

Welcome Address of the President of the Max-Planck-Gesellschaft

Professor Dr. Patrick Cramer

At the 2023 MPG Open Science Ambassadors Meeting

September 19, 2023

Harnack House, Berlin-Dahlem

- Check against delivery -

Ladies and Gentlemen,

Open Science is of critical importance.

I'd like to tell you a personal story from 1994. I was a chemistry student at Heidelberg and had a big dream: to specialize in structural biology. And if you had this dream back then, there was one place to go: The Laboratory of Molecular Biology in Cambridge. Luckily, my plan worked out. I could spend a year there and I met Max Perutz, a father of the field.

Structural biologists met in the early 1970s and founded the Protein Data Bank that nowadays contains over 200.000 protein structures! Just two years ago, DeepMind used it to train an Al called AlphaFold that solved the century-old problem of protein folding: namely predicting the 3D structure from sequence! A stunning example of Open Science: Thousands of researchers compile data in the same format over decades and half a century later a historic breakthrough becomes possible. Perhaps the Nobel Prize will be awarded for AlphaFold?

Clearly, science will open up more in the coming years. It will become more data-driven, transparent and inclusive.

But the question is: How can we, as the Max Planck Society, lead the way to Open Science? I see three major opportunities here:

- 1. We should lead by example. We know data management and Open Science takes time and we should appreciate and acknowledge the related efforts within the MPG.
- 2. We should participate in efforts of communities to agree on standard data formats including relevant metadata. A growing number of funding agencies, e.g. the ERC now require data management plans to be submitted with the application.



3. We should work towards global equity with respect to data and literature access. Making science more inclusive, especially for poorer parts of the world, is an important motivation for Open Science.

Look at the rapid development in Open Access policies. Joe Biden's administration announced that, by the end of 2025, federal agencies in the U.S. must make papers that describe taxpayer-funded work freely available. Also, the ERC has been requiring Open Access for several years now. And, after a lot of work, the DEAL contracts were expanded in Germany recently. We can soon publish Open Access in Elsevier journals. For Springer Nature and Wiley journals, this had been possible for several years already. We can be optimistic that by 2024, ~80% of our papers will be published open access. And my hope is that we can reach 100% in 2025.

But what are the boundary conditions? Let me mention just two of them.

- 1. Open Science needs quality control. It cannot happen at the expense of research excellence and integrity.
- 2. Sometimes we have to protect our intellectual property before publishing in order to explore the potential commercial use of scientific results. This does not go against the general concept of Open Science.

Although there is still a way to go, we have already achieved a lot. In September 2021, there was a formal decision by my predecessor in office, Martin Stratmann, that Open Science should be organized as a long-term, internal process of cultural change.

Two goals were defined:

First, to establish a cross-sectional forum to promote exchange on Open Science issues and practices.

That's why there was an initial panel in February with very different players from within the MPG, chaired by the former Vice-President Ulman Lindenberger. We had directors, early career researchers, representatives of the PhDnet, the Max Planck Digital Library, the Max Planck Computing and Data Facility, and the General Administration. There were also external guests - for example from CERN.

The second goal was to gain an overview of existing Open Science activities at MPIs.

And this is one reason why we need you, the Ambassadors. Please share your experiences and your thoughts on the future. I would like to thank you very much for your commitment! And many thanks also to the PhDnet and the MPDL for organizing this meeting!

Just one more point:



Open Science must be developed from within science. Our common goal must be to make Open Science as rewarding and as easy as possible. To help coordinate this, I will soon appoint a new Open Science representative to succeed Ulman Lindenberger. So, the topic is high up on my agenda.

Now I wish you an exciting and productive meeting!

The tools of our time allow us to make science better. To make it more exciting. To make it more inclusive. Let's embrace this opportunity, at MPG and beyond. Thank you.