

Executive Summary of the 2020 PhDnet Survey

The Max Planck PhDnet represents roughly 5000 doctoral researchers (DRs) working in the Max Planck Society (MPS). As in the previous years, working conditions are one of our main survey topics, including the length of contracts, the work habits and workload of doctoral researchers, as well as the recently added topics of home office and handling of the pandemic. A few of the newly added or more closely investigated topics are the ethnicity distributions among doctoral researchers, a closer look on the quality of supervision as well as the career development support. Additionally, career paths and the support for internationals have again been the subject of investigation. One of the main changes compared to the previous year is that the focus moved away from power abuse to the topic of discrimination and micro-aggression and their occurrences. As in 2019, mental health is one of the major results and put in context to the previously mentioned topics.

Relevance of the current survey

For the current Max Planck PhDnet survey, we contacted 4911 DRs out of which 2378 (or 48%) participated. Of the total respondents, 41% identified themselves as female and 54% as male, and 1% of participants identified themselves as gender diverse. Across the sections of the MPS, 39% of all responses came from the Biomedical (BM) section, 44% from the Chemistry, Physics and Technology (CPT) Section, and 16% from the Human Science (HS) section. These numbers are in accordance with the general distribution of DRs across sections in the MPS. A majority of 44% of the DRs are of German nationality while 20% of another EU-country and 35% of outside the EU. The doctoral researcher mainly identify themselves as being of European ethnicity (71%), followed by far smaller fraction of Southeast Asian ethnicity (10%) and -South Asian ethnicity (7%). Only 16 participants identified themselves of African or Caribbean descent. Together, this provides invaluable data to gain statistically relevant and representative insights. In the following paragraphs, we present an overview of key findings of the survey which we consider the most compelling, relevant and trend-setting for future points of action regarding the work of the PhDnet and the support of DRs by the MPS.

Working conditions

As every year, the working conditions of our doctoral researchers are one of the main focus points of the survey with the aim of identifying general issues that should be addressed. Fortunately, we can again report a decrease of stipends over the last year resulting in a majority of 91% of DRs being employed via contracts in 2020. However, we still see differences between the sections and nationalities when it comes to funding options with the HS section (only 85% on contracts) and Non-Europeans (87% on contracts) being on the lower end. Additionally, we again identified a pay gap between sections, nationalities and genders. Here we should clarify that our data was collected before the raise of the base salary to 65% TVöD, which should raise the percentage of DRs with 65% contracts from 22% to 57%, and should decrease the observed pay gaps. Another positive trend is the decrease in DRs holding contracts with less than 24 months, which changed from 19% in 2019 to 16% in 2020. We hope to see a continuation of the initiative by the General Administration to abolish the misuse of short-term contracts and stipends, and therefore to see a continuation of the observed trend. One of the major issues to be faced concerning working contracts is the timing when relevant information and the contracts themselves are given to the DRs. Here we see that only 22% received all of

the relevant information, 20% the contract, after starting their position with even more of them already having moved to a new city without proper information or security. Together with the General Administration we concentrate our effort to develop a suitable onboarding concept for the different stages of application and approval.

One of the major changes compared to the previous years is of course the impact of the pandemic on our DRs working conditions. A majority of them were allowed to work from home during the pandemic out of which 75% actually did work from home. However, only 36% of DRs report that they certainly will have the option of partly conducting home office after the pandemic while 62% would like to have the opportunity. Here we see the need to define more general rules for home and mobile office that allow the flexibility which could ensure even more productive research combined with a healthy work-like balance. This applies especially to our international DRs, whose ability to work from home would increase their opportunities to visit their home countries and reconnect with their close-ones. We see this as a great opportunity to be upfront with international standards and thus appealing to a broad audience of excellent international researchers.

Especially in this pandemic, the quality of supervision was put into focus once more. Overall we can report, that 76% of DRs were satisfied with the handling of the Covid-19 situation at their institute, with 66% of them being specifically satisfied with the supervision during the pandemic. In addition, also less DRs reported to be dissatisfied with their supervision (6.7%) in comparison to 2019. General satisfaction of supervision strongly reduced scores in the mental health characterizations used in the survey. We can further report that a majority of DRs are satisfied with the communication both with their direct and formal supervisors, although 45% of DRs claim that the communication with their formal supervisor is less frequent than they would like. Overall only 55% of DRs have a supervision agreement with their formal supervisor and we see this as an important tool, that should be further established among DRs in the MPS. It could be very helpful to remove the disparity between actual and desired frequency, especially with the formal supervisors, which shows a clear impact on the reported mental health symptoms.

Career paths

As in the the last years career developments is again one of our main topics in the survey. Particularly, the satisfaction with the availability of permanent positions in the academic system is very low regardless of DRs career choice (71.21% are unsatisfied). We find that more women, DRs in a partnership and DRs with children or with a plan to have children, want to leave science. This fits with the theory of the 'leaky pipeline' and should be taken into consideration when planning future career steps within the MPS. In addition, 45% of DRs don't feel prepared for a job outside of science. The only measures remarkably reducing this percentage are mentoring and career development offices that have been installed at some institutes.

Discrimination and Conflict

In this years survey we shifted our focus from power abuse to discrimination and conflicts in general. We found that language barriers are still high within the MPS. 38% of international DRs reported that not all important information including contracts, are available to them in a language they understand and 24% found German to be an obstacle for communication with people in their institutes. Worryingly, one out of four DRs has been faced with discrimination,

with Non-EU citizens experiencing it twice as often as Germans. Among the reasons for discrimination, nationality and gender are named the most. Here we want to point out that the responsible reporting lines are unclear regarding discrimination other than against females, especially when it comes to local reporting possibilities. We hope that our 'safer spaces' project initiated by the equal opportunities group of the PhDnet can provide some solutions here, but we would also encourage the idea of installing 'diversity officers' in the institutes, especially because we found any kind of discrimination to have a negative impact on mental health.

A majority of DRs (71%) did not have serious conflicts, while we still find a high number of 26% of DRs does. When assessing the reasons why DRs choose not to report conflicts, the most outstanding reason is that they don't think the conflict would be resolved. In addition, 54% of DRs who had a conflict with their supervisors, were fearful of reporting those because they were afraid of repercussions. We would highly recommend to review the reporting lines, the outcomes and training of local staff, as the satisfaction in a case of resolving conflicts has a positive impact on mental health scores.

Conclusion

In conclusion, we are happy to report many positive trends in the working conditions which will be complemented by the 2021 survey reflecting the impact of one of our major milestones, the raise of the base salary. Nonetheless, we still see caveats in the current system, especially when it comes to information flow. Here, we want to stress the importance of the ongoing onboarding project that provides a unique opportunity to create a more inclusive environment for our diverse population of DRs.

This year new challenges have been put on all of us by the current pandemic. However, we can use it as an opportunity to learn. We can learn to provide an even better environment for our researchers by introducing inclusive and generalizable mobile office rules. We can learn to be even more aware of the importance of our DRs mental well-being. Therefore, we can learn to encourage a broader and more coordinated use of Thesis Advisory Committees (TACs) and supervision agreements to help providing a healthy supervision to all of our DRs. And we can learn to raise more awareness for the existing reporting lines and design a more inclusive approach to tackle discrimination.

Nonetheless, the full impact of the pandemic on our DRs and especially their future perspectives can only be touched on by our survey. It has to be closely and carefully monitored by all involved parties to provide excellent and sustainable possibilities for the next generation of researchers.

Sincerely Yours,

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