# Prioritizing Research in University Strategies: Dilemmas and Perspectives

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**Abstract**

*Universities play a crucial role in scientific research by promoting innovation, advancing knowledge, and nurturing future scientific experts and performers. The activities conducted within universities cover a wide spectrum, but strategies prioritize key elements. Crafting these strategies is particularly complex in this field, requiring the involvement of a large number of stakeholders, among which academic and research staff stand out in importance. The paper presents the perceptions of academic staff at the "Grigore T. Popa" University of Medicine and Pharmacy in Iași (UMF Iași) regarding the main axes of university strategy development. Essential aspects are addressed, such as the weighting of academic activities, funding procedures, and incentives provided to encourage and support scientific research activities, the objectives of scientific research strategy, and how research activities are integrated into the university's strategy.*

**Key words:** research; strategy; research funding; prioritization
**J.E.L. classification:** I23, O32.

## 1. Introduction

Universities are places where knowledge is produced, discoveries are verified and complemented, and intellectual capital is developed (Boulton & Lucas, 2008, p. 3). Although they may be oriented towards cutting-edge research and contribute to major discoveries in various fields, they cannot neglect the training of specialists and the connection with the community – this integrated approach requires a strategic vision. While development project-type initiatives may have greater visibility (Manolescu, 2005, p. 5), strategies ensure the necessary coherence for long-term orientation.

Universities are essential in leading teaching, learning, research, and technology. They provide educational pathways, professional training for high-level jobs, and education for personal development. The role of universities is crucial for all sectors from a social and legal standpoint. Universities can help their graduates by providing the new knowledge and skills necessary to face the challenges of sustainable societal development, by raising public awareness, and by providing preliminary actions for informed decision-making.

European universities have long been centers of knowledge creation, innovation, and community engagement, with multiple criteria contributing to their top positions in international rankings (Medeleanu *et al.,* 2020, p. 62). During economic crises, these institutions play an essential role in offering solutions and encouraging socio-economic resilience (Talmaciu *et al.,* 2023, p. 353).

Currently, universities are no longer seen only as institutions engaged in providing knowledge to new generations, but are now seen as institutions that have a broader impact on society and economies at local and national levels.

## 2. Theoretical background

### 2.1. The role of universities in scientific research

Universities play a crucial role in scientific research by promoting innovation, advancing knowledge, and training future scientific leaders. They serve as foundational points for cutting-edge research, contributing to major discoveries in various fields through competitively won, carefully selected, and high-performance-oriented projects (Toma *et al.,* 2013).

Research universities are particularly important in offering research-oriented programs and creating the foundation for significant advancements in fields such as health, medicine, communications, economics, and national security (Associations of American Universities, 2024). These institutions not only conduct research but also educate students to become scientific leaders and innovators, ensuring the continuity of scientific progress (Associations of American Universities, 2024).

Additionally, organizations like the League of European Research Universities (LERU) advocate for the promotion of basic research in European research universities, highlighting the importance of frontier research in stimulating innovation and societal progress. Through publications and policy development, LERU and similar networks aim to improve understanding among policymakers, opinion leaders, and the public about the critical role of research-intensive universities in promoting knowledge and shaping the future (LERU, 2024).

Universities, especially research universities (Toma, 2010, p. 403), are essential in promoting scientific research, stimulating economic growth, and maintaining global competitiveness through their contributions to innovation, education, and the dissemination of knowledge.

### 2.2. The scientific research strategy of a university

The scientific research strategy of a university encompasses various key elements aimed at enhancing research potential, reputation, and impact. This involves setting priorities, coordinating activities, and efficiently managing resources (Gâlea, 2021) to achieve high-quality research outcomes.

There are several common components found in university research strategies (Georgian American University, 2024; Université Côte d'Azur, 2024; Sapientia University of Cluj-Napoca, 2021; The Open University, 2019):

- setting research priorities: universities focus on determining priorities and strategies for scientific research activities to align with internal and external challenges.
- creating synergies: research strategies aim to create synergies between research teams, explore interdisciplinary fields, and maintain excellence in academic areas.
- addressing major challenges: universities conduct research to tackle significant challenges in science and society, covering a wide range of objectives and methodologies.
- open science initiatives: embracing open science practices to provide access to scientific knowledge, promote scientific culture, and engage the general public.
- promoting scientific integrity: ensuring adherence to scientific ethics and integrity within research activities is a crucial aspect of university research strategies.
- human resource development: strategies focus on developing human resources involved in research, providing support for conference participation, grants, and enhancing scientific performance bonuses.
- promoting talent: engaging students in research through activities such as student scientific conferences to develop human resources and promote a research culture.

- collaboration and innovation: encouraging collaboration with internal and external partners, implementing advanced scientometric practices, and fostering innovation within research activities.
- consistency and coherence: ensuring consistency between the research perspective and the methodology used, whether based on primary or secondary data, to maintain coherence in the research strategy.

A university's scientific research strategy is a comprehensive plan that aims to enhance research potential, address societal challenges, promote open scientific practices, uphold scientific integrity, develop human resources, and stimulate collaboration and innovation within the research community (Toma *et al.,* 2016, p. 415; Apostoaie *et al.,* 2019, p. 200).

Within universities, more than in other organizations, key individuals can become agents of change (Percic *et al.,* 2021, p. 230), but consulting all employees on strategic aspects is the foundation for developing highly feasible plans.

## 3. Methodological approach

Next, we will present the perceptions of the academic staff from the "Grigore T. Popa" University of Medicine and Pharmacy in Iași (UMF Iași) regarding teaching activities, scientific research activities, the proportions of activities conducted by academic staff, funding procedures, and incentives offered to encourage and support scientific research, the objectives of the scientific research strategy, and how research activities are integrated into the university's strategy. The main tool used is a questionnaire with predefined and open-ended responses, answered by 74 faculty members conducting research within the university.

The results obtained as part of a broader research, whose partial results have been previously published (Toma *et al.,* 2023), are utilized.

At UMF Iași, research and education are integrated activities that support each other, having equal value. UMF Iași aims to provide its students with excellent and distinctive education, as a direct result of the proximity, integration, and dissemination of extensive and high-quality research activities. The curriculum and teaching methodology are influenced by research and are developed and delivered by excellent professors and scientists.

UMF Iași offers a rich array of postgraduate courses and postgraduate research training, providing opportunities for professional development in key areas of research and development, as well as initiation into new advanced technologies, with the goal of adequately preparing graduates for effective integration into the labor market. The activities carried out by the academic staff at the university mainly consist of teaching and scientific research activities, along with other activities within the academic community.

The overall objective of the scientific research activities of UMF "Grigore T. Popa" in Iași is to enhance performance in scientific research by integrating UMF "Grigore T. Popa" in Iași into the European scientific research space (UMF, 2024, p. 151).

The long-term strategic objectives of the scientific research activities at UMF "Grigore T. Popa" in Iași are as follows (UMF, 2018, p. 2.):

- Ensuring and improving access to bibliographic resources provided to researchers by the university;
- Creating multidisciplinary research hubs by identifying/ attracting/ training researchers;
- Ensuring and perfecting human resources for excellent scientific research, development, and innovation;
- Increasing the national and international visibility of the university's research activities;
- Intensifying collaborations in scientific research, knowledge transfer, technology transfer, and innovation with public and private partners, both national and international.

## 4. Findings and discussion

The respondents who participated in the survey attributed a weight to each component of the activities carried out at the university. In response to the question "What do you consider should be the weight of the various activities carried out by the university's academic staff?" regarding the structure of university activities by components, 68 out of the 74 interviewed persons responded, resulting in 6 missing responses.

On average, according to the respondents, teaching activities should represent approximately half of the activities carried out by the academic staff (51.62%), while research activities should hold a weight of about 35% (35.06%). Other activities within the academic community should account for approximately 13% (12.79%) of the academic staff's activities (Table 1).

*Table no. 1. Descriptive statistical indicators of the distribution of the weight of activities carried out by academic staff*

| What do you consider should be the weight of the teaching activities carried out by the university's academic staff? | Min. | Max. | Mean | Median | 75th Percentile | Mode | Coefficient of Variation |
|---|---|---|---|---|---|---|---|
| Teaching Activities | 20% | 80% | 51.62% | 50% | 60% | 50% | 29.3% |
| Scientific Research Activities | 4% | 70% | 35.06% | 32.5% | 40% | 30% | 37.7% |
| Other Activities in the Academic Community | 0% | 30% | 12.79% | 10% | 20% | 10% | 58.6% |

*Source*: authors' contribution

Additionally, 75% of respondents believe that the share of teaching activities should be at most 60%, the share of research activities should be at most 40%, and other activities in the academic community should be at most 20%. Half of the academic staff considers that scientific research activities should account for at most 32.5% of the total activities carried out at the university, with the most frequently mentioned proportion being 30%.

In response to the question "Which of the following objectives do you consider important for the research strategy of the university where you work?" regarding the structure of university activities by components, all 74 respondents participated. In the respondents' opinion, the top three objectives of the research strategy at their university are (Table 2):

- Improving research infrastructure (86.1% of respondents)
- Developing partnerships (with national/international, public/ private partners) (76.4% of respondents)
- Increasing the performance of human resources involved in research (70.8%).

*Table no. 2. Ranking of the research strategy objectives perceived as important by researchers at UMF Iași*

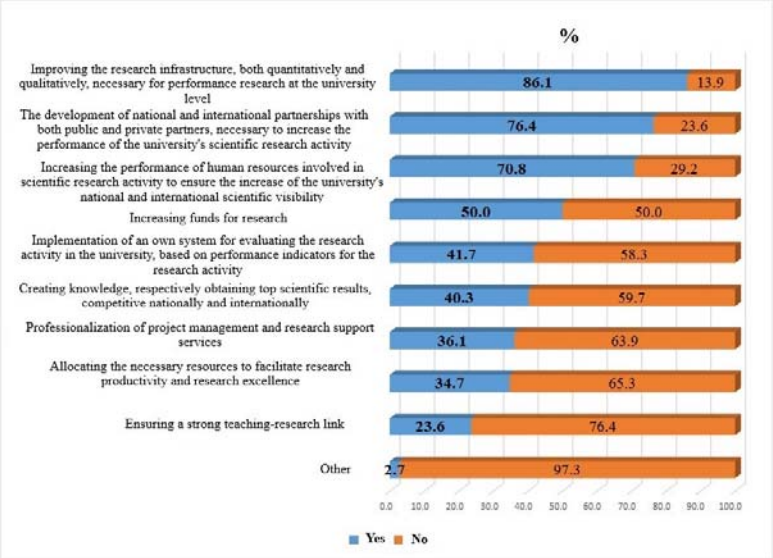
| Objectives | Yes | No |
|---|---|---|
| Improving the research infrastructure, both quantitatively and qualitatively, necessary for high-performance research at the university level | 86.1% | 13.9% |
| Developing national and international partnerships with both public and private partners, necessary for enhancing the performance of the university's scientific research activities | 76.4% | 23.6% |
| Increasing the performance of human resources involved in scientific research activities to ensure the enhancement of the university's national and international scientific visibility | 70.8% | 29.2% |
| Increasing research funding | 50.0% | 50.0% |
| Implementing a proprietary system for evaluating research activities at the university, based on performance indicators for research activities | 41.7% | 58.3% |
| Creating knowledge, that is, achieving top-level scientific results that are competitive nationally and internationally | 40.3% | 59.7% |
| Professionalizing project management services and supporting research activities | 36.1% | 63.9% |

| | | |
|---|---|---|
| Allocating necessary resources to facilitate research productivity and excellence | 34.7% | 65.3% |
| Ensuring a strong teaching-research link | 23.6% | 76.4% |
| Other | 2.7% | 97.3% |

*Source*: authors' contribution

The three main objectives identified by respondents are subordinated to enhancing the performance of scientific research activities and increasing the university's visibility both nationally and internationally. It is noteworthy that increasing research funding holds a significant place in the university's research strategy, with half of the respondents considering it a fundamental objective of the university's research strategy. Respondents also highlighted other objectives of the university's research strategy, namely the organization of a research structure. Table 2 and Figure 1 present the distribution of respondents according to their opinions on the main objectives of the research strategy at the university where they work.

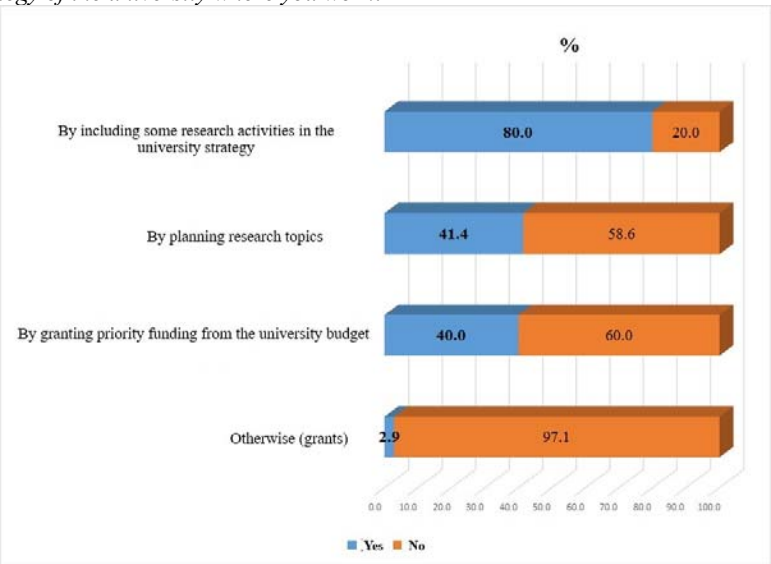
*Figure no. 1. Distribution of respondents based on their opinions regarding the main objectives of the research strategy at the university where they work*




*Source*: authors' contribution

The majority of researchers at UMF Iași recognize the general objectives of scientific research activities, while also identifying an additional objective that the highest proportion of respondents (86.1%) perceive as important compared to other objectives. This objective is: Improving the research infrastructure, both quantitatively and qualitatively, necessary for high-performance research at the university level. In response to the question "How is research activity integrated into the strategy of the university where you work?" all 74 respondents participated. The proportions of respondents based on their opinions regarding the ways of integrating research activities into the university's strategy are graphically represented in Figure 2.

*Figure no. 2. Distribution of Yes/ No responses to the question - How is research activity integrated into the strategy of the university where you work?*




*Source*: authors' contribution

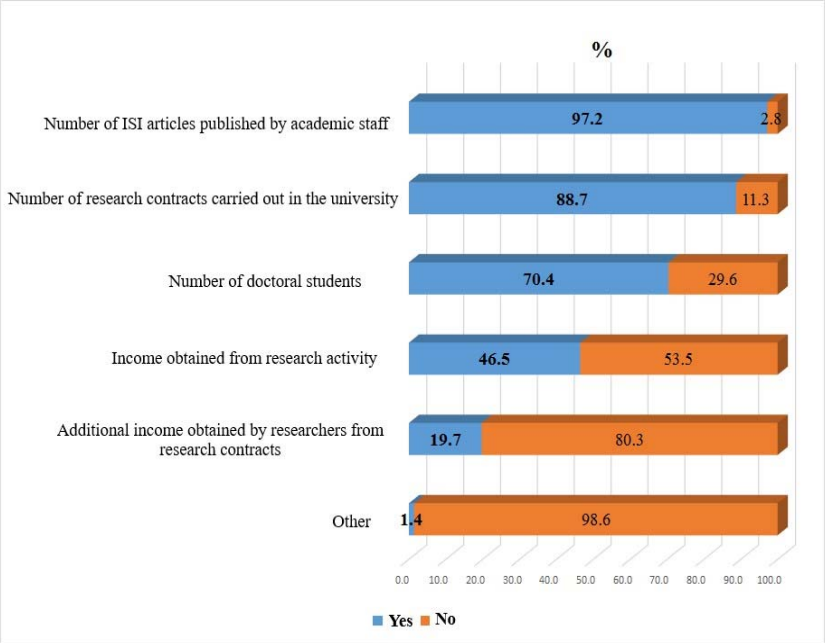
The methods of integrating research activities into the university strategy are multiple, with the priority, according to the interviewed persons, being the inclusion of research activities in the university strategy (80% of respondents chose this option).

An additional method of integrating research activities suggested by respondents is university-funded research grants. Additionally, in the opinion of the interviewed persons, it is a priority to develop a research strategy that is integrable into the university's strategy. The research strategy should be developed gradually and participatively; otherwise, significant management problems may arise. The university's strategy is strengthened based on characteristic elements of university scientific research. In response to the question "What characteristic elements of university scientific research are mentioned in the strategy of the university where you work?" all 74 respondents participated. According to the interviewed academic staff, the main elements mentioned in the university strategy refer to the following indicators (Figure 3):

- The number of ISI articles published by academic staff (97.2% of respondents);
- The number of research contracts conducted within the university (88.7% of respondents);
- The number of doctoral students (70.4% of respondents).

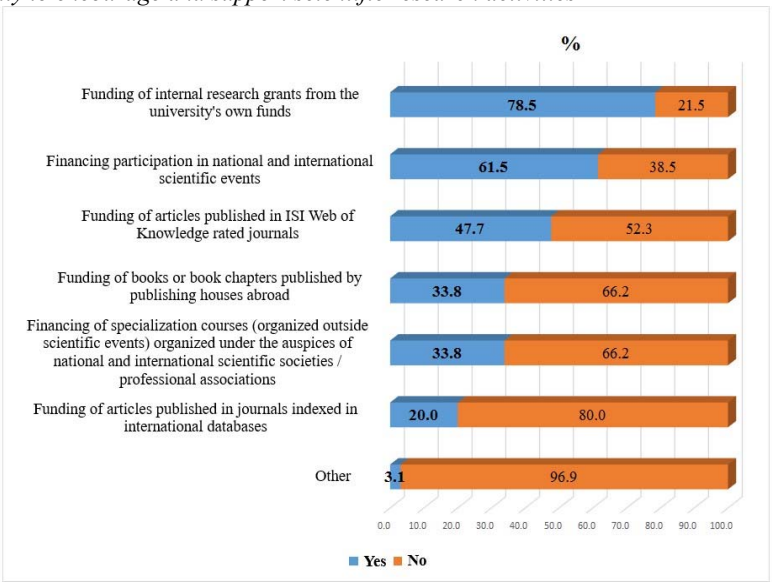
The distribution of responses to the question "What are the funding procedures used by your university to encourage and support scientific research activities?" is presented in Figure 4. In terms of funding procedures, the vast majority (78.5% of respondents) of the interviewed academic staff consider that UMF Iași uses internal research grant funding from the university's own funds to encourage and support scientific research activities. Additionally, 61.5% of respondents mentioned funding for participation in national and international scientific events as a means of encouraging and supporting scientific research used by the university where they work. Only about one-third (33.8%) of respondents believe that UMF Iași encourages scientific research activities by funding specialized courses organized under the aegis of national and international scientific societies or professional associations.

*Figure no. 3. Ranking of characteristic elements of scientific research included in the university strategy*




*Source*: authors' contribution

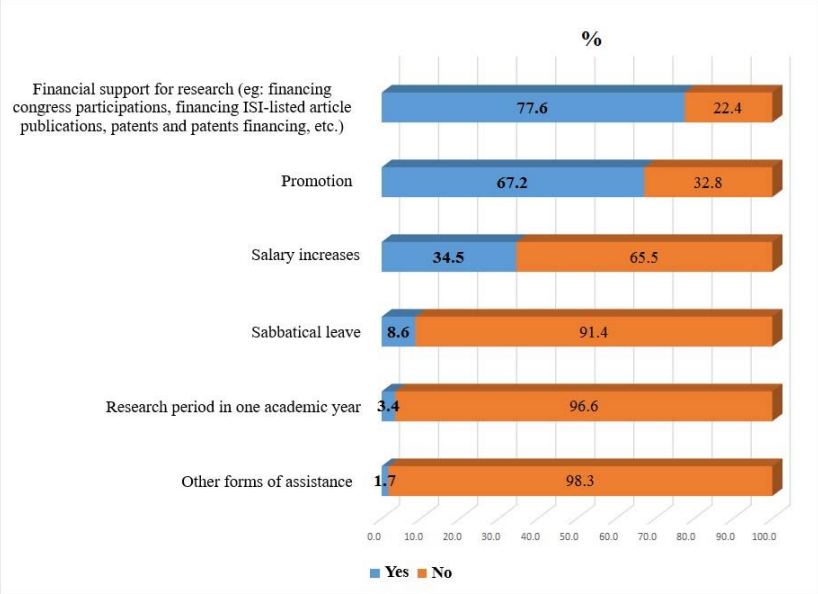
*Figure no. 4. Distribution of respondents according to opinions on the funding procedures used by the university to encourage and support scientific research activities*




*Source*: authors' contribution

An essential aspect of supporting university scientific research is the assistance or incentives provided by the university to stimulate research. Figure 5 presents the distribution of respondents according to opinions on the assistance/incentives offered by the university to encourage or facilitate research. Out of the 74 interviewees, only 58 responded to the question "What assistance or incentives does the university where you work offer to encourage or facilitate research?" from the survey questionnaire.

*Figure no. 5. Distribution of respondents according to opinions on the assistance/incentives offered by the university to encourage or facilitate research*




*Source*: authors' contribution

77.6% of respondents mention financial support for research, manifested in funding for conference participation, publication of ISI-rated articles, obtaining patents, etc., as a means of facilitating research at UMF Iași. Additionally, a significant proportion of respondents (67.2%) believe that universities encourage researchers to conduct research activities by recognizing and appreciating them in promotion competitions. Only just over a third (34.5%) of the responding researchers believe that the university offers salary increases to encourage or facilitate research activities.

## 5. Conclusions

At UMF Iași, research and education are integrated activities that support each other and hold equal value. On average, according to respondents, teaching activities should represent approximately half of the academic staff's work (51.62%), while research activities should account for about 35% (35.06%). Other activities in the academic community should represent approximately 13% (12.79%) of academic staff's work.

The study shows that the majority of researchers at UMF Iași recognize the general objectives of scientific research proposed by the university, namely: improving performance in scientific research by integrating UMF Iași into the European space of scientific research and identifying and securing funding resources for UMF Iași research projects.

Researchers also identify an additional objective for which the highest proportion of respondents perceive it as important (86.1%) compared to other objectives. This is: Improving research infrastructure, both quantitatively and qualitatively, necessary for high-performance research at the university level.

The methods of integrating research activities into the university strategy are multiple, with the inclusion of research activities in the university's strategy being a priority according to the interviewed individuals (80% of respondents chose this response).

The most important characteristic elements of university scientific research mentioned in the university's strategy are: the number of ISI articles published by academic staff (97.2% of respondents); the number of research contracts conducted within the university (88.7% of respondents); and the number of doctoral students (70.4% of respondents).

To encourage and support scientific research activities, UMF Iași uses internal research grant funding from the university's own funds (78.5% of respondents); funding for participation in national and international scientific events (61.5% of respondents).

To encourage or facilitate research activities, UMF Iași provides financial support through funding for conference participation, publication of ISI-rated articles, obtaining patents, and patents (77.6% of respondents). The research strategy of a university is a comprehensive plan that aims to enhance research potential, address societal challenges, promote open scientific practices, support scientific integrity, develop human resources, and stimulate collaboration and innovation within the research community.

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