Chapter 5.8

Research Management and Administration in Brazil

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Abstract

This chapter brings an overview of the history of research management in Brazil. Additionally, the main funding agencies for scientific research projects in Brazil are presented and the difficulties faced by researchers with the constant budget cuts for Research, Development and Innovation (RD&I) in the country were also addressed.

Since research management and administration are not yet fully recognised as a profession in Brazil, BRAMA has been working to become a consolidated association, seeking increased recognition by research management professionals through their training, benchmarking, and advocacy for the profession.

The RD&I scenario reinforces the importance of professional management to support researchers and shows the importance of BRAMA and the urgent need for actions to provide training and value to this professional category.

Keywords: Brazil; BRAMA; Research Management and Administration; RMA; demographics; FAPESP

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History of Research Management in Brazil

This chapter brings an overview about the history of research management in Brazil. As a starting point, it is important to observe the economic scenario. According to the Brazilian Institute of Geography and Statistics (IBGE, 2022a), the last decade is known as the 'lost decade', as the country's GDP growth from 2011 to 2020 did not exceed 2.7% – an average growth of 0.26% per year.

Naturally, the budgets of all economic sectors suffered the impacts of the recession. It was no different for public institutions of research and innovation. The efficiency and optimisation of research management processes are at stake in times of budget reduction.

Financial aid institutions, directly or indirectly associated with the Ministries as well as research agencies that are run by the state, are the major stakeholders from which investment in research is made in Brazil. The main funding agencies for scientific research projects in Brazil are presented as follows:

- a) National Council for Scientific and Technological Development (CNPq¹) is a public foundation accountable to the Ministry of Science, Technology, and Innovations (MCTI²). Founded in 1951, its main roles are to foster scientific, technological, and innovative research and to promote the training of qualified human resources for research in any area.
- b) Created at the same year of CNPq, 1951, the Brazilian Federal Agency for Evaluation and Support of Graduate Education (CAPES³) is a foundation accountable to the Ministry of Education (MEC⁴), playing a very important role in the expansion and consolidation of graduate studies (Master's and PhD) in all states in the country, by awarding scholarships, grants, and other forms of financial aid.
- c) The Funding Authority for Studies and Projects (FINEP⁵) is a Brazilian public company that promotes science, technology, and innovation in companies, universities, technology institutes, and other public or private institutions. FINEP, created by the government in 1967, selects and provides support to Science, Technology, and Innovation projects, presented by Institutes of Science and Technology (ICTs), with funding from the National Fund for Scientific and Technological Development (FNDCT), the Funds for Technological Development of Telecommunications (FUNTTEL⁶), and cooperation agreements with ministries, agencies, and institutions.
- d) The State Research Foundations (FAPs) are state agencies that promote scientific, technological, and innovation research in Brazil, awarding financial aid in all areas. They also provide support to activities related to science, technology, and academia. Each of the 27 Brazilian states has a FAP, which is governed by its own bylaws and funded rules. The first Foundation to be created, in 1960, was the São

¹ National Council for Scientific and Technological Development (CNPq) website: https://www.gov.br/cnpq.

²Ministry of Science, Technology, and Innovations (MCTI) website: https://www.gov.br/mcti/pt-br.

³ Brazilian Federal Agency for Evaluation and Support of Graduate Education (CAPES) website: https://www.gov.br/capes.

⁴ Ministry of Education (MEC) website https://www.gov.br/mec/pt-br.

⁵The Funding Authority for Studies and Projects (FINEP) website: http://www.finep.gov.br/. ⁶Funds for Technological Development of Telecommunications (FUNTTEL) webite: https://www.gov.br/mcom/pt-br/acesso-a-informacao/acoes-e-programas/programas-projetos-acoes-obras-e-atividades/funttel.

Paulo Research Foundation (FAPESP⁷). The FAPESP budget is guaranteed by 1% of all state taxes, and represents an annual budget of approximately R\$2.2billion (around US\$440million).

A study by the São Paulo University (USP), whose goal was to analyse documents published in Web of Science, shows that CNPq, CAPES, and FAPESP were the top-funding agencies for Brazilian research from 2011 to 2018 (Dudziak, 2012). This shows that Brazilian researchers tend to seek financial aid for their research from national or state funding agencies, but the relationship with companies, philanthropic foundations, and others, is still underexplored for this purpose and more research on these issues should be sought.

In recent years in Brazil, the budget for investments in RD&I has been constantly cut. MCTI, for instance, has seen a drastic budget reduction since 2014 (Escobar, 2021). As the search for funding for the development of scientific research becomes quite competitive, an alternative for Brazilian researchers is to seek funding overseas (Andrade, 2021). According to FAPESP annual reports, São Paulo Foundation signed 169 collaboration agreements with international institutions in 2016. In 2012, this number was only 22 (FAPESP, 2012, 2016).

Within this context, Research Management and Administration (RMA) in Brazil can be regarded at its early-stage development and the role of those in this profession is still undervalued or poorly known by Brazilian Universities or funding agencies. In most cases, grant opportunities cannot support management and administration costs. Special for public funds (federal and state) RMAs cost are considered a university or an institution investment.

In very few occasions, this role of RMAs is understood as a highlight in the quest for public resources. Nevertheless, several RMAs work in support activities for scientific, academic, and innovative research, in several sectors; their work is carried out primarily in an effort to operationalise the ideas proposed by researchers in view of the institutions' norms and rules. This allows research managers to operate in universities, research institutions, and funding agencies, playing very different roles, from more operational to more strategic positions. However, in most institutions, researchers and research managers do not have at their disposal the support they need for work development, such as proper training, management software or legal and accounting support.

Despite the fact Brazil had participated in the Research Administration as a Profession Survey – RAAAP, the third edition of an international research survey that provides information about the profession worldwide (Kerridge, Dutta, et al., 2023), the responders' number (n = 11) in Brazil was not sufficient to give reliable information regarding RMA formation, possible certification, and specific training.

History of Brazilian Association

Research management in Brazil was still a very embryonic activity, when Prof Dr Carlos Graeff-Teixeira participated in a meeting of the International Network of Research Managers Associations (INORMS) in 2012. This meeting motivated him to create an association of research managers in the country. In the following years, on 24 July 2013, at the Annual Meeting of the Brazilian Society for the Advancement of Science (SBPC), an assembly was held on the premises of the Ageu Magalhães Research

⁷São Paulo Research Foundation (FAPESP) website: https://fapesp.br/.

Center (FIOCRUZ-Pernambuco) to officiate the creation of the Brazilian Research Administration and Management Association (it was ABGEPq at the beginning, and later on renamed to BRAMA⁸). It was only in June 2015 that the Bylaws and Articles of Incorporation took effect, which culminated in the creation of the Association.

According to BRAMA's statement, the objectives of the association are to:

- a) promote development and recognition of the research manager and administrator activities, bringing together different areas of knowledge and different backgrounds individuals;
- b) encourage studies about RMA, such as: project management; accountability; financial reports; evaluation; good practice; ethics and integrity; interdisciplinary studies; intellectual property and technology transfer; interpersonal relationships;
- c) disseminate the importance of RMA profession;
- d) encourage the exchange of knowledge and experience between research managers, the scientific community, and the community in general;
- e) promote national and regional meetings;
- f) promote exchanges of knowledge with other RMA associations worldwide;
- g) promote consulting services and trainings; and
- h) advise private or public agencies on research management best practices.

In a field of practice that still lacks the offer of training all throughout the country, the association strives to fill the gap. Since its creation, BRAMA has worked in collaboration with other associations in the world on a variety of businesses and also as a disseminator of research management practices to other Latin American countries. In 2014, BRAMA officially joined INORMS (INORMS Council Member) to align with international references, establish a high level of development and play a decisive role in research management discussion in the world. Some BRAMA's members have been attending international annual meetings and congresses of distinct associations and societies as one of the strategies to develop individual and institutional knowledge.

BRAMA's members and audience include stakeholders working for universities, research institutions, and funding agencies. However, these professionals are often not recognised as research managers as they lack specific training, which reinforces the need for support from the association (Oliveira & Bonacelli, 2019). In addition, a major challenge for BRAMA is to establish an active association in a country as big as Brazil. With 27 states, Brazil is the 5th largest country in the world and, within this complex scenario, the socio-economic development between regions shows a great level of disparity. The Southeast region, for instance, represents approximately 45% of the country's GDP (IBGE, 2022b) and naturally concentrates the largest investments in research, innovation, and development.

Currently, BRAMA has more than 100 registered professionals who participate in the association's discussions; of those 27 are active individual members (Fig. 5.8.1). BRAMA's members are mostly females, concentrated in the Southeast, and the largest number of them being from universities.

Since its foundation, BRAMA has been working to become a consolidated association, seeking increased recognition by research management professionals through their training, benchmarking, and advocacy for the profession. For example, in the past two years, BRAMA has promoted seminars and meetings primarily focussed

⁸ http://www.bramabrazil.org/

⁹ https://inorms.net/

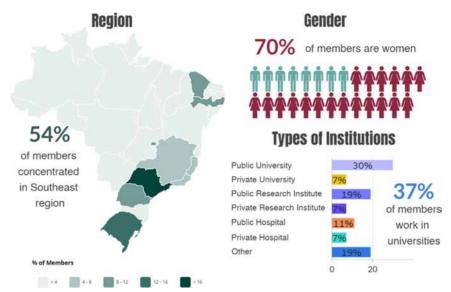


Fig. 5.8.1. BRAMA – Current Reality of the Active Individual Members. *Source*: Authors, Based on BRAMA data collected in May 2022. Charts created with www.visme.co.

on individual skills and experiences, seeking to build and disseminate a network of knowledge. In a more political sphere, BRAMA still seeks to be recognised by strategic leaders, working closely with presidents of universities, research directors and funding agencies, in an effort to raise their awareness to the importance of managing research in a structured and professional way (Oliveira & Bonacelli, 2019).

Current Reality of Research Administrators and Managers in Brazil

As earlier mentioned, RMA is not yet fully recognised as a profession in Brazil, and professionals are more often organised in decentralised support services.

Expenses with management, administration, or indirect cost are not covered on federal and state public research agencies (i.e. FINEP, CNPq, and FAPs). That said, most universities and research institutions invest very little or nothing in research administrators' offices.

Furthermore, the lack of specific training for the management of scientific research is one of the main issues at stake in Brazil; and this issue makes it difficult for researchers to understand the extent of the effective contribution of RMAs on their research.

One more issue refers to the circumstance that these support professionals would not describe themselves as research managers, but rather as accountants, lawyers, pharmacists, etc. This happens even because research managers work in different departments and serve different roles, involving administrative, financial, managerial, and strategic processes.

Additionally, it is not common to find researchers and graduate students vested in the role of administrators and managers. The point is that scientists are not trained to be managers so that they tend to run their research intuitively, and this can easily affect the performance of their projects. This overview of who RMAs

are and of the current population of RMAs in Brazil reinforces the importance of BRAMA and the urgent need for actions to provide training and value to this professional category.

What happened in recent years on climate change and the pandemic proved that science cannot have borders and that collaborative research has never been so important. This also serves to say that to cope with all the issues above, RMAs have to put together a prepared team capable of managing budget, regulations, and compliance.

The points above show how the professionalisation of research management is a step forward in the attempt to bring Brazil side by side to developed countries, becoming recognised as a partner not only for scientific quality, but also for effective management, in line with each sponsor.

Trends

In summary, most agencies in Brazil encourage individual scientific performance in search for productivity, while researchers are responsible for the remaining technical, administrative, legal, and financial aspects of the process of their research projects. In addition, national and state funding agencies are of the opinion that the costs of research management should be paid by the housing institution and so they leave these expenses uncovered. As a consequence, expenses of this nature (on personnel) are not usually included in the project budget but paid by the host institutions, as an operational regular cost, in research and research support.

Thus, Brazilian researchers face a lot of bureaucracy and lack of administrative support, which strongly impacts their availability for research (CONFIES et al., 2012); additionally this lack of support is also a waste of public money and a delay for the whole society (Oliveira & Bonacelli, 2019). An article from USP online magazine suggests that the cost of the bureaucracy is R\$9billions per year, the equivalent of approximately US\$2.2billion, considering the exchange rate (in 2019) of the article (Escobar, 2019).

However, some Brazilian agencies have already begun changing this scenario. In fact, some institutions are already aware that the offer of professional support in research management is a strategy to attract researchers and financial resources. Thus, these two initiatives can strengthen and drive the development of the activity.

The first initiative refers to the FAPESP, one of the most important research agencies in Brazil, that in 2010 established a working group to provide training to the administrative staff of institutions to support researchers (Marques, 2011; Oliveira & Bonacelli, 2019). This initiative encouraged the opening of research support offices in the state of São Paulo, and supported the development of project management activities, related to the foundation rules and regulations, in a more professional feel, as it freed researchers from bureaucracy related to RMA potentially allowing them to dedicate more time to research and student advising (Marques, 2014).

The second initiative refers to the State University of Rio de Janeiro that in 2017 established a Center of research support – Research Support Center at the Health Complex of the State University of Rio de Janeiro – CAPCS. Its aims include promoting, planning, guiding, elaborating procedures, and supporting the formalisation of projects; disseminating the culture of research and innovation in Health; strengthening the practice of innovative actions, and advising researchers regarding regulatory, economic-financial and contractual fields. Furthermore, they provide training, consulting, and infrastructure for projects developed at the university (CAPCS, 2022).

Like the FAPESP initiative, the Pan American Health Organization (PAHO¹⁰) promotes workshops to prepare researchers and administrators on how to manage PAHO funds.

Although a series of initiatives have already been identified in Brazil, regarding RMA offices in institutions (Oliveira, 2020), there is still room for development in the country, mainly North, Northeast, and Center regions. The professionalisation and organisation of the Brazilian workforce of RMAs shown in the examples above, widely encouraged by BRAMA, aim to support researchers and make them free from administrative workloads; thus, the efforts set above have drawn the attention of Brazilian institutions (Garcia et al., 2013). In view of the drastic reduction of national resources for research and innovation, the initiatives above reinforce the importance of professional management to support researchers in the design of well-structured and planned projects, They enable the projects to make good use of financial resources, to have adequate accountability, to rely on the publication of ethical and coherent results and, last but not least, to connect their research with society (Junqueira et al., 2015). Thus, the efforts depicted above seek not only efficient management, but also strive to attract international resources.

In addition, BRAMA's efforts are in line with the trends that have been observed all over the world, as in recent decades, academic research management has become an attractive career prospect for researchers around the world (Kerridge & Scott, 2018a; Reardon, 2021). It is desirable that, in the near future, the offer of training programs for research managers will meet the demand for more qualified and resourceful professionals with experience in open science, equality and diversity, ethics, and public engagement.

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¹⁰Pan American Health Organization, https://www.paho.org/en.

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