Berlin ECR Conference 2020 organization team: Jelena Brasanac, Rico Haas, Corinna Hartling, Majed Kikhia, Eva Matthaei, Ana Sofia Oliveira Gonçalves

correspondence can be addressed to majed.kikhia@charite.de
eva.matthaei@fu-berlin.de
corinna.hartling@charite.de



To the presidents of the BUA universities

Prof. Dr. Heyo Kroemer, Prof. Dr.-Ing. Dr. Sabine Kunst, Prof.Dr. Christian Thomsen, Prof. Dr. Günter Ziegler

Berlin 25.02.2021

Dear Prof. Dr. Kroemer, Prof. Dr.-Ing. Dr. Kunst, Prof. Dr. Thomsen and Prof. Dr. Ziegler,

On October 29-30, 2020, the Berlin University Alliance (BUA) held an online conference for early career researchers (ECRs) under the motto "(In)Credible Research - for credibility, integrity, and reproducibility of research." The conference with 150 registered participants was organized by ECRs and served as a platform for young scientists in Berlin to discuss challenges they currently face in academia, share experiences, and propose changes. In order to improve the quality and robustness of research conducted within the BUA, we identified major challenges faced by young researchers. The insights from the conference will be valuable when considering future policies at BUA universities.

We are confident that this open letter marks the beginning of a constructive dialogue between Berlin ECRs and Berlin university leadership. This dialogue will become actionable in particular in objective 4 of the BUA: "Promoting Talent".

Towards a healthy promotion of talent

Evidence of a mental health crisis among ECRs shook academia (Evans 2018, Woolston 2019), showing a six times higher prevalence of depression and anxiety among graduate students as compared to the general population. Could it be a coincidence that while the number of published scientific papers is skyrocketing, anxiety and depression among academics are also scoring their highs? What is behind these worrying statistics and why academia seems detrimental to researchers' mental health were some of the questions we wanted to tackle at InCredible2020. Even though we did not access depression and anxiety in a systematic manner, when asked about their mental health, 63% of our participants reported that PhD work has a negative impact on their mental health. Despite the fact that mental health is a substantial problem on its own, we feel that in the current academic settings, it is merely a symptom of a systemic problem.

The academic system is marked by constant competition for scarce resources putting pressure on researchers at all career stages. PhD students face a particular struggle as they are most dependent on support from the system. Participants at the conference reported three problems central to ECRs:

- 1. Pressure to meet publication requirements in limited time
- 2. A lack of adequate training resources
- 3. Insufficient supervision and mentoring as PIs have many conflicting responsibilities.

Combined, these issues create an environment that is experienced as detrimental to mental health and incentivizes suboptimal research.

To improve the situation, we ask all BUA universities to critically review their PhD requirements and abolish expectations that cannot be reconciled with robust, transparent, and trustworthy research. This will also require moving away from outcome focused research. For this, PhD students must get systematic and in-depth training in good scientific practice, research methods, and field specific topics. As not all researchers can stay in academia it is the responsibility of the universities to support ECRs in a potential transition. Therefore, career development programs need to be set up that address skills beyond those needed in academia and ECRs actually should be given the opportunity to attend these courses. At the same time, do not leave supervisors alone. Supervision should be engaging, inspiring, and fun, instead of a requirement, one has never been prepared for. That is why we ask universities to provide suitable coaching programs and courses for our supervisors.

From this we see three concrete steps that the BUA and their respective universities need to take:

- Each institution and their respective faculties need to critically review their PhD requirements with a focus on responsible research conduct. The resulting summary report will be the basis for a BUA wide consensus on how to reconcile subject specific requirements with the need for transparent and robust research.
- 2. All doctoral candidates should be given the opportunity to engage in meaningful training that will support their individual career goals. The BUA institutions need to create binding rules that ensure enough time, resources and professional training programs are available for *all* doctoral students within the BUA.
- A mandatory program towards excellent supervision needs to be developed and implemented within the BUA. Supervision quality needs to be monitored by the institutions and suitable improvement steps need to be implemented.

We strongly believe that a genuine interest in research and a hope to meaningfully add to human knowledge motivates young scientists. A university should be a place to nurture that hope and grow that interest. Our young generation of researchers deserves a system that equally aspires to the ideals of equality, integrity, and rewarding robust rather than catchy research. Such changes will make academia a healthier place and will improve the quality of research. Above all, they will allow researchers to enjoy their work and hopefully achieve breakthroughs that push society forward.

As ECRs in Berlin, we are grateful that our city's institutions advocate scientific credibility and integrity. With the Berlin University Alliance, we believe that our city can serve as a role model for change. We, as young researchers, are willing to play an integral role in that process.

Kind regards,

Jelena Brasanac, Rico Haas, Corinna Hartling, Majed Kikhia, Eva Matthaei and Sofia Oliveira Gonçalves

Co-signed by participants of the Berlin ECR conference 2020:

Anika Hartmann PhD student Charité Berlin

Anna-Lena Eckert PhD student Charité Berlin

Ann-Kathrin Domke PhD student Charité Berlin

Dr. Delwen Franzen Post-doc Charité Berlin

Ekaterina Potapova PhD student Charité Berlin

Eva Gabriel PhD student Charité Berlin

Dr. Friderike Weege Post-doc Charité Berlin

Janine Wiebach PhD student Charité Berlin

Jessica L. Rohmann PhD student Charité Berlin

Laura Andrea Barrero Guevara PhD student Charité Berlin

Lina Samira Bahr PhD student Charité Berlin

Martin Holst PhD student Charité Berlin

Meggie Danziger PhD student Charité Berlin Victoria Stiglbauer PhD student Charité Berlin

Wera Pustlauk PhD student Charité Berlin

Dr. Ahmed Khalil Post-doc Charité Berlin & Humboldt-Universität zu Berlin

15 further PhD students and 2 Post-docs from Charité Berlin who preferred to remain anonymous

Martin Hanik PhD student Freie Universität Berlin

Martyna Gajos PhD student Freie Universität Berlin

Matthias Schulte-Althoff PhD student Freie Universität Berlin

Paula Samsó Ferré PhD student Freie Universität Berlin

Carolin Steinert PhD student Freie Universität Berlin

Dilara Zorbek Master student Freie Universität Berlin

And 2 Master students, 4 PhD students and 2 Post-docs from Freie Universität Berlin who preferred to remain anonymous

Aaron Peikert PhD student Humboldt-Universität zu Berlin

Felix Klotzsche PhD student Humboldt-Universität zu Berlin

Katharina Bögl PhD student Humboldt-Universität zu Berlin Luisa Balzus PhD student Humboldt-Universität zu Berlin

Paul Pfeiffer PhD student Humboldt-Universität zu Berlin

Richard Wundrack PhD student Humboldt-Universität zu Berlin

And 3 Master students from Humboldt-Universität Berlin who preferred to remain anonymous

Jo-Anne Velin PhD student Technische Universität Berlin

Robert Spang PhD student Technische Universität Berlin

Tilman Krokotsch PhD student Technische Universität Berlin

and one PhD student from Technische Universität Berlin who preferred to remain anonymous