Report on Weizmann Institute activities on gender equality in science for 2016

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The Weizmann Institute general policy
It is well known that for a long time, science has been suffering from the fact that very few women have had the opportunity to contribute to its advancement. There are, of course, many reasons for this, and many have already been identified, ranging from issues that need to be taken care when girls are very young, all the way to the academic promotion of women within the academic rank.

During the last ten years, the Weizmann Institute has decided to establish a comprehensive program in order to address some of these issues, mostly at the level of graduate students, post-graduates, young scientists and accomplished scientists, which is where the Institute is mostly active. The various programs have had one common basis, which is at the core of what we believe the Institute should do, and can be phrased as follows: “The Weizmann Institute must create a platform where women scientists (including students and post-doctoral fellows) can not only be excellent scientists, but also excellent mothers”. Within this policy, we have created the National Postdoctoral Award Program for Advancing Women in Science, we have established two Daycares with clear priorities for young female scientists, have secured nursing rooms in our buildings, established clear policies for the advancement of young female scientists within the academic rank, taking into account pregnancies, children, special travel grants. Over the last 10 years, this policies and programs have allowed us to basically double the number of women we have hired as young scientists at the Institute.

The Weizmann Institute did not set quotas for the % of women in the academic ranks because we do not believe that that is the best practice for advancing women in science but we do invest considerably in helping our female students and young female faculty to excel. The Institute does not have defined numbers for the % of women in various committees but there is an effort to have significant representation of women in the committees, taking into consideration the low number of women in the academic ranks. The number of women in some of the most important Weizmann Institute committees is listed in Table 1. Table 2 lists the number of women department heads. In addition, out of six deans one is a woman and out of four vice presidents two are women.

Table 1. The number of men and women in Weizmann Institute committees.

<table>
<thead>
<tr>
<th>Committee</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>President’s advisory committee</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Appointment committee (senior scientist entry point)</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Appointment and promotion committee (Associate and full professor levels)</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Appointment and promotion committee for staff scientists</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 2. The number of women department heads.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Number of departments</th>
<th>Number of women head of department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics &amp; CS</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Physics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Science teaching</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

The Weizmann Institute of Science is thus fully committed to the promotion of women in science, and is looking forward to better understand the issues, create specific programs and solutions, which would bring the excellent pool of young female talent into the ranks of graduate students, post-doctoral fellows, tenure-track and tenured scientists in all field of study. All of these programs are under the leadership of Prof. Daniella Goldfarb, President’s Advisor for Advancing Women in Science, who is fully integrated in the leadership of the Institute, so that she can perform her duties with full support from the Institute management.

**The present advisor for advancing women in science**
The current advisor is Prof. Daniella Goldfarb from the Department of Chemical Physics, Faculty of Chemistry. Professor Goldfarb served in the past in a number of positions at the Weizmann institute: Head of the Chemistry board of studies of the Feinberg graduate school, department head of Chemical Physics, chair of the Chemistry faculty committee for appointment and promotion, chair of the Weizmann Institute council of professors (chairing the Institute committee for appointment and promotions) and currently she is the vice chair of the scientific council, chairing the committee of appointment of promotion of staff scientists.

**Promoting women in science activities at the Weizmann Institute.**
Our on campus activities are divided into the following groups (*students refer to female students*):

- a. Encouraging post-doctoral training overseas
- b. Empowering and encouraging graduate students
- c. Increasing awareness of gender equality on campus
- d. Strengthening the connections and networking among women scientists

We have set up website dedicated to the issue of promoting women in science with information on related activities. See [Women In Science website](#).
The activities in each category are described below in details.

a. Encouraging postdoctoral training overseas

Weizmann Institute established and operates a national program for post-doctoral research awards to promote women in science. The program began in 2007 and 10 prizes are awarded each year, each up to 20,000 US$ per year for two years, to female Israeli doctoral students from all universities in the country, for outstanding research in Life Sciences, Physics, Chemistry, Mathematics and Computer Science, who are going to pursue post-doctoral training abroad. This award adds to their salary from the host lab or to a dedicated post-doctoral fellowship. So far, 106 awards have been given and a significant percentage of recipients completed their training and were accepted as Faculty members in Israel. A committee including senior faculty members (men and women) from different institutions in the country, representing the above fields, selects recipients according to scientific excellence. The President’s Advisor for Advancing Women in Science is the program director and chair of the committee. We keep in touch with the winners, following their success in order to encourage active recruitment of outstanding young women scientists on campus.

Last year, the Weizmann Institute launched a new pilot program that allows women to combine post-doctoral training at the Weizmann Institute together with another laboratory abroad. The purpose of this scholarship is to enable outstanding doctoral candidate, who are unable to go abroad for an extended period of up to 5 years, to do research in a laboratory abroad for short periods and thus acquire the exposure and experience of working abroad that are so crucial to the development of a mature scientist. The hope is that this experience will help them to apply in the future for an academic post in Israel. The scholarship amounts 10,000 US$ per year for two years. This is of course, in addition to the stipend given to any post-doctoral fellow at the Weizmann Institute. One fellowship was given in 2015 and one in 2015. The project is managed by Feinberg Graduate School together with the Advisor.

To encourage outstanding graduates to go abroad and reduce the anxiety of a trip to the "unknown" with a family, meetings are held with young women scientists who have recently returned from their post–doctorate abroad and joined the Weizmann Faculty. Some of the meetings include the spouse of the scientists and of the students.

We came to realize that the lack of information regarding post-doctoral training is a deterrent and inhibiting factor and therefore on the website we have included information regarding scholarships available to doctoral and post-doctoral fellows and frequently-asked questions and answers about this type of travel abroad with a family.

Finally, partial financial support is given for students traveling to choose a post-doctoral training position abroad.
b. Empowering and encouraging graduate students

One phenomena noticed amongst women in sciences is that of the “leaking pipe”, i.e., excellent B.Sc and M.Sc and Doctoral students who “leak” out of the system for various reasons not be listed here. To reduce this phenomenon a program was started to encourage students more strongly during the early doctoral stages.

To this end, a two-day workshop is held once a year since 2014, for Doctoral candidates, and aims to develop leadership qualities required in the scientific world. The workshop is called “Young Female Leaders in Science” (YFLIS) and is managed by the European HFP Consulting company who modelled it for the target audience of female doctoral students, according to our requirements. The workshop takes place in an isolated place outside of the Weizmann Institute and is limited to 16 participants whose acceptance is based on scientific merit. The response we get from participants is excellent. The third workshop was held last September.

Another workshop focuses on “Managing motherhood and a scientific research career". The workshop comprises six sessions of two hours each run by three women faculty members from the Weizmann Institute plus Psychology and Sociology specialists. The number of participants is 20-25. The workshop takes place once a year, this year it was held for the second time.

There are a number of active graduate student forums at WIS. The Advisor supports forum activities, which include external lectures, designed to create a support group and strengthen networking, to clarify and strengthen the general tools necessary to build a career and leadership qualities and to contend with the various challenges associated with “women in science”.

In addition, there is a mentoring program in which a student or a postdoctoral researcher may choose a "Mentor", a women scientist at the Institute, where she can find a sympathetic ear and advice on issues not necessarily purely scientific but related to scientific careers.

Finally, the Institute encourages travel of young scientists and doctoral students to conferences and collaboration abroad. Support is given for young children accompanying mothers or purchasing an airline ticket more expensive because of the limited stay abroad, thus allowing young mothers to travel and take a part in the international scientific world.

c. Increased awareness of gender equality on campus

Lectures are given by experts on the gender issue, devoted to historical and social aspects and unconscious gender bias, with emphasis on clarifying the concept and its impact on the promotion and recruitment of staff and presenting ways of dealing with the issue. Today there is still no definite plan for implementing the subject of unconscious bias among the scientific staff and here we will focus on the subject by conducting small group workshops by an expert on the subject.

The subject of unconscious bias has been discussed at the president advisory committee and the President Advisor held a few discussions on the topic with some of the faculties.

One of the factors influencing the advancement of women in science is exposure to role models and in this context there are a number of activities, the first being the “Weizmann Women and Science Prize" award." The prize of US$25000 is awarded every two years to an international woman scientist who has made a significant impact in the field of research. The Award ceremony
is an important and festive event at which the winner delivers a general lecture and a number of talks more specific to her field of research. The visit includes a meeting with female students, and scientists. The 2015 awardee was Prof. Barbara Liskov MIT and her visit and award ceremony took place in 2016. The 2017 award will be in the field of Physics.

Another event is the International Women's Day lecture when we invite women prominent in science, industry or public activity, to deliver a lecture open to all Weizmann Institute workers, and to meet with students and scientists. The 2016 lecture was given by the journalist Ilana Dayan.

d. Strengthening the relationship between women scientists

Encouraging and strengthening the connections and networking between the women scientists across the various departments at Weizmann is extremely important, especially for the young scientists.

Once a year the President advisors hosts all female heads of research groups for dinner at which they celebrate the joining of new scientists and promotions to associate professor and full professor. The event is always successful, happy and very encouraging for everyone present. Last event took place in October 2016.

Gender balance statistics

Academic staff

The Weizmann Institute has two different academic tracks; one is referred to as scientific personnel and includes the ranks of senior scientist, associate professor and full professor. The second one is referred to staff scientists and includes the rank of staff scientist, associate staff scientist, senior staff scientists and senior research fellow. Below we present the current gender balance in these two tracks.

In Figure 1 we present the % of women in the scientific personnel track since 1970, which shows a slow increase starting from 2006 faculties. Figure 3 shows the gender distributions among the different ranks in the two scientific ranks. There is a total of 17.1% women in the scientific personal track, whereas in the staff scientist track it is 62.5%. The gender balance among new recruitments (2011-2016) for the scientific personnel track and the scientific staff personnel is shown in Fig. 4 and distribution among the promotion from senior scientist to associate professor and from associate professor to full professor summed over the last 5 years are shown in Fig. 5. The corresponding statistics for the staff scientists track is given in Fig. 6.
Figure 1. The % of women in the scientific personnel at the Weizmann Institute from 1970 till 2016.

Figure 2. The gender distribution of scientific personal among the different faculties. The numbers include professors on extension of service.
Figure 3. The gender distribution among the various ranks in the scientific personnel track (left) and the scientific staff track (right).

Figure 4. The gender distribution among new recruitments (2011-2016) for the scientific personnel track (left) and the scientific staff personnel (right).

Figure 5. The gender distribution among the promotions from senior scientists to associate professor (left) and from associate professor to full professor (right) summed over 2011-2016.
Figure 6. The gender distribution among promotions of staff scientists in the years 2011-2016.

Graduate students and post-docs
In Figs. 7 and 8 we show the gender distribution among the M. Sc. and Ph.D. students, respectively, per the different schools of the Feinberg graduate school. The Post-doctoral track statistics is presented in Fig. 9. The statistics among the internal M.Sc and Ph.D prizes and external prizes and fellowships are given in Table 3.
Figure 7. The gender distribution among the M.Sc students, according to the different research schools of the Feinberg graduate schools at the Weizmann Institute.

Figure 8. The gender distribution among the Ph.D students, according to the different research schools of the Feinberg graduate schools at the Weizmann Institute.
**Figure 9.** The gender distribution among the post-docs, according to the different research schools of the Feinberg graduate schools at the Weizmann Institute.

**Table 3.** Gender statistics among prize recipients among graduate students. (The external prizes and fellowships excludes women specific awards)

**2016 Feinberg Prizes**

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>M.Sc</td>
<td>7</td>
<td>7</td>
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</tbody>
</table>

**External awards**

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
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<tbody>
<tr>
<td></td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>