

The Offspring Magazine



A Publication of the Max Planck PhDnet

Mental Health in 2020



New This Year:
Offspring Magazine
The Podcast
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Summer of
Open Science

Black Lives Matter -
Black Minds Matter

CRISPRs!
Elegant tools that
create a beautiful mess

Letter from the Editorial Team

Who can still hear it: *"2020 - What a year?" We know, we were there with you, we are there for you and we will continue to be here in 2021!*

A lot of things changed not only in the world around us and for every single human being on this planet but also for the Offspring magazine team. Most of the time, change is good, often less comfortable than the couch, but worthy in the long run and I am sure we can all agree on that. If you are holding a real, tangible Offspring magazine in your hands this year you might wonder: is it a bit thinner than the last years? Gladly you won't notice it if you enjoy this magazine in a sustainable digital format. Whichever way you are reading these lines I will take you on a small journey - a journey of community and change.

October 2016:

I still remember the feeling of me being a super new doctoral candidate at a Max Planck Institute in Göttingen joining the annual PhDnet General Meeting in Berlin that year. Why did I go and what did I know about PhDnet? Fairly little to be honest but I was curious, so I joined in. And was it fascinating I can tell you. The buzz, the lively discussion, the sheer amount of highly motivated people, who knew so much about stuff I have never heard about, took me by surprise, literally swept me off my feet and I was in. I just had to decide what I find most appealing and which working group I wanted to participate in: Careers and seminars in or outside of science (Career & Seminar group), organizing events (Vision in Science and General Meeting group), knowing & writing to everyone and organizing the elections (Secretary group), designing surveys for doctoral candidates of the Max Planck PhDnet to create awareness for things going wrong or right & delivering data about what needs to change (Survey group), being creative & designing/taking care of the webpage & the online presentation of PhDnet (Webgroup), fighting for and educating about equality (Equal opportunities group) or writing and communicating about everything related to all of that (Offspring magazine group)? By me writing this editorial you know which group I chose. I had no clue what to do but I knew I wanted to write about stuff that I don't know anything about - yet. Thanks to the inspiring team back then I got more confident in my voice and enjoyed every article we have written together since.

October 2020:

4 years have passed, I finished my PhD during this rather crazy year. Additionally, I had the luck to join the Steering group in 2018 and experiencing the PhDnet from a whole different perspective - and I couldn't be prouder of how the Offspring and the whole PhDnet developed. Over the years we wrote articles about everything ranging from career interviews, survey reports, covering events and initiatives of the Max Planck PhDnet and the curiosities of science itself to raising awareness about some of the most important topics such as Equality, LGBTQ+, #MeToo, how to be sustainable in the lab and as a researcher, about mental health and how we should all concentrate on our well-being etc. etc. etc.

This year's issue covers a variety of our favorite topics. **Science:** CRISPR as an elegant tool for which Emmanuelle Charpentier & Jennifer A. Doudna recently got awarded the nobel prize. **Sustainability:** How climate friendly business trips can be overnight miracles & how to be a labconscious biologist. **Mental Health:** the impact of Covid-19 on doctoral candidates and our research & how we can stay safe and healthy during this time. **Equality:** Why you should & how you can support the Black Live Matters initiative as a scientist and human being. **Open Science:** What Covid-19 taught us about Open Science practices, how to adopt them in your daily research & if you should use preprint servers. These articles appeared during our Open Science Summer. Off note, if you are interested in the topic, the PhDnet has an Open Science working group as well.

So, what changed for the Offspring in 2020?

As you can see from the various working group contributions in this year's issue, we immensely collaborated with the other working groups of the PhDnet. Our team is mainly new, creatively stepping into new directions and making the Offspring more digital. We do not only have a new design on our webpage, but I am super excited that after some years of discussions we now have the **Offspring Podcast** initiated by Srinath Ramkumar and Nikolai Hörmann and supported by the other Offspring members. Check it out under the common channels which bring you podcasts (Spotiy, iTunes, Anchor and more). You will also find more information about it in this magazine and on the PhDnet social media channels.

What changed for me personally in the last 4 years?

I learned a lot! Not only about the exciting science of other researchers, about science politics, about general all-day science topics such as open science, working conditions of doctoral researchers, power abuse and mental health issues - but most of all I learned plenty of new things about myself. How to tackle problems that need addressing, how to communicate and how to motivate peers, how to get motivated and thrive not only scientifically but especially due to the many small side projects and the engaging community, how to organize and prioritize and unquestionably important for everyone: how to trust in yourself and others, how to speak up and be more confident. Last but not least I wouldn't have learned all of this without the community, the people surrounding me for 4 years, the teams I worked with and the amazing network leading to some friendships I will hopefully have for a (life)long time.

If you are reading this thinking: "That's bollocks" – well, you only know if you tried, right?

If you are thinking: "Oh yes I have/had this experience as well in my PhDnet time" – Thank you for your contributions and keep on your good work!

If you are reading this thinking: "Oh I want this, but will I find time and be able to participate?" – Yes, you will, and it will be way more rewarding than only focusing on your specific PhD project.

After 4 years it's now time to learn to leave things behind and to a whole bunch of super motivated doctoral candidates, to move out of the comfort zone and swim into new directions... because this is where the magic happens. Thanks for the journey and see you around!

Sincerely,
 Maria Eichel in the name of the Offspring Team

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CRISPRs! Elegant tools that create a beautiful mess

by Srinath Ramkumar

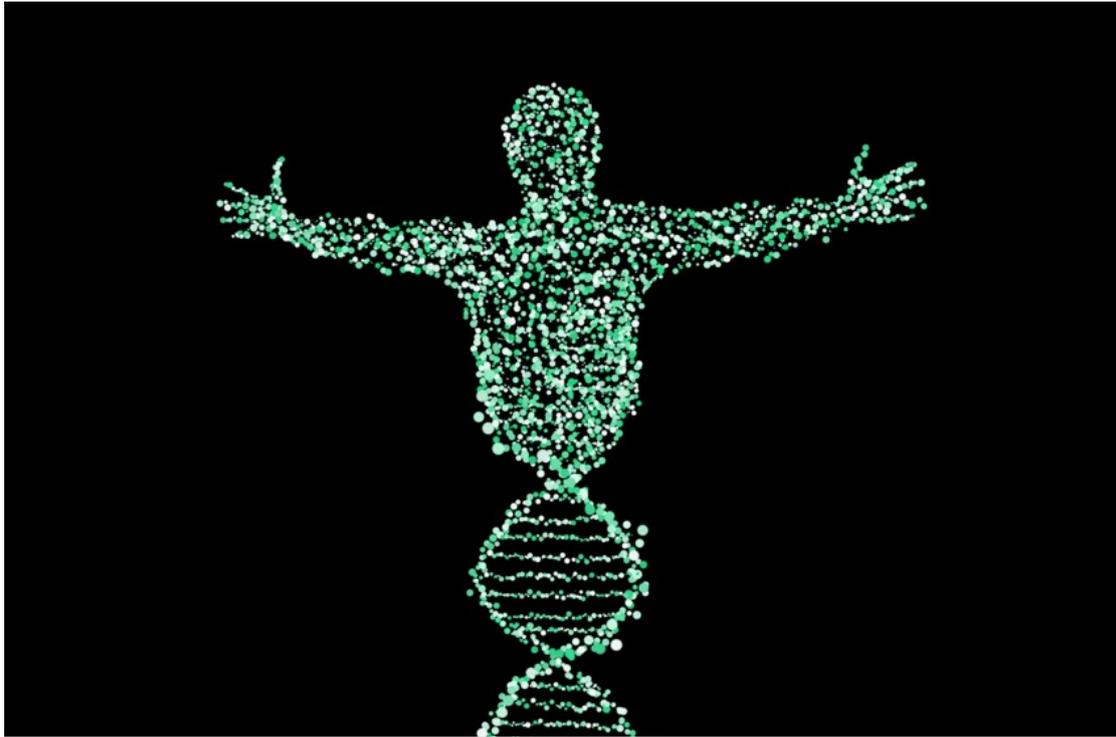


Photo Credit: Image by Elias Sch. from Pixabay.

A cloudy day in Autumn it was, when we heard the news about a scientist in China having used [CRISPR/Cas9](#) to alter a gene of twin baby girls with the pseudonyms [Lulu and Nana](#) for the first time. This news left the scientific society in shock. Many questions came to mind as one pondered the implications of this incident, not only scientific questions, but (maybe more importantly) ethical questions, which needed to be addressed immediately. CRISPR/Cas9 technology provides us with the means to edit genes with high specificity. Thus, it enables us to add or remove particular traits and characteristics to living beings. What was once merely science fiction, has now become reality.

To better fathom out the consequences of what happened, we need to understand the biology behind the technology first. DNA is the core genetic material in all living organisms and it consists of two complementary strands forming a double helix. Usually, the cellular repair machinery takes care of damages to the DNA. Damages such as breaks in individual DNA strands can be

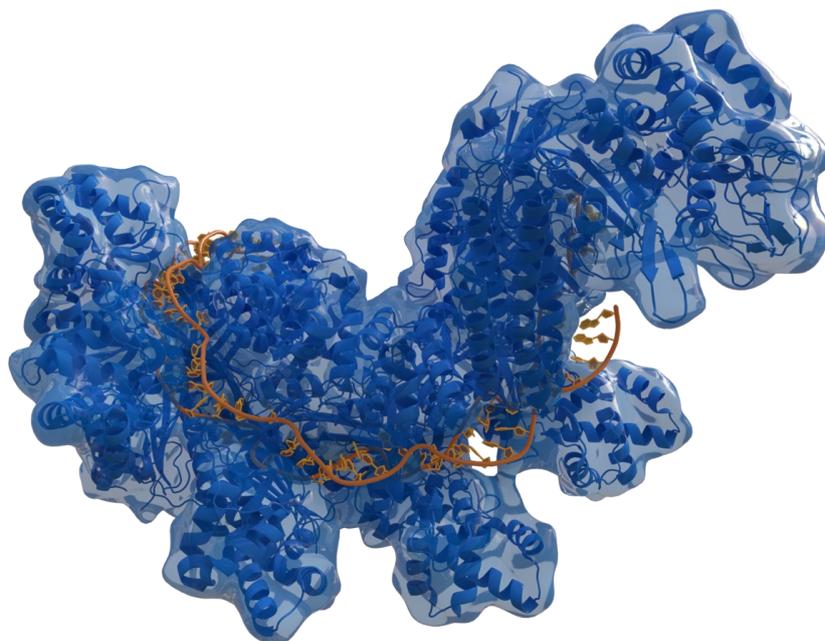
repaired easily. When one of the two strands break, the repair machinery uses the second strand as a template to rectify the break. Breaks in both DNA strands are more difficult to repair. However, the Cas9 enzyme, which was originally identified in bacteria, can induce double strand breaks. It uses a template RNA to target and bind to genomic DNA. There it introduces a break in both strands of the DNA. This scissor-like feature can be very useful: scientists use it to target regions of the genomic DNA of other organisms. Cas9 can be introduced into cells of another organism to achieve targeted mutations. Scientists introduce Cas9 in a cell to induce a double break at a particular targeted location in the DNA. The cellular repair machinery finds it difficult to perfectly fix this double strand break introduced by the Cas9 and hence ends up resulting in erroneous corrections. This particular erroneous repair process gives rise to what is called a mutation in a gene. A mutation could cause various effects on the gene itself, such as a loss of function. When a mutation is carried by all cells in the body, including those that produce the ovum and

the sperm, it is a heritable mutation, also called a germline mutation or a heritable mutation. Scientists working with biological model organisms such as mouse or zebrafish use Cas9 commonly to achieve this germline mutation. They edit the DNA of the fertilized ovum from the parents before it develops into an embryo. Through the course of development, all the cells of the organism are derived from this ovum. Hence, when the gene of the ovum is mutated, cells of the embryo carry this mutation. Once the embryo reaches adulthood, it can impart this mutation to its offspring through its own germ cells. Therefore, such a mutation can progress in a hereditary manner, hence called a heritable mutation. Since this mutation exists in the cells which are part of the reproductive system (called germ cells), it is also called a germline mutation.

Thus, scientists have been utilising [CRISPR/Cas9 as a potent tool](#) to induce such mutations since it was first demonstrated only seven years ago. It has been one of the quickest genome-editing tools to be adopted into the handbook of genetic techniques. The primary reason is its ease of use, speed and efficiency compared to any other conventional techniques. Gene editing techniques existed prior to CRISPRs in many forms, for example [Transcription Activator-Like Effector Nucleases \(TALENs\)](#) and [Zinc Finger Nucleases \(ZFNs\)](#). But true to how a technology progresses, CRISPR/Cas9 proved to be faster, more accurate and efficient. Like with most other genome-editing techniques, we still need some time to understand the potential risks and off-target effects of CRISPR/Cas9 before adopting it to human genome editing.

The introduction of the CRISPR/Cas9 technique has given rise to many discussions amongst scientists on editing the human genome in a heritable manner. The American National Academies of Sciences, Engineering and Medicine (NASEM) conducted a thorough study and published a very detailed report on the Science, Ethics and Governance of Human Genome Editing. In this [report](#), the committee left the terminologies vague particularly on how such experiments should be regulated. Although they did not call for an international ban on the usage of these tools, they called for individual governments to regulate such experiments according to what each country deemed appropriate and necessary based on the diversity of its demographics.

Going back to the aforementioned controversial experiment, the Chinese scientist mutated a gene that is responsible for interacting with the Human Immunodeficiency Virus (HIV). This interaction of the gene and HIV leads to a compromised immune system in a person carrying the infection. Scientists have shown that in patients with HIV induced immunodeficiency, if this interaction is lost, then the immune system is able to function almost normally, hence leaving a patient immune to HIV. Hence, the Chinese scientist attempted to inhibit this interaction by mutating this particular gene in the embryos, de facto making the babies immune to HIV. This seems to be a logical use of the technology for the benefit of mankind. However, the consequences of using the CRISPR/Cas9 technique are not yet fully understood. One of the biggest challenges with nascent technologies, such as CRISPR/Cas9, is the unpredictable side-effects. One of the major reasons for basic research in biology consuming very long time is due to its



CRISPR RNA-guided surveillance complex (Cas, blue) bound to a DNA target (orange) by Thomas Splettstoesser (www.scistyle.com).

complexity of the mechanisms. There are multiple possibilities of inducing side-effects beyond what one could have predicted. Hence, scientists try to develop more targeted tools to understand basic biological mechanisms.

The Chinese Academy of Sciences and the Chinese government were in agreement with these regulations from the NASEM report, yet the research was somehow allowed to proceed. Questions arise as to how the scientist was able to get around these regulations. The Chinese authorities led an investigation into the ethics and procedure of the conducted experiment, and declared that the scientist had “forged documents” to dodge supervision. It was even revealed that he had a circle of close to sixty scientists and advisors around him who were aware of the experiment before the news of his experiment got out. This group has infamously been named the [Circle of Trust behind the world’s first gene edited babies](#), since they neither reported what he was doing, nor did they attempt to put an end to this work.

Chinese institutes utilizing the CRISPR/Cas9 system believe that their work is being undermined by the international community, since a scientist’s reputation is generally also associated to the scientific credibility of the country in which they work. An additional concern for other researchers working in China with CRISPR/Cas9, is that this scandal has subjected their work to exaggerated scrutiny. For scientists working on human cells which are not inheritable between generations (viz. somatic cells), regulations have become stricter and funding has become more difficult to acquire. Although many researchers in Chinese universities have adhered to the western standards, many scientists believe this scandalous experiment has left an indelible mark on their reputations and credibility. It still remains unclear what the future holds for the scientists whom this has impacted.

Throughout human history, people have sought to improve themselves, invent new technologies, and most of all, uncover the mysteries of nature and evolution. In the past, scientists have developed a wide variety of technologies, which enable us to understand the microscopic world of biology. Today, with great tools such as CRISPR/Cas9, scientists are able to program in the most advanced coding language that exists in the world, the genetic code, thereby making them [the hackers of the future](#). The question is to what extent are we going to permit this reprogramming, and how. One could argue that systematic and thorough research is necessary for progress in any field. Therefore, the regulatory bodies and funding agencies should systematically fund and encourage research in basic sciences with the use of the CRISPR/Cas9 tools. One could also argue that there is

always a high probability of rogue experimentalists, who might embark on careless adventures, such as the Chinese example. One way to stop and regulate such experiments is to legalize and regulate [heritable genome editing](#) in a controlled manner. Strict regulations must be imposed globally and governments must adhere to these standards, although, they may be given the flexibility to enhance the stringency of these rules. On the other hand, ethical guidelines are harder to impose. The definition of what is considered ethical also changes with the increasing utility of a technology. For example, the ethics and acceptance of [in-vitro fertilization](#) has changed a lot in the past forty years. Therefore, it is only a matter of time until the ethical issues raised by heritable genome editing are solved. As humans, we need to be prepared for what our future has in store for our species and how we are able to adapt to it. Nature has played its hand and the ball is in our court now. It’s up to us to pave our path forward.

P.S. If you noticed carefully, all the paragraphs of this article begin with the letters of the genetic code (A,T,G,C).

Want to know more?

@srinathramkumar



SCAN ME

for an online version of the article

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Fourth It Ma(t)Ters Conference on Microbiology

A mini-conference on microbiology in Bremen

by Merle Ücker



Participants of the IVth It Ma(t)Ters in Bremen. Photo courtesy: Alina Kegel



It Ma(t)Ters is a mini-conference on microbiology for doctoral researchers in the MPS initiated in 2017 by the PhD representatives of the MPI for Terrestrial Microbiology in Marburg and the MPI for Marine Microbiology (MPIMM) in Bremen. This year, the conference took place for the fourth time as a two-day event in Bremen, and was a huge success!

After the arrival of the visitors from Marburg on Wednesday noon, the PhD representatives opened the conference with a short introduction of the institutes. An overall positive mood and excitement about the goodie bags (sponsored by the MPIMM press office) ensured an energetic start into the conference. Director

Prof. Dr. Marcel Kuypers gave a keynote lecture about different research topics in Biogeochemistry, from microbial carbon and nitrogen metabolism to seagrass ecosystems, processes in sand, and greenhouse gases. The second speaker, Dr. Ivaylo Kostadinov from the German Federation for Biological Data gave an informative talk about scientific data, how to be FAIR, and the topic of data submission. The participants presented their own research through short talks or posters followed by exciting discussions. This was a great opportunity for doctoral researchers in early stages of their PhD to present project plans, initial results and discuss hypotheses.

During the institute tour, the visitors got some insights into the mechanical workshop, our Nanoscale secondary ion mass spectrometer, and aquaria with



Tour through the Sea Tech Hall, the mechanical workshop. Elisa Merz, external PhD representative of the MPIMM, explains how the lander works. Photo courtesy: Merle Ücker

symbiotic gutless worms. Also, they learned about how to conduct research in the field, how to use microsensors, and why bioreactors are so special.

Of course, participants also got the chance to grab the hooves of our Bremen Town Musicians during the city centre tour for a lucky future! Discussions, scientific and non-scientific, lasted long on Wednesday evening while playing billiard and table football in the institute's recreation room. The conference ended with a dinner on Thursday evening in Bremen's Viertel, where all participants gathered around a table to share experiences of PhD life, being abroad and other interesting topics.

Inter-institute events like this are a great opportunity to get to know a new MPI, to learn about other methods and new ways of thinking, to get inspired and to form collaborations for the future. Conferences for early career scientists might not be the right place to get acknowledged by your scientific idol but they offer a safe, relaxed and fun atmosphere to gain some conference experience. Doctoral researchers get the chance to network and exchange experiences with researchers in similar situations. Finally, 'It Ma(t)Ters' helped to connect marine and terrestrial disciplines and to find out what we actually have in common.

When organising an event, many things need to be taken care of beforehand. This includes the preparation of an abstract booklet and a time schedule, finding available keynote speakers, organising drinks and meals, getting funding and planning social activities. It might be challenging to do this alongside the PhD, yet, PhD representatives from Bremen consider the experience is worth it. Among other benefits, the organising committee gets the chance to improve their

managing skills, try new areas which might be interesting for a future job and meet new people along the way. Most importantly, even if not every detail is planned out in advance, the overall event can be a great success, as long as everybody on the team is motivated and contributes to the organization.

For the first time this year, a doctoral researcher from the MPI for Plant Breeding Research in Cologne who is working on plant-microbe interaction, joined the It Ma(t)Ters conference. In the following years, the organisers hope for more participants from other institutes to broaden the audience and to enhance the event visibility by improving communication with MPI directors and the PhDnet. PhD representatives from Bremen and Marburg look forward to many more inspiring It Ma(t)Ters conferences!



Doctoral researchers from Marburg visit the Bremen Town Musicians. Touching the donkey's hooves brings good luck. Photo courtesy: David Benito Merino

Do you conduct research in the field of microbiology and want to join the It Ma(t)Ters conference in the future?

Get in touch with the PhD representatives from Marburg and Bremen!

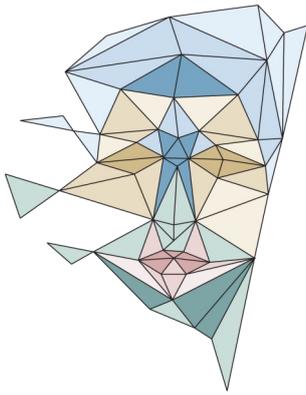
Marburg: <https://tinyurl.com/mpi-marburg>

Bremen: phdreps@mpi-bremen.de



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Mental Health Collective of the Max Planck Society

Who is the Collective?

We are a group of passionate doctoral researchers and postdocs within the Max Planck Society, who formed a grassroots mental health initiative with the aim to raise awareness and break the stigma around mental health, particularly pertaining to the academic environment. We are all faced with different mental health struggles. And those struggles often make us feel like we are all alone. But you are not alone, none of us is. All of us at the Collective have quite some experience with mental

health, and, collectively, we have been through it all - so we really do “get it”.

The Mental Health Collective wants to provide and nurture a safe place, where you can freely share your struggles, get informed, ask for advice and help.

A safe place where you will be fully accepted, because it is **OK to not be OK**. Everyone deserves a safe place and safe people to reach out to.

What does Collective do?

Our grassroots efforts have so far resulted in regularly held **Collective TeaTime** and a completely virtual **Mental Health Awareness Week 2020**, which we have set up in collaboration with University of Jena and Dresden Team— MPI-CBG, DIGS-BB and Dresden Concept. Check out the web for all the details as well as recordings from some talks given during the MHAW 2020 phd-net.mpg.de/events-and-activities/mental-health-awareness-week-2020

You can reach us via e-mail:

mhc-owners@lists.mpg.de

Subscribe to our mailing list at <https://listserv.gwdg.de/mailman/listinfo/mhc>

All info on the web!

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to get to the MHC web-page



Collective TeaTime

Collective TeaTime is a virtual get together, where we casually talk about anything and everything, with the focus on mental health. It takes place every second Thursday at 3 pm. Everyone is welcome to join - PhDs and postdocs, scientists and non-scientists, and pets! :)

With the **Offspring Podcast team**, we recorded an episode on - you guessed it - Mental Health!

LISTEN TO EPISODE 13



Follow Collective!

@mpg_mhc

Should I stay or should I go (out)?

by Mental Health Collective of the MPS

Barbara Safaric, Evelyn Medawar, Erica McGale, Olga Vvedenskaya & Julian D. Rolfes



Photo by J. Sessler, Unsplash

Back in 1982, The Clash couldn't help but wonder—

Should I stay or should I go?

Fast forward to 2020, and here we are – amidst a global pandemic, facing the same dilemma. But, is it even a dilemma?

You know how the song continues, don't you?

Should I stay or should I go now?

If I go, there will be trouble

Yes, there will be trouble, as hopefully, many of you are fully aware. The German government recently implemented strict measures in hopes of preventing further spread of COVID-19, emphasizing the importance for people to #stayathome and limit contact with each other to an absolute bare minimum.

Repeat after me: Absolutely. The. Bare. Minimum.

What does this mean to us: Researchers of the Max Planck Society (MPS)?

You are all strongly encouraged to #stayathome. Most institutes of the MPS reduced their operations to a minimum or already closed down with the majority of MPS employees working from home until further notice.

When it comes to regulations within the MPS, make sure to check out the [MAX intranet page](#) that is regularly updated with information relevant to our work.

If you are in a situation where you feel uncomfortable and unsafe to keep coming to work, but your PI still insists on your coming, please write to us at steering.group@phdnet.mpg.de or steering@postdocnet.mpg.de

We can keep your identity anonymous, and advocate in your name to the MPS presidential committee.

What about... you know, life?

Are you slowly feeling increasingly anxious, spending all of your time alone or with flatmates/partners? Just like many of us, do you feel the impact of being cut off from your friends, your loved ones and family due to the quarantine, or because they live in different cities and countries all over the planet?

You need to realize, **you are not alone!**

We are all in the same boat, whether it seems like it or not. However, each and every one of us will deal with the current situation in our own way. Everyone has to figure out for themselves what works best for them.

The only thing we can do, and the only thing in this situation that we have complete control over, is ourselves. Please keep this in mind. Stay respectful toward others and have a tiny bit more patience and compassion than you'd have had back in January. Also perhaps, more importantly, have extra patience and compassion for yourself. Be kind to yourself! These are stressful times and we find ourselves in uncharted territory.

So what can we do?

Meeting in person with your loved ones might not be possible for a while, but there are plenty of ways to stay and feel connected, from texting and calling, to skyping and cooking together.

Some things that I personally enjoy are spontaneous virtual coffee dates and "watch parties". Behold my new "night out": a bunch of my friends and I logged into our Zoom accounts and ended up watching the new season of RuPaul's Drag Race together. Not only was this a fun way to interact with people I care about, it was also a very welcome distraction from all the bad news. And of course, it was great to be reminded of RuPaul's age old message "If you don't love yourself, how the hell are you gonna love somebody else!" Also, Netflix recently paired up with Chrome to enable Netflix watch parties through the use of a new Google Chrome extension (check it out here: netflixparty.com).

In addition to "watch parties", your local retailers might offer delivery services now – check them out!

Finally, in times like this, it is more important than ever to give something back to society, if you feel comfortable doing so. One simple but highly effective way you can support your local community is by helping elderly or quarantined people in need: quarantaenehelden.org.



Want to know more?

[@mpg_mhc](https://twitter.com/mpg_mhc)



Can we learn from others who have lived in isolation before?

Quick answer: Yes! There are plenty of people who regularly experience this situation on a daily basis, namely polar explorers, astronauts or sailors. An initiative to help people deal with self-isolation during the outbreak of COVID-19, referred to as #HackCorona on Twitter, provides a great collection of coping strategies and activities such as the ones that can be found on this site: homenauts.com.

Here, we offer you some resources and a few ideas on how to #staysane while being stuck inside your apartment.

EMAP - the Employee and Manager Assistance Program

First and foremost: don't forget about EMAP, the Employee and Manager Assistance Program! EMAP offers a free and immediate consultation by phone or online for all MPS employees and their families.

How does EMAP work?

Call the phone number +49 (0)800 – 38 77 83 6 and indicate that you belong to the MPS.

The foreign number +49 (0)800 – 38 77 83 62 can be reached from the Netherlands, Austria, Switzerland, Italy, Spain and Portugal free of charge.

You can reach the Fürstenberg Institute who is operating EMAP also by email: beratung@fuerstenberg-institut.de. An online consultation is also possible. You can find short instructions at max.mpg.de.

Moreover, the Fürstenberg Institute shared the

following videos on Youtube with information on:

- COVID-19 in German and English
- Organisation of the work in the Home office in German and English
- Work in the Home office with children in German

1. Self-care & exercise

Did you always want to try meditation but you never had the time? The app **Headspace** has a huge collection of guided meditation and other exercises in their current free package – *Weathering the storm*.

There are also other popular apps such as **Calm**, **InsightTimer** and **buddhify**, to name a few, which may be helpful to invest time in your self-care.

With gyms being closed, many of us need to look for new ways to exercise.

Do you have a yoga mat stashed somewhere in the basement? With no other equipment needed – just your body and your breath – these daily virtual yoga classes may be the right thing for you: Engel.Yoga - Munich, Germany.

If a Downward Facing Dog is not really your thing, don't stop there. There are enough Youtube videos as well as plenty of gyms and fitness trainers who are live-streaming their workouts to keep us all motivated and fit. Check out the Facebook pages of your local gym and favorite fitness influencers, and fitness apps for motivation and guided sweat sessions.

Also, you can always go for a walk or a run. Apps like **Nike Run Club**, **Strava** and **Runtastic** will track your speed and distance, give you some tips and guidance. This is also a great way to virtually connect with your friends and keep the spirits high! But please, be responsible! Do it alone, follow your city and state guidelines, and avoid contact with others at all times.

2. Self-improvement

Luckily, we live in the age of the internet and the world is (still) our oyster, at least the virtual one. There are plenty of websites offering multiple courses, many of which are currently for free. Here are our top picks:

- **Udemy**
- **Coursera** (including one of the most popular courses, *The Science of Well-Being*)
- **edX**
- **1,500 Free online courses from Top Universities**

3.Chat

You can join the MPS-wide #corona_social on Rocket.Chat for some uplifting content. Feel free to post positive stuff or content to keep you going during

home office times! You can also find it in the GWDG Rocket.Chat server when you look for #corona_social.

Global Consortium for Academic Mental Health (twitter @GC4AMH) organizes #COVIDCafe several times a week over Zoom. You can meet researchers from around the world to combat social isolation during the pandemic. All the information about these meetings can be found on Twitter handle @GC4AMH. Students, postdoc, staff and faculty are all welcome.

Organize coffee breaks or lunch breaks over Zoom with your lab every other day and try to discuss non-scientific topics. It will help you and your colleagues feel less isolated.

4. Have an urge to help COVID-19-related research?

An initiative has been formed where we can currently "lend our brains" to the people leading the immensely important COVID-19 research efforts. It might be worth signing up, especially if you have some transferable skills, e.g. in data science, crowdfightcovid19.org/volunteers.

So, now you are a few days into your home office. Dishes are washed, laundry is done, you did two morning yoga classes, went for a run, skyped with everyone you could think of...

But now it's raining outside (and you are extra upset about that because you cleaned the windows yesterday!), and honestly, now you need something more low key.

What else can I do? – glad you asked! There's plenty!

Thanks to the virtual oyster, you can enjoy exquisite works of art from around the globe!

Culture & arts*:

** disclosure: This article was initially published in March, 2020, in the middle of the world-wide lockdown due to COVID-19 pandemic. Some sources have been modified (or removed) for this issue of The Offspring Magazine. **

- Royal Opera House London, Wiener Staatsoper, Schaubühne Berlin and NY Metropolitan Opera offered online stream of their events
- Berliner Philharmoniker: www.digitalconcerthall.com
- Free movies of the IDFA (Doc Filmfestival in Amsterdam): www.idfa.nl
- Virtual tours of famous museums: www.travelandleisure.com/attractions/museums-galleries/museums-with-virtual-tours

Nature & cooking:

You can explore wonderful national parks: [5 National Parks You Can Visit Virtually](#)

- Watch nature documentaries: [Film-Tips: Naturdokus für die Zeit zuhause](#)
- Or just look at some animals at [African Animals Camera](#) - live video from Africa and [Baby Goat Livestream](#)—baby goat livestream, people!
- You could even brush up on your culinary skills: [Kitchen Quarantine: Massimo Bottura's Nightly Cookalong on IGTV](#).

Podcasts & audibles

Another amazing way to shut out the outside world for a bit. You can find free audiobooks at [Audible](#).

And something completely different - throw a party for one in your living room! [United We Stream #1: Watergate | ARTE Concert](#) (many more DJs you can find streaming on Facebook and Youtube).

Also, the [Offspring Magazine Podcast](#).

Last, but not least!

Check out all of the resources we put together for Mental Health Awareness Week last year, [especially Immediate Help Document](#), where you can find specific contacts based on your region.

Still, if you are feeling overwhelmed by everything - **please reach out!** #sharingiscaring

Stay healthy!

Also, just stay at home.

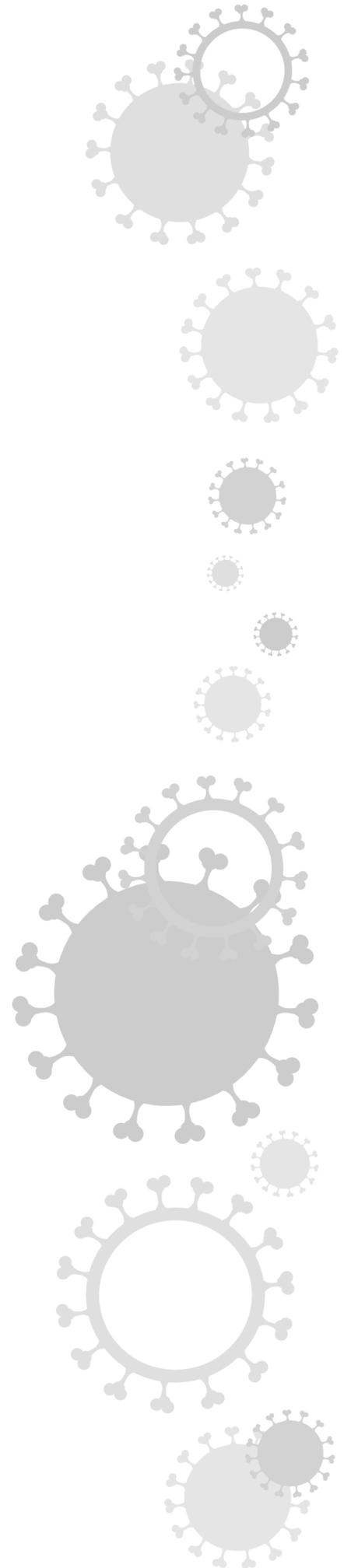


Leonard Nimoy, the original Mr. Spock.
Photo Courtesy: CBS Broadcasting



SCAN ME

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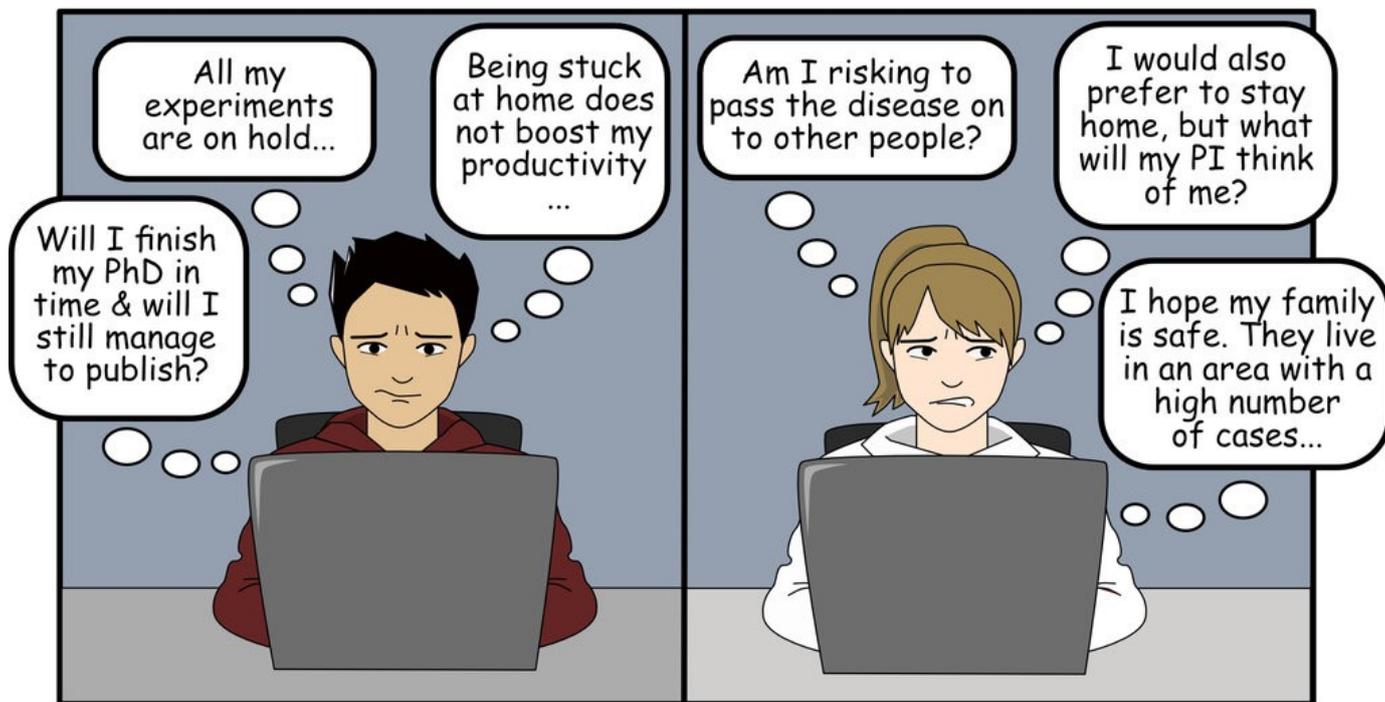


We are all in the same boat – aren't we?

The Impact of the COVID-19 Pandemic on Doctoral Students and their Research in the Max Planck Society

by Mirshat Abdurishid, Marta Salvado Silva & Nina Lautenschläger

In the Home Office VS at the Institute...

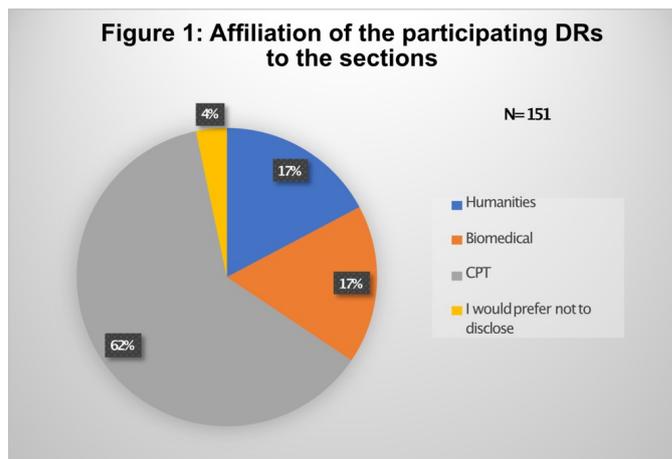


Picture courtesy: Nina Lautenschläger

A pandemic is something that none of us expected to be dealing with during our PhD projects. It is a situation that is new to all of us — full of uncertainty, worries and changes that impact our daily lives. Despite general rules like (1) keep social distance, (2) avoid traveling, (3) wash/ disinfect your hands regularly and (4) don't leave the house if not necessary - which are all quite similar throughout Germany - our work as Doctoral Researchers (following referred to as DRs) has been affected in different ways. This is mostly due to our different research backgrounds, but also depends on the 'Bundesland' (or 'federal state') that the institute is located in and how the directors of each institute implement recommendations from the Max Planck President. Thus, some of us are still going to our work place every day whereas others have been in the home office for several weeks now.

To obtain a clearer view on how the COVID-19 pandemic affects DRs from different sections in the MPS, we conducted a small survey with DRs from the nine Max

Planck institutes in Berlin and Potsdam. In total, 151 DRs participated in the voluntary survey. We received responses ranging from DRs in their first year to those in their fourth year with almost an equal distribution. Almost $\frac{2}{3}$ of the participants were from a CPT institute with the remaining $\frac{1}{3}$ evenly split between DRs from either a humanities or biomedical institute (Fig. 1).



Effects of the emerging Pandemic

The rapidly evolving crisis in Germany led to many Max Planck Institutes deciding to either shut down or enter a reduced operation mode.

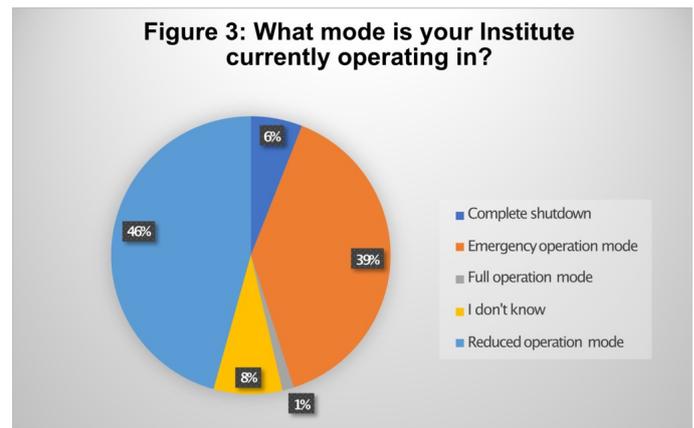
As the government decided every few days on how to handle the crisis and contain the infections, it was uncertain whether public life will be shut down and if employees can still go to work. Thus, we asked the DRs how this exceptional situation was managed at their institute:

Most DRs were informed one (24.2%) or two weeks (24.2%) before a potential shutdown of their institute, however, 35.6 % only got information a few days in advance. There was very little or no confusion in the days before changing the operation mode for 56.1% of participants, while 23.7% stated there was some or great uncertainty on how to proceed with their work (20.3% took a neutral position in the matter).

Even before the shutdown of some institutes, the President of the Max Planck Society encouraged employees to work from home if possible. We therefore wondered, if anybody still felt pressured to continue working at the institute despite that. The majority of DRs (73.2%) did not feel that way but nearly one fifth (18.8%) felt slightly pressured to go to the institute. 8% of participants stated that they indeed felt pressured to keep on working at the institute (Fig. 2).

Most of the institutes in Potsdam and Berlin are cur-

work from home (e.g. VPN and server access, or even computer equipment).



More than 80% of DRs that are now working from home reported that they received all the necessary information and were fully equipped. Well, this sounds like everyone is ready for the home office – or does it?

Indeed, 75% of the participants are currently working in the home office. However, we want to point out that there are still DRs going to work regularly. The survey showed that a fair share of young researchers from Potsdam still work at the institute every day (7.3% of total participants), sometimes (10.7%) or in shifts (6%) (Fig. 4). Nearly all of the participating DRs from the institutes in Berlin responded that they are momentarily working in the home office.

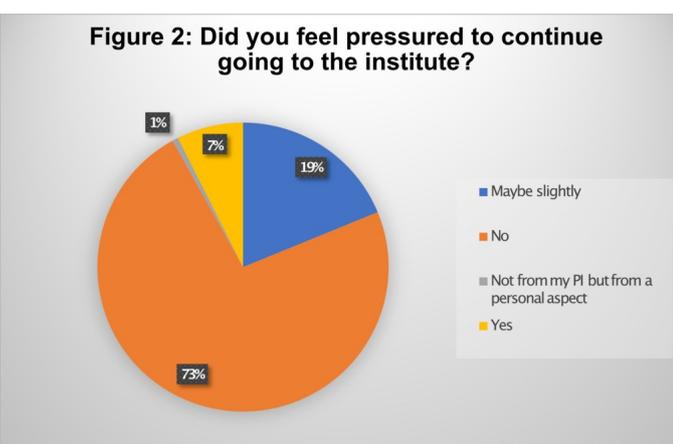
The different situations between Potsdam and Berlin emerge from a decision by the Berlin Senate, ruling that all research institutes in Berlin must have entered emergency operation mode by March, 20th.

Taking a look at the number of cases, Potsdam (222.36 infections/ 100,000 inhabitants) is far ahead of Berlin (129.18 infections/ 100,000 inhabitants, data from RKI COVID-19 dashboard, date: April, 14th 2020). This poses the question: Why were the institutes in Potsdam not shut down by the government as well? Potsdam is located right next to Berlin and there are many people commuting between the cities on a daily basis.

As the survey revealed, about 25% of the participants were still going to work, albeit to varying degrees. We wanted to know if these DRs were still given the opportunity to work from home.

Indeed, most of them were either highly encouraged to do home office (71%) or given the option to choose between working from home or continue coming to the institute (26%). A small percentage stated that the permission for home office was only granted under certain conditions, e.g. if one belongs to a risk group or has children to take care of (2%) (Fig. 5).

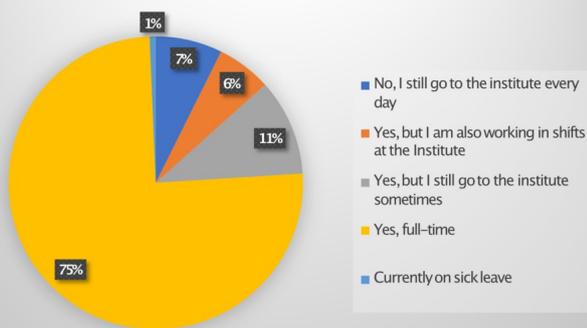
However, those that were given the freedom to choose



rently running at reduced and emergency operation mode, respectively (Fig. 3). Only 25.5% of DRs indicated to work from home since March 13th or even before, while 58.4% started home office in the course of the following week (March, 16th-20th). 16.1% selected that never started working in the home office as they continue going to the institute.

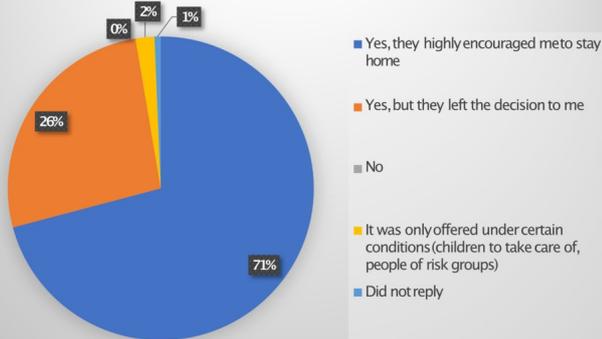
Further, we were curious whether everyone received all necessary information and equipment to be able to

Figure 4: Are you currently working in the home office?



might find themselves in a predicament: stay at home and risk being regarded as lazy by their supervisors/ PIs (especially in face of colleagues that still ‘diligently’ go to work) or continue working on-site despite the potential danger of placing oneself and others at peril. Being faced with an agonizing decision like that can put tremendous pressure on those affected.

Figure 5: Have you been given the opportunity to work from home?



The Impact of COVID-19 on PhD Projects

As these are extraordinary times, we wanted to know how DRs are adjusting to this new reality, especially working from home. When we asked the DRs to rank how much the COVID-19 situation has impacted their project on a scale from 1 to 5 (1=not at all, 5 = to a great extent), we obtained a broad distribution of answers:

33.3% of the DRs stated not to be affected at all or only marginally, while 28.7% selected that their work was affected to a medium extent. 38% have the feeling the pandemic impacts their project to a great extent.

How much a student’s project is impacted depends on very different aspects. For some DRs, whose projects are in the final phase of writing (about a third of the DRs) or who are not dependent on experimental work (e.g. DRs in humanities) or certain equipment (e.g. computational analyses), it might be easier to transition to home office. DRs that depend on samples from pa-

tients/ animals or specific technologies at their institute and whose experiments may have been interrupted, feel that the shutdown affects their productivity.

In addition, despite the majority of DRs (> 80%) mentioning that they received all necessary equipment required to work from home, a significant share (~ 15%) did not. Being ill-equipped to carry out important tasks (e.g. not having access to a laptop capable of handling simulations or data analysis) can severely impair productivity and hamper project progress.

‘My project will be delayed by about 3-6 months. I still feel pressured to go work at the institute because it is open to everyone to decide if they want to go or not. That is not right! This choice should be taken by the directors!’

However, not only the ongoing work of the DRs was influenced by the COVID-19 outbreak. Also future plans have been upset, as one can see in the list of the most predominant effects on the projects of DRs due to COVID-19:

- A conference they would have liked to attend has been cancelled
- Their work is on hold until the shutdown is over
- A collaboration or stay abroad got cancelled or postponed
- Researchers that just started don’t know what to focus on now

Another interesting read about how early-career scientists are coping with the COVID-19 challenges was published in Science Magazine by Elisabeth Pain, where young scientists describe the impact the pandemic had on their research and their personal lives.

Work in the home office

Even those that are allowed to work from home full-time might feel pressured, e.g. to be more productive than their peers in the lab. Almost half of the participants claimed not to feel pressured by doing home office (47%) but nearly an equal portion did (40%) (Fig. 6).

So, how are DRs holding up at home in their new temporary office?

Some DRs might feel pressured to perform better in face of colleagues that still go to work or by no longer having an ‘excuse’ (e.g. friends, outside activities) to keep them from working in times of a nationwide lockdown. We should keep in mind: this is a pandemic and this is all new to everyone. It is expected and normal to worry about the situation and we should not feel guilty about being less productive than usual.

It can be especially difficult when your home, usually a place to relax, suddenly also becomes a makeshift

worksite where you are expected to perform. In these extraordinary times, all aspects of the usual work-life balance might be affected. When being asked what they miss most, a fair share named the interaction with colleagues (58%), physical activities (51%) or a daily routine (40%). On a work-related level, 28% stated to lack access to important equipment and 19% wished for more regular meetings with their supervisors (participants

'It doesn't affect me at all. I am very happy doing home office. I miss doing chemistry experiments, but what I am doing right now is also very important for my thesis. The most important thing is to stay safe and contribute to flatten the curve.'

'I have problems accessing equipment and attaining books easily. I have missed my library and office at the MPI which allowed me to focus on my work much better.'

duced interactions with their colleagues. An overwhelming 81% feel that they have significantly less contact with their colleagues compared to the time before the shutdown (Fig. 8).

Many DRs stated that the reduced personal interactions have a big impact on their mood, morale and productivity. The lack of contact not only means limited ways to exchange experiences and opinions but also less opportunity to discuss ideas, results and plans related to one's PhD project. In severe cases, isolation can also take a heavy toll on mental health, especially for those that live alone or are barred from regularly seeing their loved ones.

'I definitely feel indirect pressure to be more productive during the shutdown (as if the quarantine were perfect for dissertation writing), which is stressful. And because there are no friends to see or places to go in the evenings, it is harder to allow myself to stop working. All the while my mind is more occupied with the current situation than my topic.'

Working in the home office can indeed

'I feel pressure from the colleagues that continue working. I don't know how particular situations as Department seminar will be developed because not all of us will have the same results to show.'

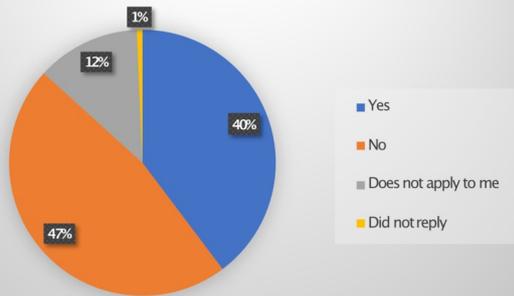
decrease contact with your colleagues and your supervisor, but it doesn't have to. Some DRs counteract isolation by having lunch or a beer hour with their colleagues via zoom. Others also organize a daily coffee break in the morning to keep contact with their fellow researchers.

On a positive note, 65% of the participants claimed to have found more time for non-work-related activities (Fig. 9).

Among the most popular choices were cooking (55%), spending more time with their families/ partners (28%) and going for a walk (24%). Tragically, 14% responded that finding toilet paper and fruits in supermarkets had become a physical impossibility (participants could select more than one option) (Fig. 10).

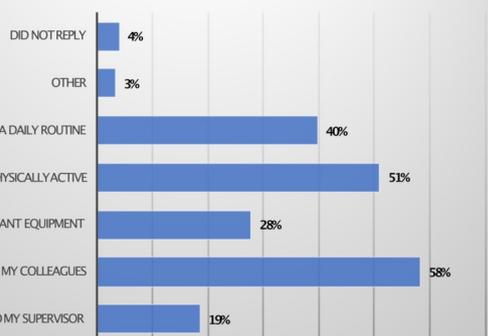
It is good to see that some DRs can spend more time on the things they enjoy, especially in such difficult times.

Figure 6: Do you feel pressured to be more productive in the home office?



could select more than one option) (Fig. 7). The access to important equipment and the absence of a daily routine seem to have the biggest impact on productivity. The temptation to stay in bed "a bit longer" instead of starting the day by commuting to the institute does not help either. Additionally, preparing meals takes more time than going to the cafeteria or getting a sandwich from the bakery. Sitting the whole day, potentially in an uncomfortable chair or on the couch, also does not improve your posture and concentration. Thus, going for a walk or a short bike tour outside may compensate for

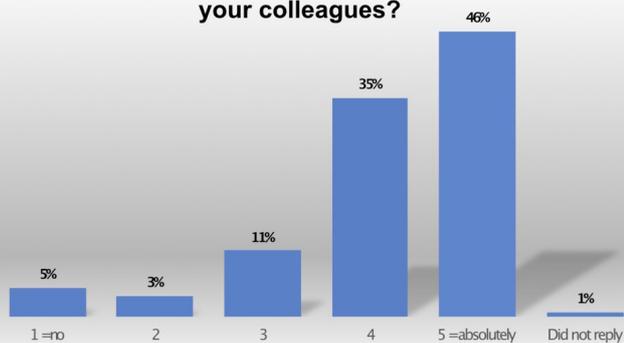
Figure 7: What do you miss the most while being in the home office?



the distances that you would usually cover on a normal work day and might help to retrieve motivation. For more ideas on how to make the most of the current situation, check out the latest article by the Mental Health Collective of the MPS: Should I stay or should I go (out)?

As shown in the quotes below and corroborated by the survey, many PhD students are saddened by the re-

Figure 8: Do you feel like you have less contact with your colleagues?



However, spending more time with your family might also mean that you have to take care of your children while trying to be productive. Many of us can only imagine

'I miss the collegiality of working at the institute and being able to talk informally about how my project is going or what I'm currently thinking about in my writing. Further, while the library and my group have been wonderful about helping me have access to the sources I need, I have felt the impact of not having access to books I've checked out of the library.'

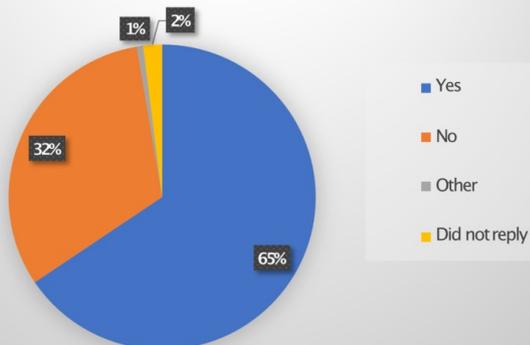
how difficult this must be. If you are finding yourself in this situation, there are some helpful tips for parenting during the COVID-19 outbreak from unicef.

'I am writing and miss regular talks with my supervisor and professor, and it feels like their amount of telecons is increased now and they have less time. In addition I'm distracted by childcare...'

Therefore, it is crucial to show sympathy for each other as everyone is sitting in a different boat trying to conquer the same waves.

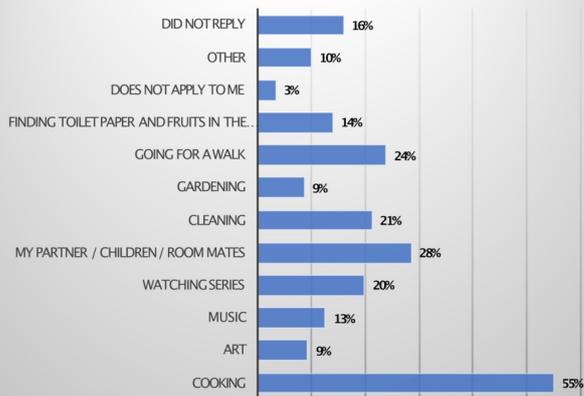
What Comes After the Pandemic?

Figure 9: Are you able to spend more time on other things (hobbies, family)?



Currently, we can see a slow improvement as new COVID-19 cases decrease and the number of people who recover from the disease increases. Soon we will be able to resume our work at the institute, but how easy will it be to find a way back in? A high percentage of the participating DRs stated that they will be able to immediately (40.4%) start working on their projects again and 30.5% said there might be a few days of delay. 10.6% think that there will be at least one week of

Figure 10: If yes, what are you spending more time on?



delay in the beginning. Many DRs might worry about their progress and how to catch up on the time that they could not spend at the institute.

We asked the DRs whether their contracts will be extended due to

'I spend more time with my family, but I miss my colleagues!...'

'I don't have as much contact with the colleagues to discuss and brainstorm, and I feel a bit lost and unsure what to do when I run into a problem or a setback ...'

the

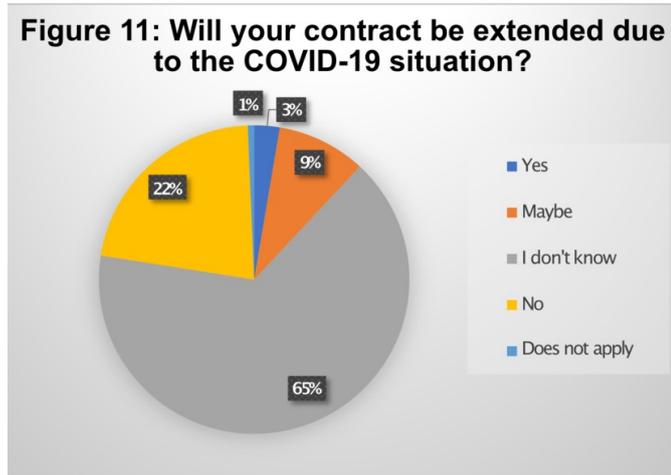
'It does not affect my project directly but the mental strain of personal isolation does. It makes me less productive and seek distractions quicker.'

(mandatory) home office. The majority of the DRs (65%) are unsure about whether their contract will be extended due to the COVID-19 situation. 22% of the participants said that they do not think that their contracts will be prolonged, while 9% are optimistic about a potential contract extension. Only 3% were certain about getting a contract extension (Fig. 11).

One thing is clear: For now, we can only wait for new decisions to be made.

New updates on the situation in the MPS can be found on the MAX website.

And in case you have any worries or questions, feel free to reach out (e.g. to your PhD representative or directly to the steering group) – you can find all the important contact information on the website of the PhDnet.



Another interesting read is a recent article on how early-career scientists are coping with the COVID-19 outbreak in Science Magazine by Elisabeth Pain, where the thoughts of some DRs.

Stay Healthy!

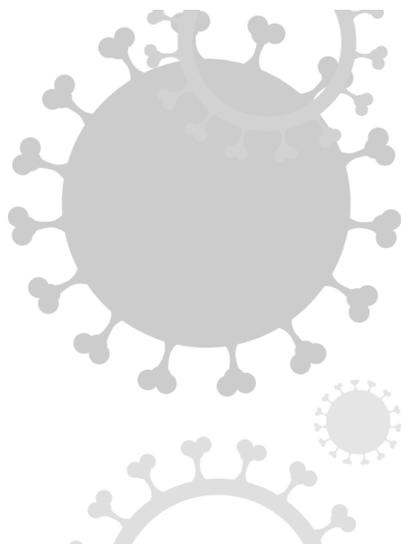
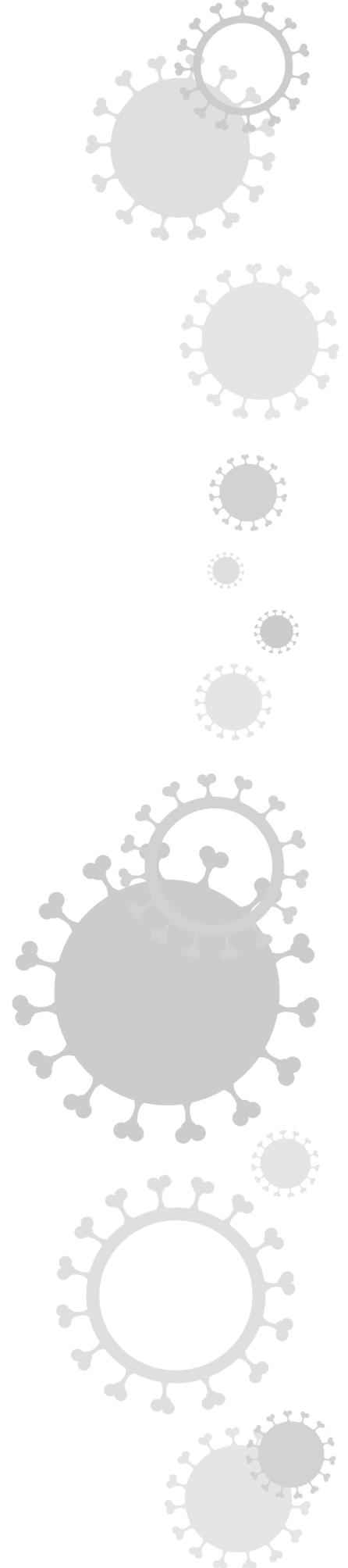
Want to know more?

@biologistninja



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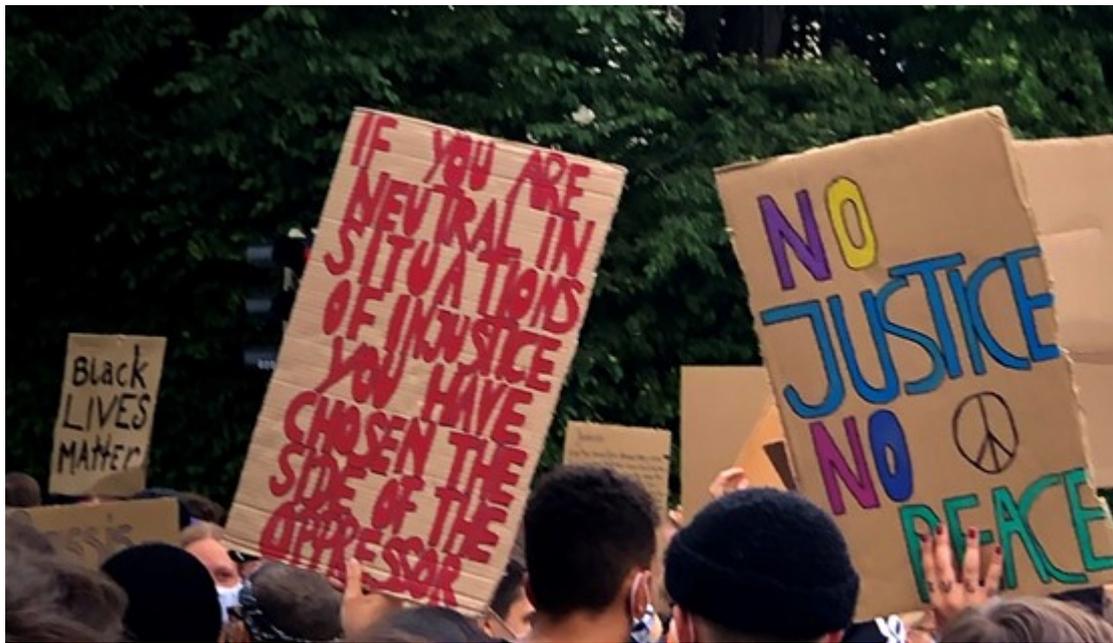


Black Lives Matter - Black Minds Matter

by Mental Health Collective of the MPS

Evelyn Medawar, Olga Vvedenskaya, Julian D. Rolfes & Barbara Safaric

*If you are neutral in moments of injustice,
you have chosen the side of the oppressor.*



[Black Lives Matter protest, Munich, Sat 6 June]

We were casually strolling around New York. Excited, giddy PhDs set free after a conference. We entered a random shop in West Village. The guy at the register sized me up from head to toe, smiled, and said –

“Black is my happy color too.”

Sheepishly returning the smile, I wished the ground would open and swallow me up. I felt incredibly embarrassed. Not because I said something stupid or fell straight on my face. I was ashamed. Of myself. I was wearing a T-shirt with the print “Black is my happy color”. The thought of “black” being connected to anyone’s race and identity did not cross my white privileged mind. How could I be so oblivious? And I like to think I try. That I put an effort into checking in with myself and recognizing how incredibly privileged I am. I should have known better. I have to do better. We all have to do better.

Germany is a racially, ethnically and culturally quite a

diverse country. However, for all their appraisal and celebration of diversity, many institutions lack People of Colour. It is a wide problem that not even the MPS is exempt from. How many People of Color are in your lives? In your lab? At your institute?

Are we suffering from the “out of sight, out of mind” syndrome?

We might. But that does not make our ignorance acceptable. As a part of society, each and every one of us has a responsibility. A responsibility to do good. To do no harm. To help when we can. We all have a part to play.



SCAN ME

for an online version of the article



[Black Lives Matter protest, Leipzig, Sun 7 June]

There is so much to be said, there is so much that needs to be done – what can we do as scientists?

Looking at statistics and numbers (and as scientists, we love data), we rapidly find an overwhelming support for the structural nature of racism: not only do algorithms structurally discriminate against people of color, e.g. when allocating health services¹ or recognizing faces², but also receiving funding³ for research is heavily biased towards white people.

As the research community claims to be generally international, open-minded and diverse, it should stand up and acknowledge existing structural imbalances and the lack of ethnic diversity.

Based on the 2018 Max Planck Society (MPS) annual report⁴, more than 30% of all employees of the MPS were foreign nationals (not German). This number increases to above 50% when looking at scientific employees. Moreover, 37% of institute directors are also non-Germans (112 out of 302). There are no more detailed numbers on ethnicity, but the picture is clear - the MPS community is, in fact, diverse.

Have you ever felt discriminated against?
How will your next scientific home be like?
How do you want it to be like?

As structural problems require structural changes, the first sensible step, we all can and should do, is to acknowledge and become aware of our biases. You might now think “Well, I am not the one with the biases” - please check for yourselves which prejudices you have when it comes to race, religion or gender at [Project Implicit](#).

Acknowledging the status quo, and that we all most likely have some of those implicit or unconscious biases is a good start. Sure, it might be uncomfortable to confront our own biases, but we need to openly discuss these topics and raise awareness, in particular within our research organizations, where **everyone should feel welcomed, independent of their gender, disability, age, sexual orientation and identity, internationality and ethnicity, and religion**. If you are thinking now - “That’s all great, but I’m *just* a doctoral researcher. What impact do I have?”- don’t sell yourselves short, doctoral researchers are more than just another cog in the academic wheel. Change is possible!

But words don’t mean anything unless they are put into action. That’s where we come into play. **Disintegration of systemic racism starts from within ourselves, within our own institutions.**

26th of May is Germany-wide Diversity Day, a campaign of the Charter of Diversity, with the MPS being a member since 2010.

Did you know about it? If you missed the Diversity Day, ask your institute why it wasn’t promoted.

The Code of Conduct of the MPS states:

“We treat each other with respect and do not tolerate any forms of discrimination based on ethnicity, gender, disability, religion or belief, age or sexual orientation or identity. Discrimination has no place in the Max Planck Society: not in the lab, not in the workshop, the office or during the hiring process. We believe that science is a diverse endeavour: diversity provides new impulses, new ideas, new perspectives and innovation.”

Numerous public scientific institution and publishing houses have issued their statements addressing racism in the scientific community, including **Nature**: *Systemic racism: science must listen, learn and change*, **Cell**: *Science has a racism problem*, and **eLife**: *Racism in Science: We need to act now*. On 10th of June, there was a global #ShutDownSTEM day - a call for action to fight racism inside of academia. Thousands of scientists joined world-wide, pointing out the importance of equity.

White privilege is real, there is no point denying it. Have a look at this eye-opening TEDx talk by Dr. Peggy McIntosh, who was the first to write⁴ about white privilege in the late 80's: *How to recognize your white privilege — and use it to fight inequality*.

If you still don't think science has a racism problem, please check out #BlackintheIvory on Twitter and read the countless stories of your fellow scientists describing their experiences with racism they face world-wide. If you are in the mood for some reading (which we heartily recommend), here are a few suggestions to start with: *Superior: the Return of Race Science* by Angela Saini, *Why I'm No Longer Talking to White People About Race* by Reni Eddo-Lodge, *Me and white supremacy* by Layla Saad.

Mental Health Support

Recent events can easily be overwhelming. Black Lives Matter movement has mobilised millions of people all over the planet in the last weeks, with tens of thousands of people joining the protests in Germany as well. Constantly being exposed to reports of incomprehensible violence and injustice the Black community is exposed to, will take a toll on you. Even more so if you are a member of the targeted community.

It is important to take care of yourselves, prioritize your mental health and set boundaries to protect your well-being. We are here to support you in any way we can, from simply talking to you or helping you find a therapist. Please, don't forget about the Employee and Manager Assistance Program (EMAP). If you feel more comfortable contacting us, please don't hesitate and do so. Some of you might have met us by now during **Collective TeaTime**, so you know the faces behind these words.

Therapy has many benefits and there are many factors that will determine how successful it will be. The crucial factor is the relationship that develops between you and the therapists. You need to feel comfortable, relaxed and you need to be able to trust your therapists. Usually you are only asked if you have a preference for female or male therapists. If you are part of the Black community, or any other ethnical minority, it might be easier to open up to a therapist that can understand your cultural background, termed Culturally Sensitive Therapy^{5,6}. The **Black Minds Matter** initiative in the UK raises specific concern for a state of emergency for Black people's well-being by providing culturally trained therapists, support groups and mentorship. Unfortunately, we have failed to find a similar organization in Germany. Official databases of licensed therapists do not include any details beyond the language(s) in which therapy is provided. Also, #ShutDownSTEM compiled an extensive list of resources for Black people who are in the need of healing and self care.

The bottom line - please, check your privilege. Use your privilege to make a change. Educate yourself. Speak up when someone is being harmed. Call out discrimination. Be a decent human being. Be kind. And never forget:

It's not about guilt, it's about responsibility.

References:

¹<https://www.nature.com/articles/d41586-019-03228-6>

²<http://news.mit.edu/2018/study-finds-gender-skin-type-bias-artificial-intelligence-systems-0212>

³<https://www.sciencemag.org/news/2019/10/study-identifies-key-reason-black-scientists-are-less-likely-receive-nih-funding>

⁴White Privilege and Male Privilege: A Personal Account of Coming to See Correspondences Through Work in Women's Studies

⁵Asnaani A, Hofmann SG. Collaboration in multicultural therapy: establishing a strong therapeutic alliance across cultural lines. *J Clin Psychol.* 2012;68(2):187-197. doi:10.1002/jclp.21829

⁶Pakes, K. and Roy-Chowdhury, S. (2007), Culturally sensitive therapy? Examining the practice of cross-cultural family therapy. *Journal of Family Therapy*, 29: 267-283. doi:10.1111/j.1467-6427.2007.00386.x

Being discriminated against should not ever happen.

If you encounter discrimination, need help or support, please contact the PhDnet Equal Opportunity workgroup at equal.opportunity@phdnet.mpg.de or PostdocNet at steering@postdocnet.mpg.de.

Contact points for PhDs in the case of discrimination or conflict

- **Superior**– Your superior is always your first point of contact, when it comes to conflicts within the team, with your peers from your own unit or from other units. If your superior is involved in the conflict, or if you would generally prefer more distance and confidentiality, there are further points of contact that will provide help and advice for finding a solution:
- **Ombudsperson** (at every institute) - Scientific misconduct and problems with supervision. These conversations are treated as confidential.
- **EO Officers** (sometimes still called Gender Equality Officers, at every institute + central EO Officer) - Cases of discrimination/prejudice/harassment
- **PhDnet Steering Group** - Cases for crisis which might involve the general administration for advice on who to contact directly sg@phdnet.de
- **PhDnet EO Workgroup** - Cases of discrimination, lack of EO, or for advice, contact equal.opportunity@phdnet.de
- **Staff Unit “Internal Investigations”**- conducting internal investigations into information on suspected non-scientific misconduct. Dr. Julia Lutz-Seitz, LL.M. Eur.
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- **Law firm** - MPS appointed law firm to help in cases of harassment, mobbing and discrimination: Wirsing Hass Zoller - Rechtsanwälte Partnerschaft MbB, represented as confidants by:

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Equal Opportunity Group



The EO Group of the PhDnet is striving to ensure equity for all doctoral researchers within MPS. Everyone deserves and needs to be treated with respect and presented with the same opportunities, regardless of their age, gender identity or sexual orientation, physical or mental health, race or ethnicity, cultural or social background, external appearance, language, and religion.

Equal Opportunity Group works on solving the problems PhDs encounter along the way towards earning their degree, improving general work conditions and raising awareness in order to fight discrimination and implicit biases.

To achieve equity, numerous barriers on the path towards equal opportunities must be broken down, which is our group’s primary goal. In the meantime, we can also help each other by making sure services are available that prop up underrepresented people to overcome those barriers. We also offer information to anyone who encounters a situation of compromised equal opportunities in their institute, with peer-to-peer advice as well as redirection to appropriate people and avenues for action.

Contact details of EO workgroup of the PhDnet:

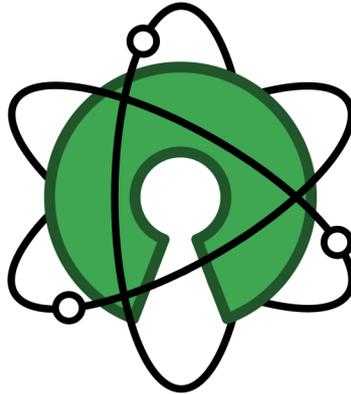
Equal Opportunity Group of the PhDnet at equal.opportunity@phdnet.mpg.de

For More Details about the EO WG



Open doors with social distance - research opens up during Covid-19 pandemic

by Open Science Group—Nikolai Hörmann, Cornelia van Scherpenberg & Rashi Goel



Covid-19 has thrown the world off balance causing a pandemic, a global shutdown and impacting each and every one of us. This requires a collaborative effort from everyone to make behavioral concessions which impact our regular social interactions. The best solution to return to our previous lifestyles is to build up herd immunity within the population, requiring about 70% of the population to become immune to Covid-19 [1]. The biggest effort lies in not overwhelming the healthcare system in the process to protect the people who are in the high risk groups.

This pandemic poses certain short and long-term challenges that need to be addressed. Within the next weeks, it is necessary to develop quick, reliable tests for Covid-19, allowing efficient isolation of contaminated patients and asymptomatic carriers. Furthermore, we need to provide sufficient personal protective equipment to healthcare workers and ventilators for severely affected patients. In the long term, it is necessary to find medication against the disease and develop a vaccine for Covid-19.

These challenges require fast-acting, precise research, making widespread access to available information on Covid-19 a central factor for progress. For years, the open science movement has been trying to accomplish this goal. Covid-19 now highlights how important open science practices are for research and possibly also accelerates the transition to follow them on an international level.

First of all, open access to data and knowledge (this might seem obvious) is really important. No matter how

successful an experiment or equipment is, if it is not freely available, it cannot contribute to solving the current problems. Luckily, the publishers of scientific journals [2] and engineers designing DIY face masks [3] or make-shift ventilators [4,5] have taken the necessary steps to make their resources accessible to everyone. Publishers have also created online platforms dedicated to information on Covid-19 and agreed to keep the articles open access as long as this pandemic lasts.

Once robust experimental conditions are ensured, the results need to be shared. The Open Science practices recommend uploading papers to preprint servers as soon as the authors feel comfortable enough to share their results with the scientific community. The prominent preprint servers bioRxiv and medRxiv currently feature 1455 preprints on Covid-19 (as of 11.04.2020, 3pm [6]). This shows how fast findings can be communicated to other researchers accelerating the exchange of scientific findings. Especially, since recent studies did not find drastic changes to the main messages of published journal articles compared to their respective preprints [7,8]. However, since the manuscripts are not peer-reviewed it is still essential to critically assess their validity. Additionally, scientific journals and reviewers on their part are making adjustments for the Covid-19 related research to speed up the peer-review process and publish relevant articles quickly.

In addition to sharing the manuscript itself, proponents of open science suggest sharing supporting data and programming/statistical code used in the analyses. Transparency is important in the context of the current pandemic, as it allows research laboratories from all

over the world to work on the same topic in a collaborative effort. Data-sharing platforms have been established to collect research information and data for modeling potential progressions of this Covid-19 pandemic [9,10,11].

Another suggestion is to grant open access to archived articles and chapters related to virology, crisis, crisis management, epidemiology, related public policy and psychology. This would allow computational researchers and mathematicians to improve their predictions of the current crisis[12].

Lastly, open science aims to advance the reproducibility of research. An experiment is reproducible if any researcher with the required resources (chemicals, computing power etc.) can obtain the same outcome when following the original study's protocol step by step. Publishing false positive results on Covid-19 could mislead researchers and waste valuable time and resources which are needed to develop drugs, vaccines, or lifesaving equipment. Consequently, being able to rely on published experiments instead of troubleshooting them becomes crucial in fighting this pandemic. While reducing the time needed from results to publication is paramount in the current crisis, it is still necessary to conduct research rigorously, especially since lives may depend on it.

Altogether, this inclusive and open research culture in medical research is setting a positive trend, which will hopefully catch on to other scientific fields and improve the current system [13]. Apart from the benefit to the larger scientific community, open science promotes the careers of individual researchers by increasing their visibility [14]. Especially, but not only during this crisis, it is important that everyone involved in research uses open science practices and joins forces to address this pandemic as it concerns us all. At this point in time, fast flow of important information could literally save lives!



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Want to know more?

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Open Science Workgroup



The main goal of the Open Science Workgroup (OS WG) is to disseminate information about Open Science (OS) and how individual researchers benefit at all career stages can benefit from OS practices. Our efforts were first focused on assessing the current situation regarding the view

of doctoral researchers on OS in the Max Planck Society (MPS) by conducting a survey. Now, that we know that doctoral researchers are interested in the topic, we are currently developing a strategy to communicate OS practices in a straightforward way.

Last year, we revitalised the Open Access Ambassadors initiative to have advocates for Open Access and Open Science in every Max Planck Institute. It was a big success and the first step towards starting a new network of Open Access Ambassadors. The aforementioned survey was published (see page 43) and gave us many insights how to tackle the hurdles that delay or hinder the implementation of OS practices within the MPS.

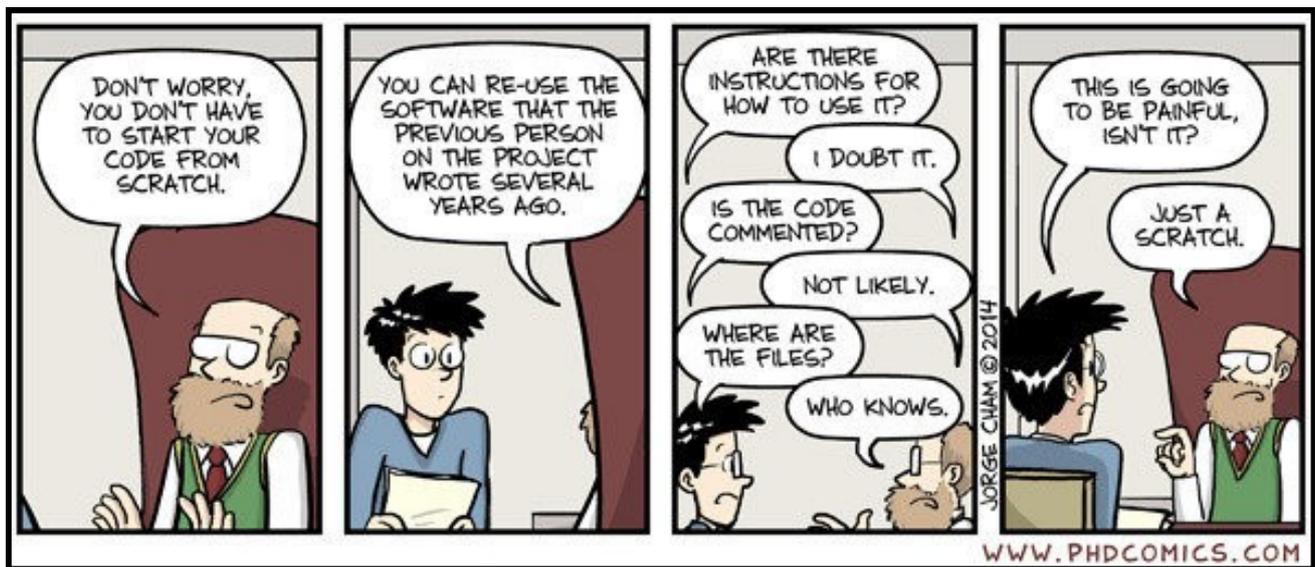
If you are interested in any topics relating to Open Science please feel free to contact the OS WG to get more information. We are always looking for new members that are motivated and bring in their own ideas. In this working group, you will learn a lot about different kinds of OS practices, come in contact with likeminded people, and contribute to improving the quality of the research done in the MPS. Contact us at : open.science@phdnet.mpg.de

For More Details about the OS WG →



Incentives to adopt open science practices in your daily research

by the Open Science initiative at the
Max Planck Institute for Human Cognitive and Brain Sciences



"Piled Higher and Deeper" by Jorge Cham, www.phdcomics.com

Introduction

"Open Science" (OS) is an umbrella term for different research practices, which aim to increase openness, transparency, rigor, reproducibility and replicability of the scientific process (Crüwell et al., 2019). These practices promote reproducibility and replicability at all stages of a research project and thereby enable researchers to do credible science (Arza and Fressoli, 2017; Munafò et al., 2017).

In the following, we (the OS initiative at the Max Planck Institute for Human Cognitive and Brain Sciences) have collected short, simple definitions of common OS practices along with arguments for their implementation, at our Institute and beyond. We focused particularly on the various ways in which open science practices can benefit individual researchers, including you.

General benefits of OS

- saves resources by conducting reproducible studies. For more information, see our [resource document](#) on how to create a reproducible workflow
- helps you to avoid errors and perform correct analysis
- enables you to re-use materials and analysis scripts for new studies
- helps you to reproduce your own results from previous studies (Lowndes et al., 2017)
- makes it easier for new colleagues to be integrated in your research projects
- enables you and others to keep working on your project even if you leave your laboratory

Benefits of open data, materials and open code

Open data, materials and code allow other researchers to re-perform analysis and check the reproducibility of a given study. This is fundamental for detecting errors and biases in studies and basing science on verifiability, not trust (Klein et al., 2018). Publishing data, materials and code relies on a well-organized and transparent data structure, scripted analysis code and auxiliary files (such as Readme files and standard operation procedures).

TRANSPARENCY in your data structure and analysis scripts

- saves resources by conducting reproducible studies. For more information, see our [resource document](#) on how to create a reproducible workflow
- helps you to avoid errors and perform correct analysis

OPEN CODE

- will benefit other scientists (and eventually you) by saving time and resources (especially relevant for neuroscience (Eglen et al., 2017))
- helps to engage the community with your science (Barnes, 2010)

OPEN DATA

- enhances the credibility in your research (Klein et al., 2018)
- boosts efficiency of scientific discovery: all research products from the study can be reused (Klein et al., 2018)
- allows you to publish in certain journals with mandatory open data sharing policy (such as Cognition, Science, PLOS, see [here](#))
- gives you a citation benefit (Piwowar and Vision, 2013)
- protects you against data loss
- can be a publication on its own (in form of a data paper or when getting a digital object identifier (DOI) from a sharing platform)
- in turn, openly available datasets allow you to quickly increase the power of your own studies or perform replication analysis (Choudhury et al., 2014; Walport and Brest, 2011)



CBS Open Science
Contact us!

Benefits of publishing your research in the form of preprints, postprints and open access

Preprints and postprints are two forms of eprints: earlier versions of the manuscript, preceding official publication in a scientific journal (Harnad, 2003, Tennant et al. 2018).

Preprints are scientific manuscripts, which are publicly shared before they have been peer-reviewed. They can be given a DOI number at this stage, and can thus be cited.

Postprints are articles that have already been peer-reviewed and accepted for publication, but have not been formatted by the publisher yet. Many journals allow a publication in this form, although they differ in restrictions they impose on authors, i.e. embargo period after paper release, when it is not allowed to publish the postprint. Journals policies can be conveniently checked for example in the [SHERPA ROMEO repository](#). Publication in a form of postprint can guarantee free access to the paper content to all interested researchers, which is particularly useful if the target journal charges a fee for reading, which not all readers can afford.

Publishing **open access** (OA) is a mode of publication in scientific journals that guarantees free access to research articles without paywalls. Journals differ in the degree of open access implementation: some publish open access by default (gold OA), some allow self-archiving and postprints (green OA), while other journals only offer an OA option and publish other articles behind a paywall (hybrid OA). Most Gold OA journals require payment of Article Processing Charges (APCs), to replace subscription charges and finance publishing. These are usually covered by the institutions. The Max Planck digital library covers APCs for Max Planck researchers for many journals (for a list, see [here](#) and [here](#)). Some journals also offer Gold OA free of charge to the researcher and institution. These journals are often referred to as Platinum OA (e.g. Biolinguistics).

PUBLISHING PREPRINTS

- increases chances during applications for funding or new position. Grant agencies (e.g. the DFG) often require the possibility to read applicant's publications, which is possible in case of preprints but not in case of submitted papers and papers under review, and therefore the latter are often not taken into account

- increases citation number: on average, papers that were preceded by preprints are cited more frequently than papers that were not (Abdill and Blekhan, 2019; Fraser et al., 2019))
- assures quicker dissemination of the research
- gives you an opportunity to obtain feedback from voluntary reviewers before the manuscript is published (Maggio et al., 2018; Sarabipour et al., 2019)
- pre-print documents the date, when your discovery was published
- is explicitly encouraged by some journals (e.g. eLife) offering preprint review and scoop protection (i.e. if a manuscript with a similar scope has been published after your preprint submission, it will not be a reason for rejection)

POSTPRINTS AND OPEN ACCESS PUBLISHING

- increase the visibility of research by granting the accessibility to the manuscript to potentially unlimited group of readers
- increase citations in comparison with non-OA papers (Hajjem et al., 2006; Piwowar and Vision, 2013; Wang et al., 2015)
- eventually translate into savings for your research institutions (if all papers are available OA): universities do not have to buy back their own work; tax-funded research is accessible for those who paid for it
- support equality in the research community – research is available to all researchers regardless of their own financial resources or those of their research institution or their country

Benefits of

preregistrations and registered reports

Preregistration is a procedure of registering parameters of the research (mainly the hypotheses and analysis plan) on dedicated platforms. It aims to prevent generating hypotheses post-hoc - after the data are already collected - and changing analytical decisions depending on the results, a practice that has greatly contributed to the replication crisis (Simmons et al., 2011). Preregistration also enables tracking back potential changes in planned steps and their justifications, making the process transparent and plausible to the readers.

Registered reports extend the concept of preregistration. They are scientific articles chosen for publication based on their detailed research plan submitted prior to data collection. The proposals are peer reviewed twice: 1) before the start of the experiment, when the introduction and methods sections are evaluated and changes are suggested, 2) after the experiment is finished, to assess the researchers' compliance to the accepted proposal and the quality of the discussion.

PREREGISTRATION

- helps you to formulate specific hypotheses and develop a concrete timeline for your project
- presents an opportunity to get feedback and to discover potential flaws in your study design before data collection
- is supported or even requested by an increasing number of jour-

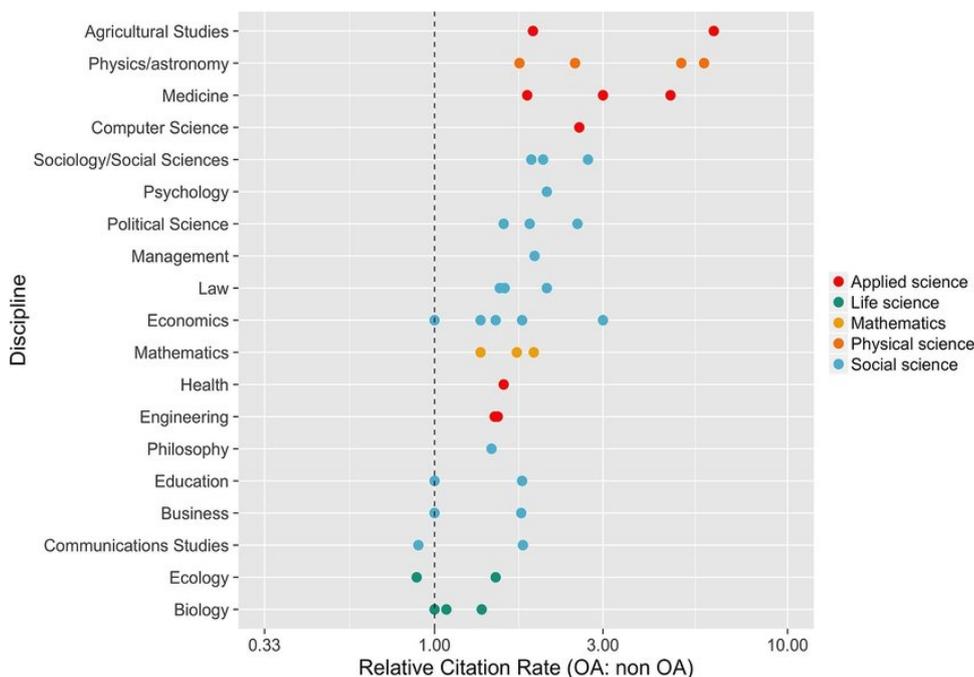


Figure 1: Open access articles are cited more frequently than non open access publications. Figure depicts combined results of multiple studies, measuring relative citation rate of OA to non-OA papers, which is a ratio of mean citation rate of OA to mean citation rate of non-OA studies. Multiple points for the same discipline denote various estimates reported in the same study or several different studies. Figure published originally in McKiernan et al. (2016), under Creative Commons Attribution License.

Percentage of null findings

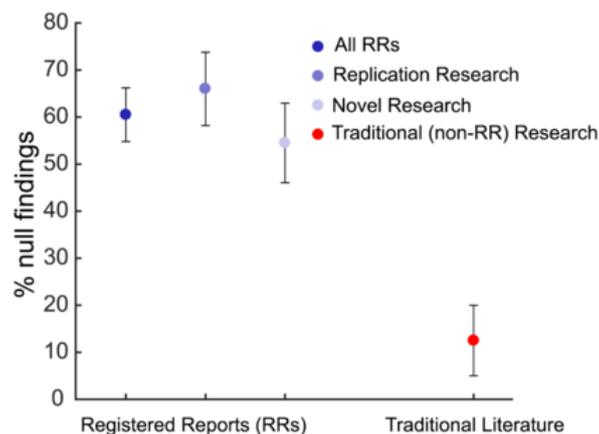


Figure 2: Registered reports act against publication bias by publication of true null findings. Figure depicts percentages of null findings among RRs aiming at replication ($n = 153$) or testing novel hypotheses ($n = 143$) and proportion of null findings that have been previously reported for traditional (non-RR) literature and their respective 95% confidence intervals. Figure published originally in Allen & Mehler (2019), under Creative Commons Attribution License.

nals in our field: e.g. Psychological Science, Nature Human Behavior

- protects you from reviewers pressuring you to change hypotheses post-hoc (Wagenmakers and Dutilh, 2016)
- presents an opportunity to act against publication bias, because pre-registered studies are more likely to report null findings compared to the general scientific literature (Allen and Mehler, 2019)
- increases credibility of the research outcomes (Nosek et al., 2018)

REGISTERED REPORT

- In addition to the above mentioned advantages of preregistration, registered reports give you the certainty of publication regardless of the result and decrease the pressure to “produce” positive results

For detailed information and resources on preregistration and registered reports please have a look to our [Resources for Preregistration and Registered Reports](#).



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Preprint or not Preprint?

A discussion worth having

by Maria Eichel


 The logo for bioRxiv, featuring the word "bio" in black, "R" in red, and "xiv" in black, with a stylized Greek letter chi (χ) integrated into the "x".

THE PREPRINT SERVER FOR BIOLOGY

The times we live in have suddenly changed in spring 2020 with the Covid-19 pandemic impacting not only the social but also daily work life of everyone around the globe. In a recent article by the Open Science group in collaboration with the Offspring we highlighted how research opens up during the Covid-19 pandemic and how important transparency and open resources are in times when information needs to be accessed quickly and easily (for more information see: https://www.phdnet.mpg.de/131182/2020-04-14_openscience-covid19?c=22833) In this article we would like to inform you about the benefits and possible downsides of uploading an article to preprint servers such as bioRxiv.

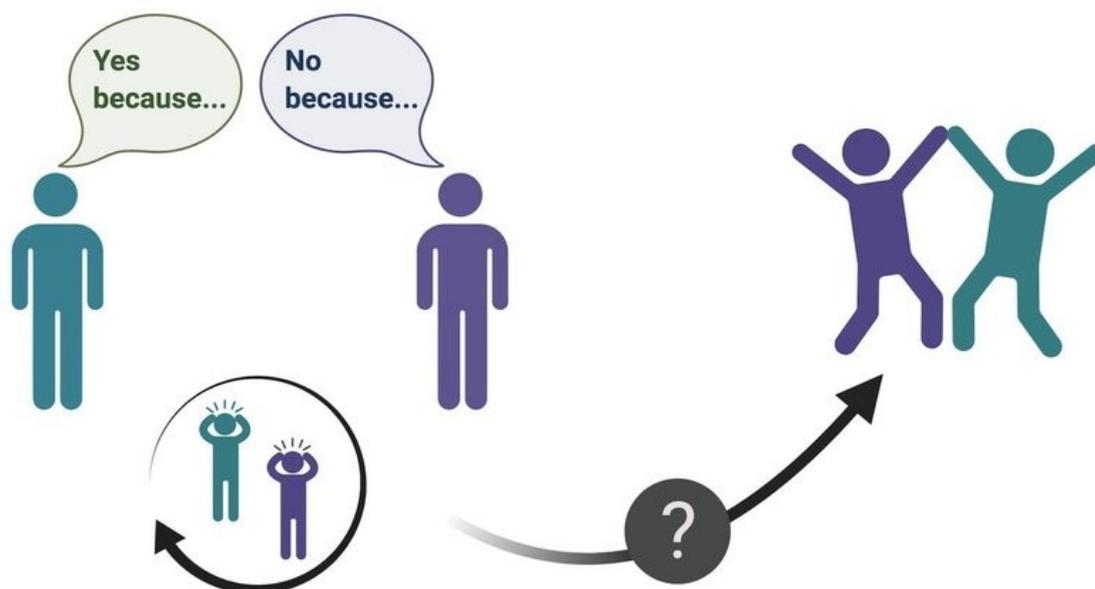
First, let's go back some months to December 2019. After attending the Open Access Ambassador conference in Berlin, an event organized by the Max Planck digital library and Max Planck PhDnet, I came back to my institute not only with more knowledge about Open Science practices but also an urge to spread the word about Open Access initiatives. For example, the availability and rising use of preprint servers like bioRxiv. Once I started talking about it with my peers, I noticed two different scenarios: I) those who are really into the topic and sometimes knew even more about it than me and II) those who responded, "sounds good but I would like to know more about this". Of course, there was also a third, more wary scenario: "Isn't there any danger in uploading to preprint servers?". In exactly that moment I decided to summarize what I learned and collect different perspectives and existing data to give a talk: "Preprint or not preprint? A discussion worth having". In exactly that moment I decided to summarize what I learned and collect different perspectives and

existing data to write this article for a broader audience. Coming from the biological sciences, I will mostly relate to bioRxiv but some of this information applies to other fields as well. Please keep in mind this is an opinion piece even though I did some thorough research — it is not a guideline.

"I want to publish on a preprint server because...." – "I don't want to publish on a preprint server because..."

This can be a scenario some of you might have experienced already. It can be a discussion between colleagues and friends, one between authors of a manuscript, one amongst early career researchers (ECRs) and senior researchers or between collaboration partners; but all of the time it is a discussion between scientists. This often leads to a circle of arguments with no one really convincing the other. Despite these differences, in the end we all share a common goal to foster good science; therefore we must find a common solution to this problem in publishing. Let us consider some important characteristics of an "ideal" scientist. In my opinion, scientists are rational, based on facts, curious, realistic, open and as transparent as possible, respectful, brave, and with an urge to shape and improve the future of science. Am I a bit optimistic or dreamy? Maybe yes, but isn't this kind of optimism the beauty of young minds?

Second, let's consider why we publish? As an ECR with a passion for my project I would like others, also lay people, to **know about my science**. Being at the end of my PhD I have started taking care of my future career steps and here comes the second reason: **I want to continue doing what I like, which is working as a scientist**. Publishing increases my chances to remain in science after my



The discussion circle - How do we get to an agreement? *Scheme created by M.Eichel with Biorender.com*

PhD, and later in my career I will face the point where I **need money to keep doing what I like**. Which leads me to one other reason for publishing: **we need publications to get money!** I am pretty sure all of you can see the circle there and are aware of the many hurdles along the way to just be able to continue doing what you like so much. These hurdles won't be the content of this article though; it's rather about one possible way to jump across some of these hurdles – if there is a change in the way we publish altogether!

A short history of preprints

And now let's travel back in time to about 60 years ago: In the 1960s the first Information Exchange Groups (IEG) were created by the National Institutes of Health (NIH) which was basically a group of scientists from similar research areas. With the help of the NIH scientists could send drafts for consideration which were copied and distributed in the respective groups to foster scientific exchange. And it had quite some famous names joining in, such as James Watson and Francis Crick, who discovered the structure of DNA. Last but not least, due to immense costs and a lot of pressure from the publishing sector the IEGs were eventually forced shut down (see the full story at: <https://www.sciencemag.org/news/2017/08/forgotten-experiment-biologists-almost-launched-preprint-revolution-5-decades-ago#>). The first official preprint repository arXiv.org was founded in 1991 even before the internet became popular. It mainly contains articles from physics, mathematics and computer science and has grown immensely over the past decades [1]. What has been common in the physics world for decades finally started for the biological sciences in 2013 with the launch of the nonprofit preprint server bioRxiv by Cold

Spring Harbor Laboratory (CSHL). And it doesn't stand alone: between 2007 - 2012 the Nature Publishing house started the server "Nature Precedings" and up to now other preprint servers like ASAPbio (<https://asapbio.org/>) or the multidisciplinary platform Preprints (<https://www.preprints.org/>) exist. One important contribution to the rise of the preprint was that research funders such as the NIH, the Wellcome Trust, U.K. Medical Research Council and the German DFG legitimized and even encourage the use of preprints in project proposals. As a reminder: this is where we get the money to continue doing what we like! In addition, big scientific journals like Cell, Science or Nature and plenty of others do formally accept the submission of manuscripts which are already posted on a preprint server [2, 3]. If you are unsure about the open access policies of the journals you plan to submit to you can find useful information at the Sherpa Romeo database (<http://www.sherpa.ac.uk/romeo/search.php>). By 2019 more than 1 million articles were downloaded monthly from bioRxiv, with authors from neuroscience and bioinformatics submitting the majority of studies [4 and 5].

Are you still in awe and wonder what a preprint server actually is? Good question which is important to know before starting into our discussion. When asking Wikipedia it gives you a nicely summarized description: "*[...] a preprint is a version of a scholarly or scientific paper [authors remark: with a citable DOI] that precedes formal peer review and publication in a peer-reviewed scholarly or scientific journal. The preprint may be available, often as a non-typeset version available free, before and/or after a paper is published in a journal*" [6].

Now, let's start with the arguments against bioRxiv that

I happened to come across either on the internet or during discussion with scientists independent of their career stage. Before engaging on the positive effects of posting your manuscript on a preprint server I will comment on some of the negative aspects right away.

“Preprint or not preprint? – a discussion”

One of the main arguments I heard so far is probably also the most common one: “A Journal might not recognize the preprint or reject my manuscript because of it.” Yes, there are journals out there whose open access policies and the usage of previously uploaded manuscripts on preprint servers are in my opinion rather old-fashioned. For the life-sciences this is mainly the New England Journal of Medicine. But keep in mind that especially for patented work, as well as for clinical studies, uploading to bioRxiv might come with some danger. Recently, CSHL also released medRxiv.org, a preprint server with tighter standards for health science, medicine and clinical research (<https://www.medrxiv.org/>).

Second argument: “A preliminary, non-peer reviewed study might be bad-mouthed publicly or on social media which could affect the decision of future editors or reviewers”. Plainly speaking — yes this can happen. But this can also happen post publishing and we are all aware of published studies that have minor or even major flaws. Question yourself: Do you trust in your science? Do you think your manuscript is ready for publishing and would you send it to a journal (whatever journal) in this state? Yes? Then go forward with it. Your manuscript can/will be judged by editors, reviewers and other scientists no matter if you publish in a journal or upload it to bioRxiv. A bioRxiv user survey by Sever and colleagues in 2019 could show that the majority of users received feedback on their manuscript either via Twitter (44%) or privately via email (37%) and conversation with colleagues (34%) [8]. In my small scientific field, I checked various labs on bioRxiv and Twitter and could find no indication of public bad-mouthing of studies which potential reviewers/editors could see. And honestly speaking, would I openly bad mouth a scientist in my field or would I rather aim at a personal contact with my criticism? I am not trying to convince someone, but I want to make critics aware that what they fear might not be happening publicly on social media and affecting the future prospects if it is a well conducted paper. On the contrary one of the highest motivations to post manuscripts on bioRxiv is indeed increasing the awareness of your own research (about 80%, right before the argument to be benefitting science) [8].

Another critical argument I happened to come across is rushing to preprint might sacrifice accuracy. This argument is absolutely valid and that’s why you should never rush to a manuscript — preprint or journal. And yes, there are manuscripts on bioRxiv that are not complete. One should keep in mind that you set the standard for your science when you upload a manuscript on a pre-

print server. This way others can also see what your standard of science is and what you consider a finished manuscript. Especially for ECRs this point might be crucial, but I will come back to this later. In my opinion preprint servers should not replace journals but rather serve as an add on. An add on which has a lot of advantages for the scientific field and yourself as a scientist.

“There is no selection and revision, and everyone can just publish everything”. Well, let’s be honest here: How often did you come across a published paper that had major mistakes or appeared everything besides flawless or where you wondered really this came out in journal xyz? So even with published papers I turn on my brain and try to evaluate the content of the study and that’s what we all are supposed to do and need to learn (see characteristics of the ideal scientists above). One could even turn this around and see it as a chance for an ECR to learn to reflect more on the science when reviewing bioRxiv articles instead of trusting journal names and impact factors. However, there comes a danger regarding the misuse of publicly available scientific data by mainstream media and the private sector which can be quite dangerous especially during times of Covid19. For this reason, bioRxiv (and other preprint servers) reminds everyone that the published studies are preliminary data reports and have not been peer-reviewed. Also, it can happen with peer-reviewed published papers as well – one of the reasons why science communication and education of the media is even more important nowadays.

Last but not least, two more arguments against posting on preprint servers appeared in common discussions: “Preprints have a lower visibility” and “I fear getting scooped”. I will leave the two last contra-preprint arguments just standing in the room for you to discuss with yourself after reading the pro-preprint argument part of this article.

The aforementioned survey of 4000 bioRxiv users has a nice collection of the most common pro-preprint arguments I personally came across with (see figure below) and reflects what the majority of ECRs of the department I work in point out.

First, I will refer to the arguments related to quality, impact and discoverability: “To increase awareness of your research, to benefit science, to control when research is available and receive feedback”. When posting your article on a preprint server the public, but also private feedback you can receive as an author is naturally from a broader audience either on the bioRxiv platform, via mail, on Twitter. With this your science can reach a community beyond your lab and coauthors and selected reviewers. Input at this stage of a manuscript even has the opportunity to better your chances of getting published since you can use questions or criticisms to prepare for your revision phase or revise your manu-

script before submission. Because of a faster dissemination of research your manuscript revision can potentially speed up. Further, the word about your science is out there and your research is visible and citable since you get a DOI with your upload to bioRxiv. Another study on bioRxiv, which was also featured on Natureindex.com, indeed suggests that published articles which have been uploaded on preprint servers get more citations and online visibility than those without a preprint [7]. In addition, it comes in handy for job applications as well. By uploading a preprint (instead of waiting until your manuscript is published after long revision processes and possible paper hopping) future employers can already see your research and your standard of science and might be more interested in hiring you.

Notably, by now common research funding agencies such as the NIH, MRC, EMBL, DFG and many more take preprints into account for job and grant application. If you are at a career transition stage, it might be crucial to present the work you did so far for future supervisors or grant agencies to judge from which field you are coming from and to get insight on what you did. These points are especially crucial for, but not exclusively, ECRs that are applying for postdocs, new positions or grants but it can also come in handy for faculty positions and such. Mentors of ECRs should especially consider these points and support their graduates.

More than 50% of the survey respondents also answered to stake a priority claim on their research as a motivation to upload to bioRxiv. This motivation should be crucial for everyone especially in highly competitive fields because you do prove to have been the first to have a manuscript ready at a given time-point and thus receive a timestamp to your research. This priority claim is also commonly checked in journals and there are even examples of side-to-side publication of two studies because one was uploaded on a preprint server before. Nowadays some journals even state a so-called “scooping protection” which means they will consider your manuscript if it was uploaded to a preprint server within a given time frame even though a competitor might have published a similar story in the meantime. Nonetheless, it can be a double-edged sword since competing labs might try to claim priority with an unfinished manuscript. This emphasizes why a discussion with your coauthors and supervisors about uploading a preprint is indispensable and is also vastly dependent on your field of research

Last but not least, posting articles on preprint servers has the chance to prevent redundant work (e.g. posting of negative data) and foster collaboration of similar projects or be a platform for posting controversial findings. In addition, we should not forget that by using preprint servers’ minorities in the scientific field (e.g. smaller unknown/younger groups, minorities or research from more underdeveloped countries) have a chance to

make their research available without the high submission and publishing fees, and can also easily access research of others. This has the chance to spread your research even wider and is one major reason for open access policies — to better the scientific field together! And let’s not forget uploading your manuscript to bioRxiv is for free [3, 7, 8].

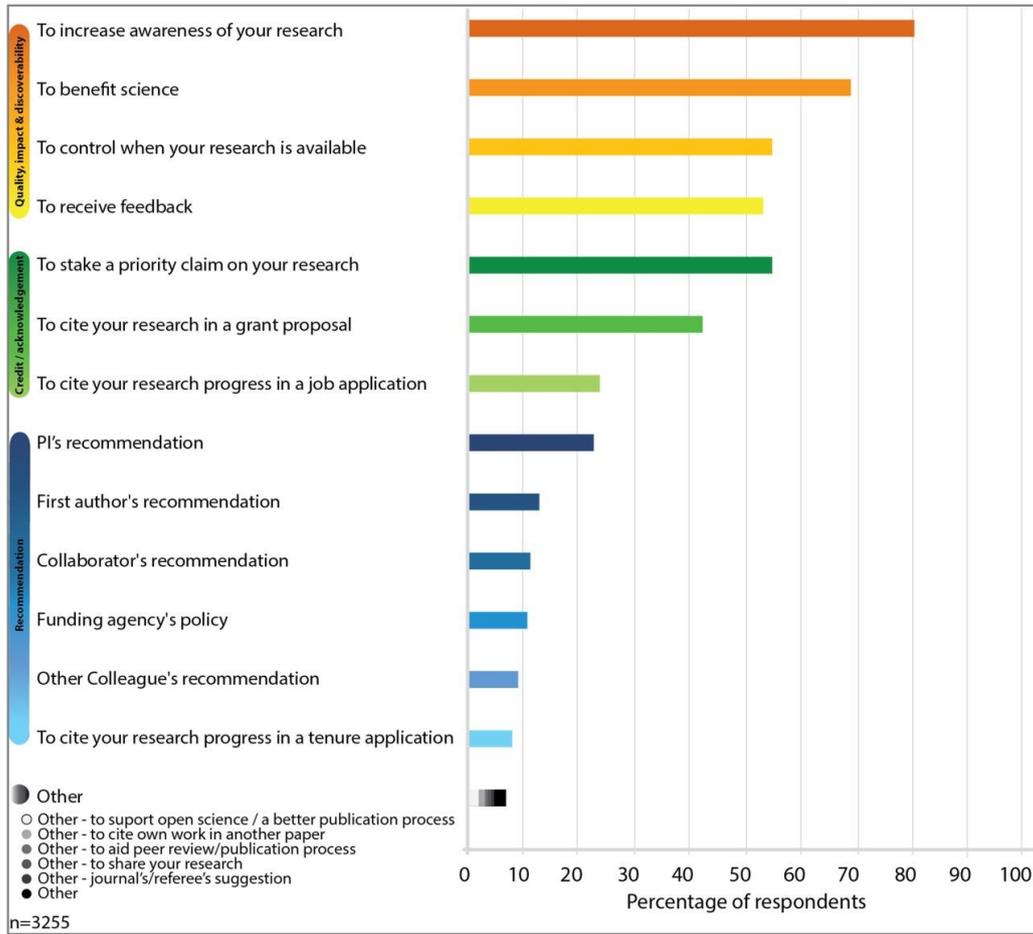
And now?

The development of the preprint servers has changed the way we think about distributing data and in the future it will most likely increase in several research fields, how quickly (or slowly) this occurs remains to be seen. Some journals, such as EMBO together with ASAPbio & others and recently also eLife, started initiatives called “Review commons” or “Preprint Review”. These services offer to review your manuscript on bioRxiv and consider its publication in a respective journal alongside [9, 10]. A future article by the Offspring will focus on this initiative so stay tuned.

If you read this article until this point you will hopefully have an overview of the most common arguments about preprint servers but by far not all. This can serve as a starting line for you to form your own opinion, read up on this topic (see literature below) and increase the awareness amongst your peers. You are convinced? Go out and have discussions with your fellow scientists, amongst departments, graduate schools and with your supervisors if your next manuscript will be uploaded to bioRxiv. Keep an open mind also for opposing arguments. After all, in my opinion scientists are rational, based on facts, curious, realistic, open and as transparent as possible, respectful, brave, and with an urge to shape and improve the future of science. Would you like to join me in this dream?

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11. Background Page 32,33 – *Scheme created by M.Eichel with Bio-render.com*



Motivations for posting work on bioRxiv. Taken from Sever et al. 2019 [7].

<https://www.biorxiv.org/content/10.1101/833400v1.full.pdf+html>



"I think uploading preprints is important to communicate your research fast and allows (especially early career researchers) to apply for grants and positions with citing their preprints. It also opens up [channels] to receive feedback from the scientific community before/ during the (often very long) publication process"

Doris Krauter (nee.Hermes) - MPI for Experimental Medicine, Göttingen

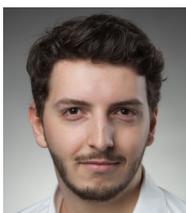


"Pros: It is citable, has a DOI, no need to say (under preparation); YOU (the "peer" can read it), non necessarily only reviewed by 3 anonymous "peers", if [the] paper [is] not published yet it is a way for new postdocs and PhDs to show their work before fellowship committees.

Cons: ?????

Don't be afraid that some journals might not like it, be brave and change a broken system. As a matter of face, some reviewers don't accept a manuscript if there is on preprint available."

Alejandro Restrepo - MPI for Experimental Medicine, Göttingen



"Scientific advancement in the form of publications is in most cases publicly funded and as such should be accessible to everyone. On this notion, opening new research results to a broader potential audience might also increase the reach of a publication. In highly competitive research fields, the risk of getting scooped can be circumvented by preprints"

Tobias Buscham - MPI for Experimental Medicine, Göttingen



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Where do early-career researchers stand on Open Science Practices? A survey within the Max Planck Society

By Max Planck PhDnet Open Science Group, Daniel Toribio-Flórez^{1*}, Lukas Anneser², Felipe Nathan deOliveira-Lopes³, Martijn Pallandt⁴, Isabell Tunn⁵, and Hendrik Windel⁶

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Open Science (OS) is of paramount importance for the improvement of science worldwide and across research fields. Recent years have witnessed a transition towards open and transparent scientific practices, but there is still a long way to go. Early-career researchers (ECRs) are of crucial relevance in the process of steering towards the standardization of OS practices, as they will become the future decision-makers of the institutional change that necessarily accompanies this transition. Thus, it is imperative to gain insight into where ECRs stand on OS practices. Under this premise, the Open Science group of the Max Planck PhDnet designed and conducted an online survey to assess the stance towards OS practices of doctoral candidates from the Max Planck Society. As one of the leading scientific institutions for basic research worldwide, the Max Planck Society provides a considerable population of researchers from multiple scientific fields, englobed into three sections: Biomedical sciences, Chemistry, Physics and Technology, and Human and Social sciences. From an approximate total population of 5100 doctoral candidates

affiliated with the Max Planck Society, the survey collected responses from 568 doctoral candidates. The survey assessed self-reported knowledge, attitudes, and implementation of different OS practices, namely Open Access Publications, Open Data, Pre-Registrations, Registered Reports, and Replication Studies. ECRs seemed to hold a generally positive view towards these different practices and to be interested in learning more about them. Furthermore, we found that ECRs' knowledge and positive attitudes predicted the extent to which they implemented these OS practices, although levels of implementation were rather low in the past. We observed differences and similarities between scientific sections, which we discuss in terms of need and feasibility to apply these OS practices in specific scientific fields, but additionally in relation to the incentive systems that shape scientific communities. Lastly, we discuss the implications that these results can have for the training and career advancement of ECRs, and ultimately, for the consolidation of OS practices.

The above abstract has been formally published as an article in Frontiers. The full article can be found below



Voluntary Commitment: Climate-Friendly Business Trips – An Overnight Miracle

by Julian D. Rolfes, Evelyn Medawar & Jakob Schweizer

On September 18, 2019, the circulation of a voluntary commitment regarding [climate-friendly business trips](#) started. Its story, however, goes back to May 2019, to the first workshop on “Sustainability in the Max Planck Society” in Magdeburg ([Offspring article](#) covering this workshop and more). At the end of this workshop, an Interim Steering Committee (ISC) was elected with the task to set up a proper and legitimate network structure for the prospective Max Planck Sustainability Network. This was where the voluntary commitment started. The ISC is a bunch of politically well informed, if not actively involved people, with a relation to the MPS and with a heart for Mother Earth. They understand the bigger picture making them a fertile soil to sow the seeds of great friendship.

Evelyn, Jakob and I, are a group that also spends time with each other privately whenever possible. Bridging the distance between Essen, Magdeburg, Berlin and Leipzig, we use a Telegram group to organize ourselves as meetings in person are limited by the geographic distances between us. In this group, we share environment-related information like the Humboldt University’s voluntary commitment for sustainable business travels that got us excited. Without long hesitation, we shared it with the network and initiated the discussion that quickly led to the decision to set up our own voluntary commitment for the MPS. Using the HU’s voluntary commitment as a basis, we set up the MPS version in minutes. After proof-reading by the ISC, we distributed it to the Sustainability Network, PhDnet and Postdocnet. Our voluntary commitment proved to be very successful: Not even a week later, we had 200 signatures! Today, on December 18, we count 436 signatures.

To us, these numbers are immense! We did not even dare to dream about such a resonance, and we hope that the numbers will keep on growing. The response is already a strong message to the members of the MPS to cover the additional costs that typically come with taking the train instead of the plane. The time where money was the only limiting factor is over - and we think it’s time for the MPS to recognize this. We all



Insitutes of the MPS which already formed a local Sustainability group.

should recognize our environmental responsibility, and especially as scientists, we should acknowledge that there is no sound reasoning not to – only our ego and our habituation to affordable luxury are holding us back to make the right decisions. I think we should go even further and make the commitment to refrain from short-haul flights an MPS-wide rule; there are several German universities who set a good example already (climatewednesday.org/selbstverpflichtung/ & academicflyingblog.wordpress.com/). To tackle this issue, there are working groups within the Sustainability Network who refine different proposals on CO₂ compensation (to make train rides more sexy and economically interesting) within the MPS and a reformation of the Bundesreisekostengesetz on a federal level.

Currently, having at least one email a day in my inbox from a person who is willing to stay on ground is a huge motivation driver and a nurturing feeling of solidarity to continue working on sustainability within the MPS – and I hope that the inflow of signatures is not going to stop soon. Let all these mindful people continue to bring awareness to the topic of ‘ecological responsibility in business travels’ at their workplaces and may we all – as well as the MPS as a whole – continue the discussion. The Sustainability Network will send a catalogue of proposed measures including the list of signatures for the voluntary commitment to the President of the MPS. I am extremely looking forward to the moment when the network’s proposals and the voluntary commitment arrives at their desk, featuring all the engagement and motivation behind a huge group of scientists caring about sustainability.

If you would like to get involved with the Sustainability Network, look out for your local Sustainability group (if there is none, form one) and sign up to the network’s mailing list at: <https://listserv.gwdg.de/mailman/listinfo/sustainability> – you can also share your story regarding climate-friendly business trips on social media with us via **#SciFlyLess**.

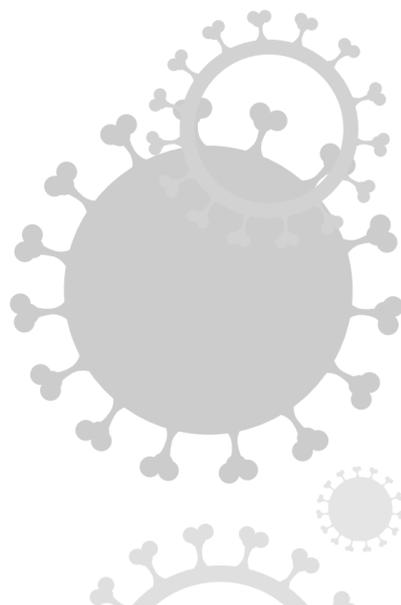


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**MAX PLANCK
SUSTAINABILITY NETWORK**



The Max Planck Sustainability network

The Max Planck Sustainability Network (MPSN) is a grassroots network within the Max Planck Society (MPG), with around 370 members from over 60 Max Planck research institutes, aiming to support sustainability within a German science association committed to fundamental research. The MPSN has adopted the twin goals of making research practices within the overall MPG more sustainable and of supporting local Sustainability Groups in making research practices at their individual institutes more sustainable. The MPSN counts members from diverse backgrounds, regarding both academic field of expertise and roles within the MPG. Its activities focus around Energy, Mobility, Supplies and Waste, Biodiversity and Food, with the ambition to assess impact and expense of each proposed measure. The network’s long-term vision is to make research more sustainable and to serve as a role model that inspires other scientific organizations to become sustainable and to optimize the operation of research and administration, which require both individual and structural changes.

Read an article by Sustainability Network on Making Science Organizations Sustainable published in *Frontiers in Sustainability*:

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to read the article



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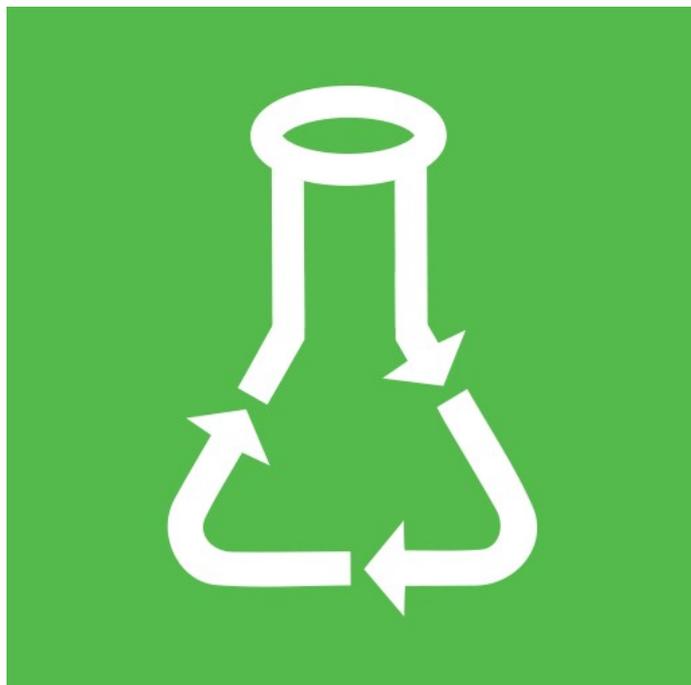
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to visit the Sustainability web-page



Labconscious biologists share sustainable laboratory practices

by Nicole Kelesoglu, editor and blogger



Being “labconscious” means having a broad awareness of the environmental and economic costs of performing laboratory work. Our online community at labconscious.com shares news and practical solutions to improve lab sustainability. These ideas range from simple actions that individuals can take to reduce single-use plastic waste or switch to greener protocols, to examples of group efforts for waste diversion, equipment sharing or energy initiatives. “That’s the way we have always done it” is not a good enough reason to stop biologists in our community from re-evaluating lab practices to prevent pollution.

As the editor for Labconscious, I feel quite proud that New England Biolabs supports this open resource for sustainability in life science. Scientists refer to the blog posts and resource pages for online calculators, green lab groups, services, and uniquely green lab supplies and technology. Labconscious shares this information freely and exclusively based on merit.

This resource has only increased in value in COVID-19 pandemic conditions. Staggered lab shifts and lab supply bottlenecks have heightened life science’s focus on lab operation efficiency. Labconscious blog readers already had insights on how a pipette tip washer and sterilizer works to reuse this plastic consumable, that

recycling lab gloves is not always the most sustainable disposal, that organizations can modernize sharing lab supplies, microfluidics can make biomedicine more efficient, and saving energy can be automated.

You might be surprised to learn how life science labs are succeeding in green lab initiatives. Featured ‘green lab tips’ has provoked their adoption into more labs. The life science specific context makes the applicability and potential pitfalls of sustainability tactics clearer upfront. Concurrently, lab sustainability professionals who assist labs to establish initiatives are sharing their quantified carbon and cost impacts. Biologists are encouraged, since they can set expectations based on other labs accomplishments. Going green in labs is in a growth cycle.

Our community is also helping to make lab sustainability ideas more accessible to talented scientists worldwide. We all know that time and research funding for scientists are not infinite resources. Resource efficiency is paramount. Labconscious receives inquiries from biologists in the Americas, Europe, Africa, Oceania and Asia. We communicate about broad and specific challenges. It’s gratifying to be able to amplify helpful information!

Join us! Your unique knowledge is needed!

You may be thinking... Energy? Water? Waste? Isn't that someone else's job to manage? How do we know that sustainability is a responsibility for biologists? If you take a step back to look at the big picture it becomes clear why biologists' input is critical. Your lab experience can help the entire community understand what is possible.

Biologists have highly specialized knowledge of the complex conditions required for assays, nucleic acid manipulations and culturing cells. A lab space must keep experiments running and keep vital biologicals and chemicals stable. Oftentimes no one outside the field, or sometimes even outside an individual lab setting, can determine how cold freezers must be set, how often water baths can be turned off, or whether less toxic chemicals can be used for analyses and still produce optimal results. As a profession, we must ask ourselves those questions or suffer complacency.

There are further nuances to going green that require broad life science participation. Not every green lab practice is possible or even necessarily more sustainable in every context. Beyond the type of science being done, the geographical location of a lab can determine true sustainability. For example, the worldwide recycling crisis and ocean plastic disaster has compelled biologists to reexamine the single-use plastic device life cycle. However, tactics to address this issue are restricted by upstream device design and downstream by locally available disposal services.

Eco-friendly lab work does not catch on when better ways are implemented in one lab, or even in one life science organization. The impact is exponential when the entire field of life science is aware and individual scientists are empowered to decide how sustainability can be applied to their lab workflow. I invite you to visit the Labconscious web site, to submit your ideas, and to sign up for the blog.

Thank you for your consideration and best wishes on your research projects!



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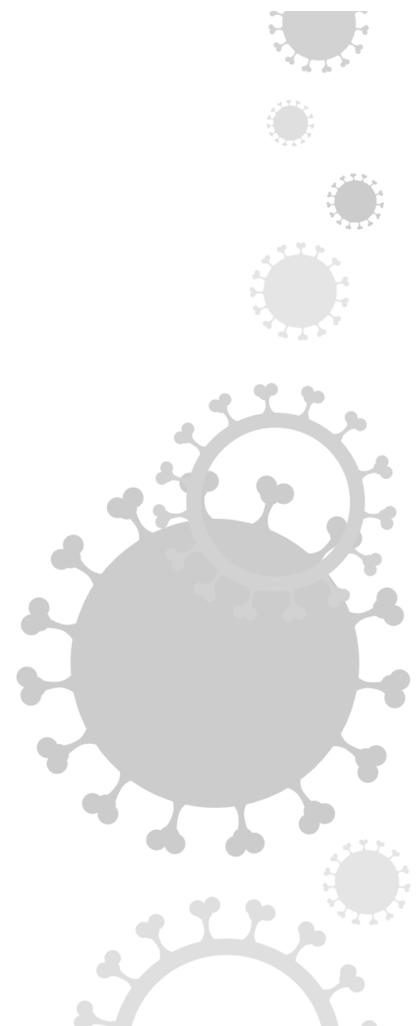


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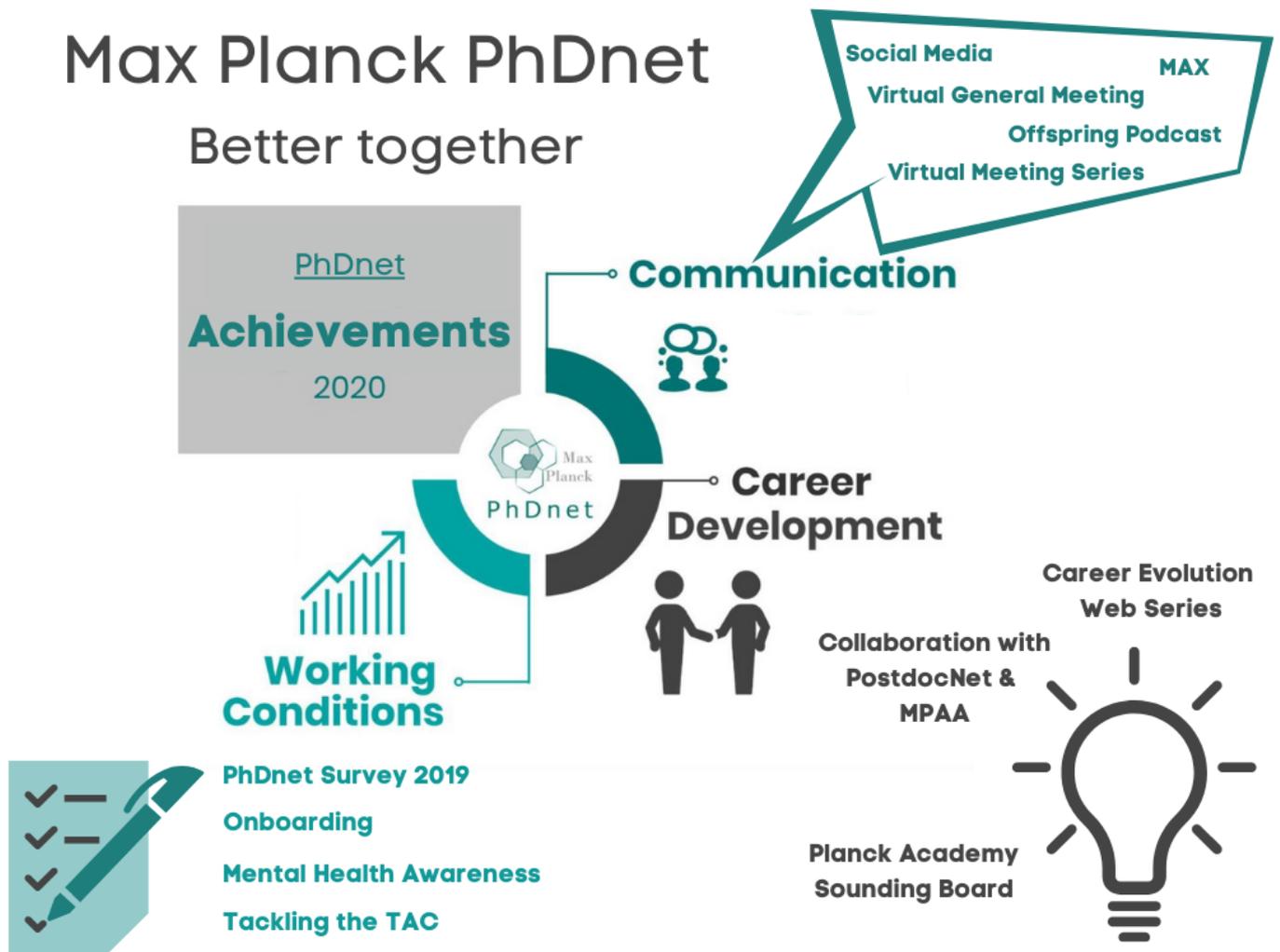
About the Author:

Nicole Kelesoglu is a science writer and social media manager with laboratory experience in microbiology, cell biology and molecular biology and with a strong interest in sustainable laboratory practices.

In brief, she studied Microbiology at the University of New Hampshire and afterwards joined the laboratory of Elisabeth Luna at UMass Medical School as a Research Technician for two years. Nicole then became product manager at Cell Signalling Technology in Danvers, Massachusetts. In 2010, she joined New England Biolabs as eMarketing technical writer with a focus on epigenetics and biological research agents. Currently, Nicole works as an editor, blogger and social media manager for Epiexperts and labconscious which receive support from New England Biolabs. (References: LinkedIn and labconscious.com)



Max Planck PhDnet Achievements 2020



With our first virtual General Meeting, an exciting, productive, but in many ways different year is slowly coming to an end for the 2020 Steering Group (SG). With the coronavirus pandemic interrupting our everyday lives in an unprecedented way, the work of the PhDnet had to be adjusted as well. The 2020 SG met face to face only twice this year: for a handover meeting at the General Administration (GA) in Munich in January, and for the opening ceremony of the Planck Academy at Harnackhaus in February. From then on, our group meetings, social activities, networking events and interactions with members of PhDnet or the GA all took place virtually. While we regret to have had only few occasions to get to know each other in person, we are nevertheless satisfied with our team effort and the achievements that we, on

behalf of PhDnet, are proud to report.

Our agenda for 2020 encompassed three major key points: Communication, Career Development, and Working Conditions.

Communication

Our aim to improve **communication** with the GA got off to a good start. At our handover meeting in Munich we got to know many members of the GA across various departments and were able to outline projects and collaborations.

However, starting in March it quickly became clear that communication of information about the handling of the

Covid-19 situation by the Max Planck Society (MPS) and its institutes had to become a number one priority. We therefore started to promote the use of **MAX** as a platform amongst the Doctoral Researchers (DRs) by creating a PhDnet team room and section subrooms, and by hosting a webinar on how to access and use MAX efficiently. In addition, we started our own PhDnet **Virtual Meeting Series** in April. For the first time in PhDnet history, we initiated Q&A sessions for DRs to talk with members of the MPS and GA about the situation of DRs in the times of an ongoing pandemic and beyond. We chatted with the CPT section head, members of the central and a local works council, the head of the Health, Safety & Environment unit, and the speaker of the scientific staff representatives of the Human Sciences Section. Importantly, the SG's annual **meeting with the president of the MPS** at the end of April took place virtually as well. Despite the unusual setting the meeting was constructive and fruitful, and we highly appreciated to have the time to discuss all important points of our agenda with the president. In May, in a follow-up **meeting with the head of the Human Resources department**, Kerstin Dübner-Gee, we were able to discuss in more detail aspects of the working conditions and career aspects of DRs in the MPS.

To promote our activities and provide information we increased our **social media presence** across all channels with regular posts on Twitter, Instagram and Facebook. In addition, the PhDnet webgroup drew up a task force to **restructure the PhDnet website** and made its content more accessible and streamlined. Moreover, all newly elected external PhD representatives now receive a **welcome e-mail** from us, to directly establish a strong connection with the DRs across the MPis. Lastly, we are currently in the process of finalising a **poster** to increase the physical visibility of PhDnet in the institutes. Apart from the Steering Group, the PhDnet workgroups contributed some exciting projects to improve our communication and outreach. First of all, the **Offspring** group launched a **podcast** for and by DRs. The podcast hosts and DRs themselves, Srinath Ramkumar, Nikolai Hörmann and Allison Lewis, regularly interview members of PhDnet, alumni with interesting career paths, or experts on Open Science (OS) and Open Access (OA). With over 2000 listens, the podcast has got off to a very successful start!

Communicating **MPS wide OS and OA strategies** has been another keypoint of the SG and the OS working group. The working group finalised their survey on the opinion and knowledge about OS practices amongst DRs

and are about to publish the report in a peer-reviewed journal. In addition, the group is writing up a position paper with recommendations to join forces with MPS bodies to increase OS practices in the institutes and the whole MPS.

Career development

At the start of the year the PhDnet joined forces with the GA and the PostdocNet in their efforts to develop career perspectives outside of academia for DRs and Postdocs. In the **Career Evolution web series**, which has been held regularly since July, the hosts interviewed alumni from various fields of industry who shared their experience with a wide audience (around 100 participants in each series). This series is a successful **new platform** to connect DRs with partners from industry and provides important **perspectives for their future**.

In addition to this collaborative work, the MPS introduced the **Planck Academy** at the beginning this year. This platform hosts **workshops** for DRs and Postdocs, but also for **Directors and Group leaders**. This is an important step towards shaping a better supervision culture in the MPS. We are enthusiastic that the PhDnet Steering group has been invited to **join the sounding board** of the Planck Academy to provide feedback on the needs of DRs and take part in decisions on the future development of this platform.

PhDnet Survey and collaboration with N²

An important measure to gauge the **satisfaction and current working conditions** of DRs in the MPS is the annual PhDnet survey. The **2019 survey report** was finalised in June this year and has received a lot of attention. While overall satisfaction has been increasing across the years, a high percentage of DRs suffer from **depressive symptoms** and anxiety due to aspects such as high workload and pressure from their supervisors. Around 19% of DRs receive work **contracts with a duration of 2 years** or less, and women, non-German DRs and those working in the HS section get **paid less** for their PhD works. All of this puts DRs in a financially and mentally vulnerable position. On the other hand, supervision agreements and TACs are slowly becoming the standard for all DRs.

Thanks to the work of our incredibly skilled and profes-

sional survey working group, we hosted several **survey presentations** directed to DRs but also heads of administration, IMPRS/PhD coordinators and managing directors. These presentations were extremely well received and the feedback has been positive throughout. We are glad to have brought our important findings to the attention of a much bigger audience than has previously been the case.

In addition, the PhDnet survey results are being compared to those of our **N² partner networks**, who distributed the same questionnaire to the DRs of their organisations. In the framework of N², we are aiming to publish the results of our **harmonized survey** to increase their significance even more.

Working conditions

As the PhDnet survey has shown impressively this year, **supervision** remains one of the key aspects for a healthy and successful PhD. The steering group tackled this issue by performing a **separate survey** amongst DRs on the topic of **Thesis advisory committees (TAC)**. It was shown that regular meetings with the supervisor and a functioning TAC provide a **healthy and productive environment**. With the help of the TAC survey, the steering group identified different kinds of TACs and provided some important documents and ideas on how to **form and work with a TAC**.

Another key aspect of this year's steering group has been the topic of **onboarding**. This includes the recruitment of new DRs, support for new PhD candidates as well as settling in at the MPIs and within the MPS. Together with the GA and the PostdocNet a **task force** was established to improve the onboarding process, with a focus on the ability to provide important **information as early and as transparently** as possible. We look forward to this fruitful collaboration in the coming years.

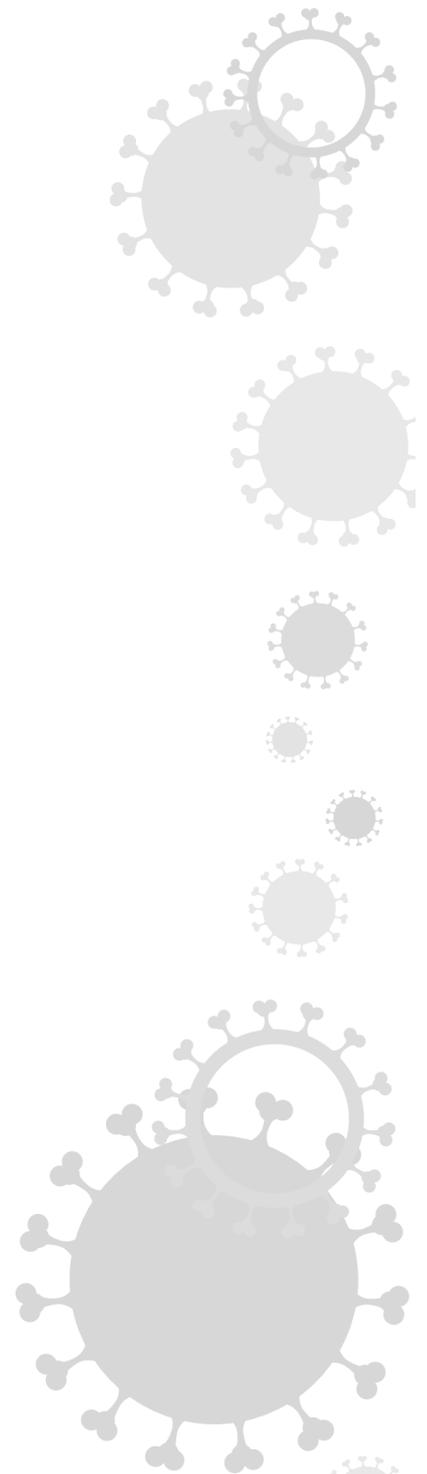
Furthermore, the 2019 survey highlighted again that the issue of **short contracts** for DRs. The importance of this topic was acknowledged by all stakeholders and it now discussed in **the presidential circle**.

Lastly the **Equal Opportunities (EO) group** of the PhDnet once more focused on the topic of mental health. The **Mental Health Collective** (with members of PhDnet and Postdocnet) was founded during the pandemic and has since established a **TeaTime** and revived the **Mental Health awareness week**.

Additional activities

For the first time, the PhDnet steering group received professional training in negotiation and communication skills, as well as media and press training. Both workshops were in a virtual format but helped the steering group tremendously in focusing our work and broadening our skills.

An important task of this year's steering group and secretary group had been the reform of the PhDnet **Statutes**, with a focus on the **election procedures**. The PhDnet will vote on these changes in this year's general meeting in November 2020.



More Working Groups of PhDnet

Survey Group



Survey Group

Have you ever wondered where PhDnet gets its statistics to back up their positions and to push for positive changes? It is the Survey Working Group. Annually doctoral researchers (DRs) receive a survey from PhDnet about their working conditions, supervision, career opportunities and many other modules. These surveys provide an invaluable body of data that allows the PhDnet to make informed decisions about how to serve DRs and strengthen our relationship to the Max-Planck Society (MPS) General Administration.

The Survey working group compiles and sets up the survey questions, ensures that everyone receives the survey, analyses the survey data and reports back to the Steering group, the MPS, external representatives and anyone else who is interested through reports and presentations. The flexible modules in the survey are adjusted each year to accommodate the most pressing topics to DRs, while other modules are asked each year to investigate long-term changes. In the past, the survey has been integral to many improvements for DRs, including raising the number of holidays within the doctoral employment contract (the "Fördervertrag") from 20 to 30 days and increasing awareness of mental health issues of DRs. If you have questions regarding the reports or you are interested to join the team,

contact us at survey.group@phdnet.mpg.de

Scan QR code to know more about the Survey Group:



Webgroup



In our function as webgroup, we maintain the PhDnet website and the @phdnet.mpg.de mailing lists to share information and help communication and exchange within the PhDnet.

We provide support to all other working groups with regard to the website, mailinglists or other web-related topics. We help with updates of workgroup pages, their layout, with figures and design if wanted. We create event pages and upload important information, e.g.

schedules. We keep the list of external representatives up to date.

For our work, we are in contact with all other workgroups, the steering group and the general IT of the MPS.

Got curious about our work? Just reach out to us!

All you need is motivation to develop new skills and some patience for trial and error. ;) You'll be rewarded with small mastering experiences, friendly "thank you" mails and the great feeling of being part of a community.

Contact us at webgroup@phdnet.mpg.de

Scan QR code to know more about the Webgroup:



Career Development and Conference



Career Development and Conference

At the beginning of 2020 Max Planck PhDNet Career Development and Conference WG joined forces with PostDocNet and Planck Academy to create a career event “Career Evolution: Science2Industry” focusing non-academic career perspectives for DR and Postdocs.

Since mid-July every Thursday a Max Planck Alumni, industry speaker or a professional coach joins for an hour in an informal setting to share their individual journey, insights and practical tips to successfully transi-

tion to non-academic positions. Kicking-off with science communication career, so far we have been able to cover several industries such as management consulting, chemical, pharmaceutical and data science, with many more to come in 2021.

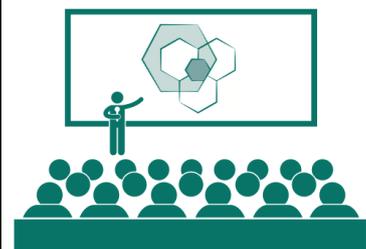
The latest episodes have attracted over 200 listeners per session. The high interest argues for an increasing need for professional development resources, as highlighted by Max Planck PhDNet 2019 survey results, which indicated that 56% of DRs are not satisfied with career development during their PhD. Furthermore, 85% of DRs at MPS wish for improvements in career development!

With ongoing web series we hope to connect DRs with real-life examples and spark the interest in exploration of different career possibilities.

Scan QR code for more information and join us:



General Meeting Group



The PhDnet General Meeting is an annual meeting of PhD representatives and interested doctoral researchers of the Max Planck Society.

The meeting provides the opportunity to get to know the PhDnet and have an exchange between new and experienced PhD representatives from different institutes. Furthermore the program of the General Meeting typically includes reports from the steering group and workgroups, and discussion of common problems faced by doctoral researchers.

More specific, the following topics will be covered:

- Getting to know the PhDnet.
- Presentation of the work done in the PhDnet during the past year and defining goals for the work of the PhDnet in the upcoming year.
- Discussion with representatives of the Max Planck Society - past meetings were often attended by the MPS president or a vice president as well as a representative of the Administrative Headquarters.
- Election of the steering group and formation of new workgroups.
- A lecture by an invited speaker from the Max Planck Society
- Social events (e.g. meeting dinner, visit to a local science-related attraction).

Scan QR for more information on the GM Working Group:



Secretary Group



The Secretary Group aims to improve connectivity between all institutes within our PhD network. Therefore, we maintain email lists, one of which is open to all PhDs within Max Planck Society. If you are interested in joining, please

have a look at our website.

Another goal is to have a PhD elected at each institute, who represents their fellow PhDs within PhDnet. This fosters exchange between institutes and maintains con-

nectivity with the PhDnet bodies. The details for the elections can be found in the Statutes. The Secretary group makes sure that all elections follow these Statutes to ensure that representatives are eligibly elected. Therefore, they provide guidance and assistance for every election procedure. By this, every institute will gain the opportunity to participate in the annual General Meeting and possess voting rights to decide on the future direction of PhDnet and choose new members for the Steering group.

Scan QR for more information on the Secretary Working Group:





Episodes 1 & 2 - Life of a Researcher



Mohamed El Brolosy and **Giulia Boezio** are doctoral researchers at the Max Planck Institute for Heart and Lung research. Both being international students, they talk about their life in Germany as an Expat, and the challenges they faced when they started to pursue their doctoral work.



SUMMER OF OPEN SCIENCE

Episodes 3 & 4 - Open Access

Dr. Peter Suber is the director of the Harvard Office for Scholarly Communication. He has been involved with the Open Access Movement from the very beginning, even before the international initiatives were conceived. We talk about his career path that ultimately lead to the position he holds today, we discuss the history of Open Access, copyrights in publication, peer review and preprints among other topics. You can find more about Dr. Peter Suber and his work in the interview.



Episodes 5 & 6 - Research Evaluation



Dr. Paula Stephan is a professor of economics at the Georgia State university. Her research concerns the career outcomes of early career researchers and how research assessment is performed. We discuss about the importance of networking, the career outcomes of doctoral and post-doctoral researchers in the sciences in this part of the discussion. You can find more about Dr. Paula Stephan in the interview

Episodes 7 & 8 - Scientific Misconduct

Dr. Elisabeth Bik, a scientific consultant/detective, who is uncovering publications committing scientific misconduct. We discuss details about how she became one of the most well-known people to publicize research papers that contain image duplications. Furthermore, we talk about reasons for scientist to fake their data and what some causes could be. If these topics interest you, find out more details in the interview.



Episode 9 - Research Integrity



Dr. Noémie Aubert Bonn a researcher who Researches Research. We discuss about Meta research, Research Integrity and ways to change the current system of academia, publishing and many more. If you are interested to find out more, feel free to check out Dr. Noémie's work on Research Integrity here: <https://www.biorxiv.org/content/10.1101/2020.02.12.945733v2>. More details can also be found in the interview.

HIGHLIGHTING NON ACADEMIC CAREERS

Episode 10 - Scientific Venture Capitalism

Dr. Sri Teja Mullapudi is a Technology and Venture development Analyst at Toronto Innovation Acceleration Partners (TIAP) a VC firm working towards venture building of early-stage health science technologies emerging from Toronto's universities, hospitals, and research institutes. We discuss how his life in science and working in a lab environment equipped him with the right skills and tools to thrive in different environments. You can find more in the interview.



Episode 11 - Founding a Biotech Company



Dr. Anthony Hyman is a director at the MPI for Molecular Cell Biology and Genetics in Dresden. In our interview with him, we talk about his illustrious career with becoming a Director of a Max Planck Institute at a very young age as well as his entry into the Biotech Startup field with his two companies focusing on RNAi and Bio-molecular Condensates. Listen to the interview to hear his journey through the Academic and Bio-Tech startup spheres.

Episode 12 - Science and Policy

Dr. Jorg Körner works at the interface of Science and Policy at Acatech, a company which gives advice to the federal and state governments of Germany on future technologies and scientific policies. Dr. Körner shares his journey to Acatech and his experience working at the intersection of politics and science. Furthermore, he explains the process of new innovations and technologies making their way into the daily lives of the general populace. To know more details, listen to the interview.



Coming Up

Episodes 18, 19 and 20

Dr. Klaus Blaum, Dr. Asifa Akhtar, and Dr. Ulman Lindenberger

The three new **Vice Presidents** of the **Max Planck Society**, in an exclusive interview with the Offspring Podcast.

STAY TUNED



PHOTO CREDITS:

Giulia Boezio: Giulia Boezio; Mohamed El Brolosy: Mohamed El Brolosy
Peter Suber: Peter Suber
Paula Stephan: Paula Stephan, GSU
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Ulman Lindenberger: David Ausserhofer

2020 PhDnet General Meeting



More info @ bit.ly/PhDnetGM2020

#PhDnetGM2020

We would like to thank everyone who joined us for the PhDnet General meeting Nov. 4-6th 2020. We highlighted the structure of the Max Planck Society, PhDnet working groups, involvement with N², updated our statutes and elected a new steering group. We would like to thank Prof. Dr. Martin Stratmann (President of MPS), Dr. Asifa Akhtar (BMS VP), Dr. Andrea Musacchio (BM Section Chair), Dr. Peter Druschel (CPT Section Chair), Ulrich Becker (SH Section Chair), Dr. Eduardo Ros (CPTS Scientific Staff Representative), Dr. Gabriele Bixel (BMS Scientific Staff Representative), Markus Burtscheidt (Chairman of General Works Council), Christoph Kolbe (Corona Task Force of the MPG), Julia Lutz-Seitz (head of internal investigations unit of the MPG), Dr. Gregor Eichele and Dr. Hans Jürgen Butt (Ombudpersons of the MPS), Kerstin Dübner-Gee (Head of Human Resources Department of the MPG), Ilka Schießler-Gäbler (Programs & Networks- Alumni, PhDnet & Career Steps Network; Department of Human Resources, Development & Opportunities MPG), all of the working group coordinators, and all participants.

We hope you learned about the inner-workings of the Max Planck Society and joined a working group. You can find the slides and resources from the general meeting on the PhDnet website.

Sincerely,

Your 2020 Steering Group

PhDnet Steering Group 2021

At the General Meeting, elections were held for the 2021 Steering Group, and here are the winning candidates



Lea Heckmann - Spokesperson

Lea is a DR at the MPI for Physics in Munich and during the past year she led the analysis of the PhDNet survey results. Now she is thrilled to use the abilities and insights gained from that experience in her new role as spokesperson to push for equality in working conditions and to work on ensuring a supportive work environment for all MPS Doctoral Researchers.



Sarah Young – Deputy Spokesperson

Sarah Young is a DR at the MPI of Colloids and Interfaces in Potsdam and is very excited to join the PhDnet Steering group for a second year in a different role, along with a motivated and energetic team. In her new role as Deputy Spokesperson, she wants to continue her work on the DR Onboarding process, along with the General Administration and PostdocNet, as well as with a task force within the Equal Opportunities working group of PhDnet. In addition, she hopes to raise voices for all DRs in the sounding board of the Planck Academy and contribute to N². All these activities will hopefully lead to better working conditions for MPS Doctoral Researchers.



Florian Teichman – General Secretary

Florian is pursuing a PhD at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig. In his function as General Secretary of the Steering Group 2021, he plans to work on improving communication and exchange at all levels of the PhDnet. As Group Leader of the Secretary Working Group, he aims to focus his best efforts on assisting every Institute with the External Representative Elections.



Johannes Bischoff – Chemistry, Physics and Technology Section Representative

Johannes is a DR at the Fritz-Haber-Institute in Berlin which is part of the Max Planck Society. After being elected as the external PhD representative he started exploring the PhDnet and discovered the detailed organization or the different working groups, seminars, career help, legal help, social activities and so on. Now, as the CPT Section representative, through his own experience he is motivated to enlighten other PhD students on the opportunities provided by the PhDnet. Also, he likes to talk a lot, you can always contact him for a chat. :)



Paula Margareta Albu (Marga) – Biology and Medicine Section Representative

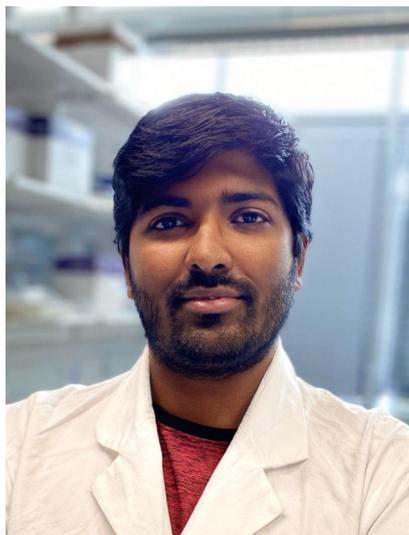
Marga is a DR at the Max Planck Institute for Heart and Lung Research in Bad Nauheim. As BMS Representative she would like to help continue the work focusing on career development, as well as tackling issues associated with communication, mental health, diversity and inclusion, which she believes are strongly interlinked.



Aroma Dabas – Human Sciences Section Representative

Aroma is a DR at the MPI for Human Cognitive and Brain Sciences. As the representative of the Human Science Section, she aims to continue the work on improving communication between the doctoral researchers and the General Administration. Particularly, she hopes to increase the options of training and workshops offered in the Learning Management System (LMS) to reflect the diversity of the Human Sciences Section.

Meet the Editorial Team



Srinath Ramkumar is a 3rd year doctoral researcher at the Max Planck Institute for Heart and Lung Research in Bad Nauheim. His primary research goal revolves around understanding the role of Extracellular Matrix proteins in heart development and regeneration. He works under the supervision of Prof. Didier Stainier, a renowned expert in the field of developmental genetics. He strongly believes that effective communication of scientific research is essential and using any modern means necessary to do so must be adapted quickly and efficiently. Hence, he joined the Offspring team in 2018 with a goal to incorporate informational videos with clear scientific messages that the general public can easily digest. He also started the podcast series for the Offspring Magazine along with Nikolai Hörmann in 2020 to increase the reach of Science Communication and important topics of interest to academics such as Open Science, Open Access and Mental Health. Outside the academic sphere, he enjoys film and music production. He is a professionally trained singer and violinist of the South Indian tradition of Classical Music called Carnatic Music, and he loves to play badminton and football.



Maria Eichel just recently finished her PhD at the Max Planck Institute for Experimental Medicine in Göttingen. Her studies focus on the communication between glial cells & axons within the peripheral nervous system. For Maria communication is the key thus she joined Offspring 4 years ago and has been involved in several projects from mental health, to career interviews & open science. Sadly everything has to come to an end but Maria is really excited about what the future Offspring members (including finally the Podcast) will tackle in the next few years. When she is not running around organizing things or doing experiments, Maria enjoys to read a good book with a hot cup of tea, loves to travel (this year she is discovering her home country Germany), meet friends for wine (this year more digitally) and binge watch TV series.



Merle Ücker came to the Max Planck Institute for Marine Microbiology in Bremen following her childhood dream to be a marine biologist. She is now a fourth year doctoral researcher in the Department of Symbiosis. Instead of swimming with dolphins, she got friends with the Linux command line and investigates population genomics of deep-sea mussels and their bacterial symbionts using bioinformatics. Through her role as PhD representative, she got to know the Offspring in 2018 and joined the team to get some editing experience and revive her passion for writing. When not troubleshooting error messages, she enjoys exercising, gardening, crafting or being outdoors (ideal to see friends in times of Corona).



Barbara Safaric is a PhD candidate at the Max Planck Institute of Biochemistry in Munich. In her PhD she is interested in how DNA replication takes place on a single molecule level. Barbara feels really passionate about improving working conditions for PhD students, thus, she is not only participating in the Offspring, but is also involved in the PhDNet Equal Opportunity workgroup as this year's spokesperson. EO is actively working on assuring equal rights within MPS for all minority groups, celebrating diversity and promoting mental health. To put further emphasis on mental health, together with few other motivated colleagues, she was involved in founding the Mental Health Collective of MPS.



Leonie Keller is a 3rd year PhD candidate in Biology at the MPI for Heart and Lung Research in Bad Nauheim, where she works in the field of cardiac regeneration. Already in childhood she got fascinated by the living nature, spending the holidays on her grandparents farm and performing first studies by collecting and observing snails, frogs, rabbits and donkeys. When she heard about Offspring, she was immediately full of enthusiasm, as an opportunity to combine her passion for science with her passion for language was exactly what she was looking for. In her free time, she likes to spend time in nature with a preference for beaches, plays cello, cooks and hang out with family and friends.



Nina Lautenschläger is a 3rd year doctoral candidate at the Max Planck Unit for the Science of Pathogens in Berlin. In her thesis project, she is developing new genetic tools to understand how Toxin-Antitoxin systems are regulated in the human pathogen *Streptococcus pyogenes*. Besides working in Microbiology, she enjoys creating abstract artworks with alcohol inks or designing graphics, logos and comics using Affinity Designer. To make some room for more creativity next to the lab work, she joined Offspring in November 2019 to contribute to the design and layout of the articles and the final magazine. When she is not busy with cloning, she enjoys baking, playing with her labrador puppy "Nala", watching architecture and interior design series or spending time in her shared art studio space.



Nikolai Hörmann is a 4th year doctoral researcher at the Max Planck Institute of Neurobiology. He is working on the development of primary, motion-sensing neurons in *Drosophila*. After learning of the PhDnet during the 2018 General Meeting, he first joined the Open Science Workgroup, which he is coordinating in 2020. As Public outreach is an important topic of Open Science, together with Srinath, they decided to start a podcast to highlight certain topics surrounding research and the scientific system. Furthermore, he likes to contribute an article to the magazine every now and then to improve his writing skills. Aside from research, he enjoys doing sports like football, tennis and badminton as well as playing the piano.



Adrian Lahola-Chomiak is a 2nd year doctoral researcher at the Max Planck Institute of Molecular Cell Biology and Genetics in the lab of Dr. Jacqueline Tabler. He combines mouse genetics, live imaging, and biophysics to understand how shape is generated in mesenchymal tissues through the lens of the mammalian skull vault. Adrian joined the podcast to pursue a long time passion for journalism and science communication. He hopes to highlight the conflicts between science, scientists, and the broader society in which they live. When Adrian isn't troubleshooting microscopy he spends his time immersed in geeky hobbies. Computer parts, sourdough bread, Dungeons and Dragons, and wonky economic issues all compete for his free time.



Allison Lewis is in the first year of her doctoral research at the Max Planck Institute for Molecular Cell Biology and Genetics in Dresden. She moved to Germany from Edmonton, Alberta, Canada after completing an MSc in Medical Genetics. Now in the lab of Anne Grapin-Botton she uses organoids to understand the regulation of progenitor maintenance and differentiation in the human pancreas. She joined the Offspring working group last year during the PhDnet general meeting to get experience in science communication. In her down time she likes watching bad movies with her girl friends, and playing board games and Dungeons & Dragons. In these solitary Corona times she enjoys embroidery, knitting, and trying to keep her herb garden alive.



Sandra Fendl is a sixth year doctoral researcher and about to finish her PhD at the Max Planck Institute of Neurobiology in Munich. In the lab of Alexander Borst, she is developing new genetic methods to study neurotransmitter receptors in the fruit fly brain. After being a PhD representative in 2016, and co-organizing the first MPG neuroscience PhD symposium WireUp in 2019, it took her another year to find her way to the PhDnet.

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