GUIDELINES FOR GOOD RESEARCH COMMUNICATION

Preamble

Science shapes many aspects of private and social life. It is the basis for political, economic and personal developments and decisions. Science changes society with new findings, technologies, processes and ideas, and the scientific community systematically reviews its own results, methods and premises. Science is becoming more specialized and complex. This makes it increasingly difficult for many people to grasp and understand current research findings, weigh up opportunities and risks and recognize potential conflicts.

Within the sense of these guidelines, research communication is the communication of scientific information with the public. This includes communication by institutions and individual researchers, but does not include journalistic reporting on science or communication within the scientific system.

Research communication makes scientific topics accessible to the widest possible target audience, and provides tools for dialogue.

Citizens can promote or hinder science, and can grant or withdraw trust. This means that reliable information from and about science is becoming increasingly important. Those who communicate scientific knowledge therefore have a great responsibility. The framework conditions have not only changed as a result of internal scientific and social developments.

With dwindling resources, journalism is losing the ability to critically scrutinize the reliability of information. At the same time, there are more and more opportunities to share scientific knowledge with citizens and to interact with them directly via the internet and social media, at events or exhibitions. This increases the need for clarity, quality and honesty in the information and services provided.

Researchers also have a special responsibility to communicate their scientific findings in a clear and understandable way. They help to ensure that science is not only accurate and up-to-date, but also accessible and understandable. Researchers should also actively seek dialogue with the public and be prepared to answer questions and engage in discussions.

Communication officers at scientific institutions are the custodians of good research communication within their establishments. They take on an advisory and steering role in partnership with the researchers and participate in national and international discourse on practice and research in research communication.

The scientific institutions ensure appropriate framework conditions for research communication. This is especially true when communication leads to conflict. The institutions have a duty to care for the actors communicating on their behalf.¹

Good research communication:

- is part of good research practice. In this sense, these guidelines are inextricably linked to the Guidelines for Safeguarding Good Research Practice;
- makes the positions of all those involved in the communication process visible and promotes respectful and open interaction;
- raises awareness about science in its various disciplines and explains the working methods and perspectives of researchers;
- addresses the questions and needs, and possibly the fears and reservations, of citizens and shares these with the scientific community and its decisionmaking bodies. It facilitates dialogue between the scientific community and society at large;
- recognizes and considers the demands and needs of journalists, including their working methods, influence and the possible consequences of reporting. It works actively with the media;
- extracts from the wealth of data available the information that is relevant to society. Self-interest should be just as unimportant as the alleged suitability of the media;
- works with the facts. It does not exaggerate research successes and does not trivialize or conceal risks. It avoids information that raises unfounded fears or hopes. It presents a transparent research process and, where possible, provides free access to the scientific sources. Good research communication facilitates dialogue about the opportunities and risks of scientific methods and results;
- identifies the limitations of statements and research methods. It assesses the

¹ Siggener Impulse 2020: Die Krise kommunizieren. Siggener-Impuls-2020 Krise.pdf

significance of the information for science and society and places it in the context of the current state of research in accordance with scientific honesty. Research communication names sources and contact persons. It makes interests and financial dependencies transparent;

- addresses the motivation and work of researchers. Citizens are interested not only in facts and information, but also in the process of scientific work and the people involved;
- prepares information in a way that is appropriate for the target group and in language that is easy to understand;
- in direct, non-journalistic communication, prefers to use open tools and channels that are as accessible as possible, making knowledge available to as many people as possible without distorting presentation and context, and making content available under a Creative Commons licence wherever possible;
- is value-led*² and goal-orientated. It defines standards for the quality of its processes and results. It reflects self-critically on its effectiveness and avoids unnecessary or inefficient measures. Its actors provide information about their working methods and make the role of the respective speakers transparent;
- is constantly evolving and adapting its objectives, strategies and measures when necessary, for example due to technical, social or scientific changes. It takes note of research findings on research communication and remains in constant dialogue with colleagues in the specialist network.

The guidelines were developed in a cross-institutional working group, organized by Wissenschaft im Dialog and the Bundesverband Hochschulkommunikation [German Association for University Communication], for the area of scientific PR. They were adapted in 2024/2025 in line with the Guidelines for Good Research Communication as part of a participation process.

- Benefits for society
- Transparency
- Openness of science to active dialogue with society
- Self-criticism and willingness to change
- Independence
- Willingness of all actors to cooperate
- Principles of good research practice

² Values of Research Communication

CHECKLIST

for researchers and those responsible for research communication

The following key points and questions are intended to support the preparation of any kind of research communication (e.g. press releases, web articles and social media posts, events, participation formats or exhibitions). The checklist anticipates questions that may be asked, for example, by journalists or informed citizens.

Factual basis for relevance and scope and for categorization in the current state of research:

- Please explain the key findings of the research/study. If possible, express your results in concrete figures, both in relative and absolute terms (not only percentages, but also real frequencies).
- What exactly is unique about the topic or result?
- How new/current is the topic overall?
- Are there other working groups dealing with this topic and how should their results be categorized?
- o Are any of the statements contradicted or criticized?

Methodological transparency

- Please explain the study design (for example, it is usually not sufficient to state that the study is representative or non-representative. Are the limitations of the methodology adequately addressed?)
- Keyword 'open data': Are raw data that are structured and machinereadable, as well as scripts that reproducibly generate the graphical representation based on the data, accessible?
- Keyword Animal testing: Were laboratory animals used in the study/research project?
- o If so, which ones, how many and how?
- Keyword Artificial intelligence (AI): Was AI used in the research itself and/or when writing the article? In what way?³

³ Siggener Impulse 2019: Künstliche Intelligenz als Herausforderung für die Wissenschaftskommunikation <u>Siggener-Impuls-2019 Künstliche Intelligenz.pdf</u>

Financing

- o Is there external funding?
- o If so, who is funding the project?
- Please name the sponsors individually, if applicable, as well as the respective amount and duration of the funding.
- Are there conditions attached to the funding?
- o If so, what are they?

Cooperation partners and possible conflicts of interest

- o Are there cooperation partners?
- If so, which ones? (Please count the cooperation partners and name them if necessary).
- o Are these industrial/private partners?
- Are there, or have there been, involvement or other relationships of members of the working group with one or more of the sponsors/partners that may give rise to a conflict of interest?
- Do the research results generate financial benefits, for example through existing patents etc.?

Visualization

- (How) can the topic be visualized appropriately?
- Are there photos, graphics, video material that can be used for communication?

Communication of the topic, expectations and goals

- Do you have special expectations about how your topic should be communicated? Who would you like to reach, and what exactly would you like to achieve, by publishing this topic?
- Are there agreements with sponsors and/or partners about how this topic is communicated? If so, which ones?
- Do third parties have to approve the press release before publication? (Please note that this requires a longer lead time, and add the contact persons' details).
- o Who should carry out the vote?

¹ Siggener Impulse 2021: Bilder in der Wissenschaftskommunikation <u>Siggener-Impuls-2021 Bilder.pdf</u>

Role of the researchers and communicators

- o Is it about imparting research knowledge in your own area of expertise?
- o Is it about interpreting these facts and findings?
- Are different options for action presented that are based on research knowledge?
- Are recommendations or preferences given in favour of one of the options?
- Is the article an expression of opinion or a value judgement?
- Do the statements still or no longer relate to your own area of expertise?

Transparency of sources

 Journalists need access to sources and contact persons for their research. Communication should therefore make the sources as easily accessible as possible and enable direct contact for queries.

Other topics, depending on the context or specialist discipline:

Possible applications and their consequences

- How realistic are the potential applications and effects (positive or negative)?
- Are there any other effects worth mentioning that are not included in the publication?
- Are there any known risks/harmful consequences if your research results are applied?
- Are there alternatives to the proposed intervention/measure (please name the advantages/disadvantages)?
- Are there any further comments on the assessment of the topic?

Costs

- Are the application options associated with costs?
- o If so, how high are the costs? Who bears the costs?
- Please cite the source of the publication, if possible with a link to the download, or send the publication to the PR manager if this is not possible.

Disclosure of contact details to journalists

• Please provide contact details and information on how to reach them, including the researchers' website.

• Private contact details should not be published, but the researchers should be reachable by those responsible for communication - including via mobile phones.

Contact:

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