







Chapter 5.31

The Profession of Research Management and Administration in Germany

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Abstract


This chapter provides an overview of the research management and administration (RMA) sector in Germany. It describes the German research ecosystem, looks at the – in Germany – still young profession of RMA and the professional network FORTRAMA, and provides a brief insight into the work and employment situation of people working in this field. This chapter concludes with a prognosis for the field in the upcoming years.

Keywords: Germany; RMA development; funding structure; professionalisation; FORTRAMA; demographics; RAAAP

The German Research Ecosystem

The German research ecosystem is shaped by the country's federalist structure, which puts responsibility for education firmly into the domain of Germany's 16 federal states

The Emerald Handbook of Research Management and Administration Around the World, 679–685

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doi:10.1108/978-1-80382-701-820231065

and largely leaves it to the states to monitor the system and distribute funding for higher education. Therefore, the states enjoy extensive autonomy in drawing up and applying their own laws and regulations for higher education when it comes to determining standards for student admissions or appointing professors and staff. Since the 1950s, the higher education system has evolved significantly by adding *Colleges of Art and Music* to the traditionally research-focussed *Universities* and *Universities of Applied Sciences* (Hochschulen für angewandte Wissenschaften; HAWs). The latter have only slowly become more active in research and in offering doctorates since the late 2010s.¹

There are nearly 1,000 research institutes outside the university system.² Many of these are associated with one of four large public-funded research organisations, each focusing on specific domains of research. Since 1948, the *Max-Planck-Society* (MPG)³ with its 86 research institutes supports basic research in the natural sciences, the humanities and social sciences. Operating 19 research centres, the *Helmholtz Association*⁴ (est. 1995) conducts cutting-edge research in the six fields of energy, earth and environment, health, key technologies, matter, and aeronautics, space and transport. The *Fraunhofer Society*⁵ (est. 1949), which runs 74 institutes globally, focusses predominantly on applied research in the domains of health, environment, mobility, transport, energy and natural resources. Finally, the *Leibniz-Association*⁶ (est. 1990) comprises 97 independent research institutes that put a strong focus on knowledge transfer into politics, the economy and society.

In 2020, 3.14% of Germany's GDP – nearly 106 billion Euros – went to funding research and development, of which approximately one-third supported research and development activities at public universities as well as at the research organisations mentioned above.⁷ Key players in distributing the research funding include the *German Research Foundation (DFG)*,⁸ which provided 3.6 billion Euros in 2021 and the federal ministries, most prominently the *Federal Ministry of Education and Research (BMBF)*,⁹ which provided 20 billion Euros. In addition, specific funding programmes are administered by some of the German federal states – exclusively targeting higher education institutions within their jurisdiction. Also, a variety of foundations, most importantly the *Volkswagen Foundation*,¹⁰ provided nearly 240 million Euros to fund research in 2021. Overall, third-party funding at German universities has more than doubled since 2000, reaching almost 9 billion Euros from 2019 onwards.¹¹

¹ Adding to the mix are more than 100 privately funded universities that – in contrast to the traditional universities and HAWs – charge higher study fees. However, of these, only a small number of institutions engage in research and provide doctoral studies.

² <https://www.tatsachen-ueber-deutschland.de/de/forschung-und-innovation/ausseruniversitaere-forschung> [17.07.2022].

³ <https://www.mpg.de/en>

⁴ <https://www.helmholtz.de/en/>

⁵ <https://www.fraunhofer.de/en.html>

⁶ <https://www.leibniz-gemeinschaft.de/en/>

⁷ Compare here and in the following: Bundesbericht Forschung und Innovation 2022. Daten und Fakten zum deutschen Forschungs- und Innovationssystem; https://www.bundesbericht-forschung-innovation.de/files/BMBF_BuFI-2022_Datenband.pdf [20.09.2022].

⁸ <https://www.dfg.de/en/index.jsp>

⁹ https://www.bmbf.de/bmbf/en/home/home_node.html

¹⁰ <https://www.volkswagenstiftung.de/en>

¹¹ Bundesministerium für Bildung und Forschung (BMBF, 2022) puts third-party funding at 8.7 billion Euro in 2019 whereas Wissenschaftsrat (2023, p. 46) establishes third-party funding at 8.8 billion Euro in 2019 and 8.99 billion Euro in 2020.

Consequently, today, research and development at universities is funded by more than 45% from third parties. Of this share, an average of 30% each is provided by the DFG, and Federal Ministries, almost 10% by European Union (EU) programmes and 7% by foundations,¹² giving each university professor an average 287.000 Euro of third-party research funding annually.¹³

In contrast to higher education in the Anglosphere, students only pay administrative fees, thus making higher education affordable to students from all economic backgrounds. In practice, however, pupils from marginalised groups are still less likely to enter the higher education system. Because students are not ‘paying customers’ and since the federal system has led to a large variety of course programmes and only a few structured doctoral programmes, German institutions of higher education have been slow in developing or adapting to modern management structures and digital research management systems. The introduction of international research rankings (THE; Shanghai Ranking, etc.) in 2003 has led to an increase in the measuring and evaluation of research performance, both at individual and institutional levels (Hüther & Krücken, 2018). However, beyond a few basic figures within a *core data set research* (Kerndatensatz Forschung),¹⁴ to date, there are no compulsory regulations set for data that universities must provide to compare the quality of their research at a state or national level.

While the national German Excellence Initiative beginning in 2006 sought to identify and establish high-performing universities in the area of research, by far not all universities were prepared to enter into the competition. How the additional funding in 2017 was distributed among the 44 universities has raised much criticism. It is argued that rather than increasing excellence, the initiative may be systematically destroying a well-established system of providing comprehensive, high-quality education through a large number of institutions (Hüther & Krücken, 2018).

Evolution of the Profession in Germany

Until the 1990s, academic self-governance (*akademische Selbstverwaltung*) has been a guiding feature of German universities, placing considerable responsibility on professors to manage their research, advance their teaching and contribute to the administrative duties of their institution. As the Bologna Process,¹⁵ starting in 1999, required universities to provide more structured teaching, it likewise affected university governance more broadly. The requirement to adhere to complex accreditation and evaluation processes particularly facilitated the development of a more professionalised university workforce and the broader evolution of research management. Consequently, in Germany the profession of RMAs begun to evolve since the turn of the millennium. In 2003, for the first time, about 30 people met to discuss issues concerning their newly established profession. This pilot event developed into an annual ‘Research Managers’ Meeting’. From 2012 onwards, it continued under the name ‘Annual Meeting of Research and Technology Managers’, with the number of participants quickly rising to more than 500.

¹²Wissenschaftsrat (2023, p. 19).

¹³BMBF (2022, p. 18).

¹⁴<https://www.kerndatensatz-forschung.de/>

¹⁵For the Bologna Process and its effects on the German Higher Education System compare Hüther and Krücken (2018).

Soon it was obvious that with its strength in numbers, this network needed a professional representation of its interests by becoming an officially acknowledged representative body within the universities as well as to the funding organisations in Germany. Therefore, in 2008, a board of up to 10 people was elected. It assumed the tasks of promoting and furthering the professionalisation process, organising good practice exchanges, supporting the networking activities of their colleagues and of improving collaboration with the funding organisations. The board represented the network externally, organised the annual conference, developed training programmes, initiated working groups, and administered the internet portal ‘forschungsreferenten.de’. This portal served as a tool for everyday communication and the dissemination of information. Membership in the portal was free-of-charge and had grown rapidly to around 1,500 members in 2018. The vast majority of members worked in full universities and universities of applied sciences. However, representatives of non-university research institutions, research-funding institutions and ministries equally signed up.

In 2018, the network formally registered itself as a legal entity under the name Forschungs- und Transfermanagement e.V. (Research- and Transfermanagement, FORTRAMA).¹⁶ Currently, the association comprises of about 560 individual members, including a few members from Switzerland and Austria, and 100 institutional members. Ten members serve on the board of whom two act as co-chairs. They, along with a small back office, consisting of a part-time managing director and some support staff, organise the association’s daily business, while an external advisory board provides input on matters of particular strategic relevance. Internally, the association continues professional exchange through its working groups, addressing topics such as research transfer, management of PhD programmes, professional training development and onboarding activities for new FORTRAMA members. Meanwhile, the association’s annual conference continues to serve as the main hub for German-speaking RMAs in developing and strengthening their networks. In addition, the association draws from its members’ broad knowledge and experience to develop a programme of best practice exchanges, to offer a combination of short and mid-length online training modules along with residency programmes lasting several days to prepare future RMAs for their complex tasks.

The German RMA Community

With the structural changes in the German higher education landscape over the past two decades, demands on modern research management have subsequently changed significantly at the institutional level over recent years. There is a growing need for experts in the areas of funding, administration, transfer and marketing, for example, at German research institutions. Dynamics in the higher education environment have not only created a new labour market in research and university management (Krempkow & Höhle, 2021) but have also led to greater networking among personnel in these newly developing fields. Resulting out of this development is the establishment of various networks, for example, the Transferallianz¹⁷ e.V. (1994, focussing on the transfer of research into society and the economy), the Gesellschaft für Hochschulforschung e.V.¹⁸ (2006, focussing on higher education research), the Netzwerk

¹⁶ Research and Transfer Management Network (<https://fortrama.net>).

¹⁷ Transfer Alliance (<https://www.transferallianz.de>).

¹⁸ Society for Higher Education Research (<https://www.gfhf.net>).

Wissenschaftsmanagement e.V.¹⁹ (2011, covering aspects of higher education management from a practitioners' perspective) and the aforementioned Netzwerk Forschungs- und Transfermanagement FORTRAMA e.V.

The RMA community in Germany is not limited to the university sector alone. RMAs are also found in non-university research institutes,²⁰ in funding institutions (e.g. the DFG, foundations) as well as in industry. Consequently, research management in Germany is somewhat fragmented. For example, some institutions have very well-staffed research departments, in some cases with long-established research information systems, while smaller institutions, in particular, often are not equipped to offer comprehensive RMA services.

RMA Demographics in Germany

Since mid-2019, the German Ministry of Education and Research (BMBF) has been funding the research project 'Career paths and qualification requirements in science and university management' (KaWuM)²¹ as part of the initiative 'Qualitätsentwicklungen in der Wissenschaft' (quality improvement in academia), in which the FORTRAMA e.V. network participates as a cooperating partner. For the first time, this study has analysed the respective networks and their members in Germany in a quantitative panel study (Krempkow & Höhle, 2021). Further insight into the RMA workforce more particularly is provided by the equally BMBF-funded quality assurance project 'FortBeam',²² which began in 2020 and focusses on links between research management and research quality (Henke et al., 2022).

Since activities in this area are very heterogeneous (managing directors, faculty managers, leadership positions, research managers, etc.), a variety of networks with diverse agendas have been established over recent years (see RMA Community above). So far, there are only rough estimates of the number of people involved in the field. It is estimated that about 22,000 people work in the broader area of research and university management in Germany (Banscherus et al., 2017). The KaWuM study refers to them as higher education managers (HE-Managers). Initial results assessed from 1,380 completed questionnaires evaluated as part of the KaWuM project are briefly presented below as they describe the broader sector, in which the RMAs operate:

They show that about one-third of the respondents hold a responsible management/executive function, while about one-quarter assign themselves to be part of the 'research service'. Predominantly, they are required to work at a very high level of independence and not surprisingly, most working in the field hold advanced degrees, 52% a doctoral degree (Krempkow & Höhle, 2021). In general, a doctoral degree is considered to be the most appropriate as it indicates having a thorough knowledge of university processes and importantly, own research experience. Nearly two-thirds of the people working in this area come from the humanities and social sciences and about one-third from the natural and life sciences. While relevant networks are known well within the profession, most actors do not consider membership to be necessary. Less than half of the study participants (43%) stated that they were members of one of the previously mentioned networks.

¹⁹ Science Management Network (<https://www.netzwerk-wissenschaftsmanagement.de>).

²⁰ For example, Fraunhofer-Society, Helmholtz-Society, Leibniz-Association, Max-Planck-Society.

²¹ <https://kawum-online.de/>

²² <https://www.hof.uni-halle.de/projekte/fortbeam/>

Of the above described higher education managers, roughly 4,200 are active in the narrower RMA field, according to the FortBeam project. Using a fairly strict approach by counting as RMAs only those who work at the intersections of strategy development, administration and research and relying on information provided by the management of the surveyed universities, colleges and research institutes, the project team identified 2,720 persons at higher education institutions and a further 1,446 at research institutes outside universities as RMAs (Henke et al., 2022).

For a smaller subset of HE-managers, the RAAAP-2 study (Kerridge, Ajai-Ajagbe, et al., 2022) – albeit with a small sample size of only 153 respondents for German RMAs – can provide further insights into RMA demographics. As in most countries, the RMA community in Germany is primarily female, according to the RAAAP-2 study, around 70%. The same can be seen among FORTRAMA members, with two-thirds of its members being women and one-third men. The majority of RMAs hold a doctoral degree – around two-thirds, thus indicating that in the German research ecosystem it seems for RMAs to be even more relevant to have completed an independent research project than for HE-managers more broadly. According to the RAAAP-2 study, the majority of RMAs are between 35 and 54 years of age. Most work in either the pre- or post-award area, in the majority at a managerial level, they speak German and English in their daily work and have conducted research themselves before shifting to research management. The fact that two-thirds of them have permanent working contracts further indicates that research management has become a constant element for universities and research institutes alike. The results of the RAAAP-2 study fall in line with the experience from the FORTRAMA network.

The network members show a high affinity for training, probably owing to the lack of specific training paths leading directly to the profession of research manager. Work is mainly characterised as learning on the job. Nonetheless, part-time master's programmes to introduce students to the general professional field of research management do exist (e.g. M.P.A. Science Management at the German University of Administrative Sciences Speyer or MBA Higher Education and Research Management at the Osnabrück University of Applied Sciences). So far, however, not many research managers currently working in the field have completed such postgraduate studies. Together with the Zentrum für Wissenschaftsmanagement e.V.²³ FORTRAMA offered a 9-day foundation course for research managers until 2021 designed for newcomers, that was well received. In addition, the network regularly provides smaller training units on different topics of particular relevance to RMAs (e.g. on methods to facilitate interdisciplinary research).

Observations show that RMAs are predominantly satisfied with their work as it combines self-directed tasks with high levels of independence in carrying them out. The KaWuM study highlights the high competencies RMAs require particularly when it comes to networking, problem-solving, as well as researching, processing and presenting the information. Despite this extensive skill-set required to work well in the German research ecosystem, the field is also characterised by a lack of career opportunities and possibilities for promotion. While still the exception, some examples do exist of former RMAs taking on new positions as provosts at a university; in one case an RMA even became the president of a university of applied sciences. Such examples indicate that the RMA profession prepares one well for more complex professional positions.

²³ Center for Science Management (<https://www.zwm-speyer.de>).

The Future of RMA in Germany

Following the more general evolution of the research management scene, the past few years have also seen the arrival of transfer and innovation scouts, research management system specialists, grant writers, etc., all indications of a very dynamic playing field. The renewed national competition for research excellence, which formally started in 2023 along with a general decline in student enrolment numbers (resulting in an increased focus on research) are likely to further stimulate the RMA landscape and the various research institution's endeavours to distinguish themselves by developing unique research profiles. Equally, an even greater specialisation of RMAs owing to requirements of DFG, EU, etc. is to be expected. It is thus likely that RMA in Germany will see an even stronger drive for professionalisation along specific lines of RMA together with a growing workforce in this field.

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