**EDITORIAL** 

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What do we know about the world, about ourselves, about reality? And from where do we know it? Of course, this is also closely related to the question of how superstition, conspiracy theories and persistent misbelief can become established. In the end, it's about understanding our existence and our ability to shape it—with all its consequences and by taking responsibility for our actions. Science is probably the most effective tool humanity has ever created to tackle these challenges. Science pursues a straightforward goal and has an almost sporting attitude: May the best theory win! And it will continue to do so until there is an even better one. In this context, better means that it—the new theory—describes the world even more accurately.

The knowledge of things, of existence and of our possibilities for shaping things must be made accessible to humanity, especially because only a few people, the scientists, are involved in the processes of scientific theory formation and its falsification. It is imperative to organise the transmission of knowledge and to transfer initially exclusive knowledge into an educational process that enables an informed and connected society to gain knowledge, to understand and to make the "right" decisions. This enlightening goal is arguably the most noble objective of science communication and makes every member of its guild stand before the auditorium with a proud chest and confess: I am a science communicator!

The fact that, today, science communication also pursues less noble, even downright profane goals, should be confessed right away in the introduction to this compact handbook.

Science has always competed for limited resources: Money and personnel. Money that flows into research cannot flow into the expansion of daycare centres. Likewise, a brilliant programmer who gets paid well working for a huge e-commerce company is no longer available to the university science system. The science sector therefore has to figure out its place in the world. As a result, science – and with it science communication – has no choice but to submit to the various mechanisms of marketing and the attention economy.

The conflicting goals of modern science communication - i.e. empowering society while at the same time optimising one's own image in order to maximise acquired resources - form the often uncomfortable balancing act of the working reality within this profession.

This handy booklet aims to empower the reader with 50 compact introductions to relevant topics, which aim to capture the essential mindset and diversity of working practice in contemporary science communication. It is aimed at researchers across all disciplines seeking further qualifications, entry-level employees in science communication departments and anyone who wants to take their first steps in the field. These 50 essentials offer an introduction to the tumultuous world of science communication – from the pens of many proven experts who have formed the team of authors.

Those who have a good overview of the entire field and have reflected on the wealth of options in current science communication can make wise decisions about its design. Surprisingly often, it is a matter of leaving things undone. Identifying and excluding ineffective activities that only waste time and money. If you can avoid the "rat race" of science PR, you should. The art, if you like, is to find the right balance between benevolent science communication and goal-oriented science PR and not to get bogged down in too many parallel "construction sites" of communication. Careful consideration, prioritisation, and responsible decision-making are essential components of good science communication practice. We are therefore conveying the goals of science communication in

general to the readers and thus to the makers of the congenial and wondrous world of science communication.

We would like to express our sincere thanks to our project colleagues Oliver Glassl, Nicole Paschek and Céline Lecarpentier from the University of Luxembourg for their contributions and unwavering support. We are also grateful to the Luxembourg National Research Fund and the University of Luxembourg for their financial support, which has enabled us to carry out this project. And we would like to thank all the authors who have contributed their valuable insights and perspectives to this book. As editors, our aim was to curate a collection of articles that would inspire and engage the readers while preserving the individuality and authenticity of each author's voice. The diverse views and styles presented in this book reflect the multitude of facets, goals and circumstances within the field of science communication. While all the texts in this book come from the authors, the graphics mostly result from a collaboration between the editors and the graphic designers. So last but not least, we would like to thank HUMAN MADE for their outstanding creative input.

With the goal of inspiring and enlightening the readers, we aim to offer an enjoyable and educational experience. Finally, in the spirit of good edutainment, we also hope that you find great pleasure in the exciting journey of discovery that awaits you.

## The **Editors**



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