounts for disparities in male and female science contributions. Indeed, a logical step is to actively build a commitment process in close collaboration with universities and research institutions, which will implement concrete activities and funding opportunities to foster women participation in science and research.

These highly complex multi-level approaches are in the line with global Millennia2015 goals and aim at contributing an invaluable basis and guidelines for their successful achievement.

