JARA Guiding Principles for the Joint Development of Doctoral Education

With the aim of becoming a “place to be” for early-career scientists in Germany and of jointly attracting and retaining the brightest minds from Germany and abroad, RWTH Aachen University and Forschungszentrum Jülich have agreed on key points for the continuous further development of doctoral education and supervision.

The basis of and indeed guarantee for the quality of the doctoral process is a transparent supervision relationship between the supervisor and doctoral researcher. The guiding principles endorse quality assurance, provide orientation for all involved in the doctoral process, and embody a culture of responsibly fostering talent. Furthermore, both institutions aim to provide new impetus for continuing education and transferable skills training opportunities, and, by collaborating more closely, to promote the transfer of knowledge and the convergence of career paths between the university and non-university research institution. The guiding principles will be implemented where appropriate and feasible within the framework of JARA.

1. Doctoral researchers are defined here as being enrolled as doctoral students at RWTH Aachen University or another university cooperating with Forschungszentrum Jülich who are working on their research topic at RWTH Aachen University, Forschungszentrum Jülich, or in cooperation with a research partner at Jülich. The type of doctoral degree (e.g. individual qualification or doctoral degree programme) and the type of financing (e.g. contract of employment or scholarship) are irrelevant.

2. A doctoral degree represents a scientist’s first independent research achievement. How the doctoral phase is structured is decisive for the education of next-generation scientists. Accordingly, supporting doctoral researchers is the focus of talent management at both institutions. The aim is to offer all doctoral researchers excellent conditions under which they can develop optimally. Doctoral researchers will receive the best possible support at both institutions, but they are ultimately personally responsible for successfully completing their own doctoral degree.

3. RWTH Aachen University and Forschungszentrum Jülich are committed to the principles of the Diversity Charter\(^1\). The selection, supervision, support, and evaluation of doctoral researchers are processes free of discrimination based on sex, nationality, ethnic origin, religion or ideology, disability, age, or sexual orientation and identity. In terms of increasing equal opportunities, it is also important to encourage women to take on management positions within and outside of science.

4. Scientific integrity is the most important maxim, taking the situation and particularities of the individual academic disciplines into consideration. For this reason, both partners pay special attention to ensuring that young scientists understand the importance of the rules of good scientific practice and responsible research and that they comply with them accordingly. As key areas of responsibility for scientists, responsible research and innovation (RRI) and research data management (RDM) are equally as important. Furthermore, both partners attach value to integrating the topic of entrepreneurship.

\(^1\) http://www.charta-der-vielfalt.de/charta-der-vielfalt/die-charta-im-wortlaut.html
5. RWTH Aachen University and Forschungszentrum Jülich believe a respectful, responsible, and encouraging academic supervision to be essential in optimally supporting the education of the next generation of successful researchers while simultaneously meeting the individual requirements of each doctoral researcher. With this in mind, the conclusion of a supervision agreement between supervisors and doctoral researchers is recommended. Doctoral researchers receive regular feedback from their supervisors on their independent scientific work within their research topic. Supervisors are also responsible for advising doctoral researchers on career development. Supervisors provide doctoral researchers with the flexibility for continuing professional development and are available for academic discussions. They support the networking activities of doctoral researchers and fully qualified scientists at further stages of their career. Supervisors at each of the institutions support participation in the various elements of doctoral education. As participation should be coordinated in terms of content and time with the research project, it is recommended that doctoral researchers and their supervisors agree on suitable professional development measures and that participation – whether at RWTH Aachen University or Forschungszentrum Jülich – is documented and, if requested by the doctoral researcher, confirmed.

6. Training during the doctoral research project should focus on professional development. RWTH Aachen University and Forschungszentrum Jülich boast excellent expertise and outstanding infrastructures in their designated areas of research, allowing them within the framework of JARA to create interesting and pioneering interdisciplinary openings at the interface between disciplines, thus extending the competence of early-career scientists. With regard to a potential contribution from scientific employees to academic teaching, the acquisition of appropriate competences in the form of soft skills can also be incorporated into training measures.

7. Furthermore, RWTH Aachen University and Forschungszentrum Jülich support and recommend the acquisition of interdisciplinary professional skills. All doctoral researchers are entitled to make use of the courses at both institutions regardless of the faculty to which they are attached. A certificate of participation is issued to the doctoral researchers. The courses are offered in line with professional quality standards developed by both partners, the application of which is compulsory.

8. During the doctoral degree, the foundation is laid for the researcher’s future career. The development of transparent and reliable career paths for young scientists is decisive in attracting international doctoral researchers. For this reason, both institutions have adopted the joint objective of providing their doctoral researchers with the best possible structured support for career orientation and career planning within science and beyond, and of providing them with the necessary training opportunities. The various career development resources and services at both institutions can be used by all doctoral researchers at RWTH Aachen University and Forschungszentrum Jülich. In addition, both partners strive to coordinate their services and resources and to expand these within the framework of JARA in the form of joint support.

9. Both partners see themselves as learning organizations who regularly assess their joint strategy in promoting young talent within the framework of JARA, coordinate their objectives, and evaluate and expand their instruments.

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2 The conditions of participation apply as laid down in the JARA circular on the use of resources and services offered by Forschungszentrum Jülich by doctoral researchers at RWTH Aachen University.
RWTH Aachen University and Forschungszentrum Jülich are consolidating the communication and visibility of their joint services and resources for doctoral researchers and they aim to ensure that all important information and resources are available in both German and English in order to provide international doctoral researchers with quick and easy orientation.