Tomáš Opatrný – Rector candidate theses

Who I am

I graduated from the University of Palacký (UP) with a degree in Mathematics and Physics Teaching. Following this, I completed my doctorate in Quantum Optics and spent seven years as a postdoctoral researcher at esteemed institutions in Germany (Jena, Erlangen, Garching), Israel (Weizmann Institute), and the USA (Texas A&M University). Since returning to Olomouc in 2003, I have been teaching physics at the Faculty of Science while conducting research in theoretical quantum informatics, quantum optics, and thermodynamics. My research collaborations extend to institutions in Denmark, the USA, and Israel.



In addition to my teaching and research responsibilities, I have actively participated in academic governance. I have held various roles including faculty and university senator, vice-dean for science and research, vicerector (responsible for research evaluation, IT, and sustainability), and a member of research boards at other institutions. I am also a member of the Council of Higher Education Institutions, where I served as vicechairman for two terms. At the national level, I contributed to shaping research policy as a member of the Research, Development and Innovation Council, which advises the Czech government, along with its Commission for the Evaluation of Results. Furthermore, I engage in evaluation processes as a member of committees for the National Accreditation Bureau and as an evaluator for selected outcomes within Module 1 of the Czech research evaluation scheme. In 2020, I was part of an international evaluation panel for another Czech university. I enjoy mentoring talented high school students through the Tournament of Young Physicists. My passion for physics is complemented by my enthusiasm for engaging with intelligent individuals from diverse fields about their work. In my leisure time, I enjoy reading books, playing the guitar and banjo, paddling, running, cycling, or spending time with my grandchildren. I take pride in several contributions to UP, including the establishment of the Foucault pendulum created as part of a student thesis and initiating the tradition of the golden graduation ceremony. The first such ceremony was organized at the Faculty of Science in 2007 and has since become popular as a means for alumni from various faculties and universities to reconnect.

Why I am running

I am running because I believe there is significant room for improvement within our university. We should not waste time by remaining stagnant; instead, the university must have a clear vision of its goals and adhere to fundamental principles that guide its progress.

Principles

• Academic freedom is of fundamental value that should underpin higher education.

• The primary mission of a university is to educate and conduct research. While the university engages in various activities, education and research must remain the central focus around which all other endeavors revolve.

• Education and research should occur in tandem, fostering a mutual synergy that enhances their effectiveness. This integrated approach maximizes the benefits for students and the broader academic community.

• Both university education and research operate within an international context, necessitating active participation in global interactions. Engaging with international partners enriches our academic environment and broadens the horizons of our students and faculty.

• A university is primarily governed by gentle economic incentives, personal examples, and fair treatment. This governance model promotes a collaborative and respectful academic culture.

• Decision-making processes should rely on evidence derived from systematically collected and evaluated data. This approach ensures that choices are informed and aligned with the university's goals.

• Academic self-governance is a privilege that must be treated with utmost responsibility. While we manage our own affairs, we must remember that we serve the public, which funds our institution. This responsibility compels us to maximize the effectiveness of our work.

• The rector plays a crucial role in ensuring that the rules established through our academic self-governance are upheld.

• While respecting the autonomy of individual faculties, the rector should also stimulate inter-faculty cooperation, fostering a collaborative spirit across the university.

By adhering to these principles, we can create a robust academic environment that prioritizes education and research while responsibly engaging with both local and international communities.

1. Education

Preparing highly qualified specialists and educating young people is one of the primary missions of Palacký University Olomouc. The goal is to achieve this in the most effective manner possible while ensuring that studying in Olomouc becomes one of the most enriching experiences in the lives of our future graduates.

1.1 Efficiency of study programs

The easiest way to identify areas for improvement is to compare the number of study programs offered. In 2023, Palacký University Olomouc had a total of 1,083 study programs, whereas the University of Innsbruck had approximately 150. Considering that Innsbruck has about 28,000 students compared to our fewer than 23,000, the relative number of programs at our university is almost *nine times greater* than in Innsbruck! Such high fragmentation and excessive number of programs pose challenges not only for UP but also for other institutions in Czechia, many of which have already begun efforts to streamline their offerings. The rector's role should be to motivate workplaces to find common ground and explore the possibility of combining programs through appropriate incentives. Should these initiatives be successful, the benefits will soon become evident: there will be more time for individual work with students, enhanced opportunities for creative endeavors, and increased capacity for writing project proposals. By focusing on efficiency in our study programs, we can better allocate resources and improve the overall educational experience for our students.

1.2 Decision-making based on evidence, feedback from graduates and their employers

When shaping our study programs, it is crucial to base our decisions on systematically collected data regarding the needs of our students, as well as feedback from graduates and their employers. Currently, systematic data collection primarily occurs through student evaluations, but there are significant opportunities to enhance this process to obtain more comprehensive and informative feedback. To improve our understanding of how well our programs prepare students for their careers, we should periodically reach out to graduates with targeted questions. For instance, we might ask them to what extent their studies prepared them for their current roles, whether there are skills or knowledge areas they feel were lacking in their education, and if they would recommend any changes to the curriculum. In addition to gathering feedback from graduates, similar inquiries should also be directed at the employers of our graduates. Their insights can provide valuable information about the effectiveness of our programs in meeting industry needs. To encourage participation in this feedback process, the rector should implement a system that rewards faculties for collecting responses through returned questionnaires—not just for positive feedback. This approach will motivate individual departments to foster strong relationships with students, making them more likely to provide contact information and consent for their employers to share relevant feedback. Once sufficient data is collected, we will be able to make more informed decisions regarding new accreditations or reaccreditations.

I envision drawing inspiration from institutions that effectively use direct feedback from graduates' employers in shaping their programs. For example, some technical schools have established industrial councils—committees made up of representatives from key companies where graduates typically find employment. The two-way flow of information at these committee meetings is beneficial for shaping study programs, fostering long-term cooperation, proposing thesis topics, and initiating joint research projects. Moreover, I propose that similar systems be established at lower levels within our faculties. Each guaranteeing workplace should create its own program councils composed of external experts who can provide insights into how best to prepare future graduates for the professional landscape they will encounter after their studies. To support the establishment and meaningful functioning of such bodies, a bonus part of the budget should be allocated. By implementing these strategies, we can enhance the relevance and effectiveness of our study programs, ultimately benefiting both our students and the broader community.

1.3 Interfaculty teaching

The current funding model, which allocates resources to the department guaranteeing a program, tends to discourage interfaculty teaching. This system often leads departments to protect their own student populations jealously or to engage in a "credit bank" mentality, where they are more focused on maintaining control over their resources rather than fostering collaboration. Given that the normative funding system is

outdated, it would be far more beneficial to motivate departments to take greater advantage of interfaculty teaching opportunities. The greatest advantage of promoting interfaculty teaching will be for our students, who will gain access to a broader range of interesting and useful subjects. This collaborative approach can also help break down the "faculty walls" that often prevent departments from knowing what their neighbors are doing. By encouraging cooperation between different faculties, we can create a more integrated academic environment that enhances the educational experience. To implement this change effectively, I propose drawing on the experiences of other institutions that have successfully adopted similar initiatives. One example is the application of a bonus scheme derived from part of the finances of the "performance component" (often referred to as "index K"). This scheme rewards faculties that provide teaching to students from other faculties as well as those that accept such teaching. By creating financial incentives for collaboration, we can encourage departments to work together more closely. This not only enriches the curriculum but also fosters a sense of community among students and faculty alike. As students engage in interfaculty courses, they will not only expand their knowledge but also develop vital interpersonal skills by interacting with peers from different disciplines. In summary, by revising our funding model to support interfaculty teaching and collaboration, we can significantly enhance the educational offerings at our university. This approach will ultimately benefit our students and help cultivate a more cohesive academic community where knowledge is shared and interdisciplinary connections are made.

1.4 Internationalization of studies

In every area where our university educates students, it is essential for our graduates to understand their profession within an international context and to naturally collaborate with colleagues from various countries. I fully align with the goals outlined in the Ministry of Education, Youth and Sports (MEYS) internationalization strategy, which emphasizes the implementation of study programs that incorporate significant internationalization elements. This includes offering parts of the curriculum in a foreign language, designing study plans that consider foreign or combined mobility, and utilizing so-called "mobility windows." Currently, the state subsidizes internationalization through the K indicator, which allocates part of our funding based on how many students participate in stays abroad and how many foreign students come to us. However, we have significant reserves in this area. For instance, when comparing the funding we receive through the "internationalization K" with the share of the fixed part (the A indicator) among schools competing for the same resources—such as Charles University, Masaryk University, Czech Technical University, and Brno University of Technology—it becomes clear that we are losing approximately 10 million CZK annually. This loss benefits institutions that are more effective in internationalizing their studies; in our segment, we have 12.3% of the fixed part compared to only 10.5% in mobilities. The situation appears even more critical when we relate mobility reserves to the number of students. In segment 4, Palacký University has 16% of students, and if each student had the average number of mobilities, we could potentially gain 30 million CZK more than we currently receive. However, these reserves are not evenly distributed across faculties; some have effectively utilized mobility programs better than others and could serve as models for their peers. The rector's task will be to leverage the experiences of these more active faculties and stimulate other departments to motivate their students to make maximum use of mobilities and other internationalization opportunities.

Additionally, a change in the functioning of the rector's foreign department is necessary. Currently, effective foreign cooperation is built from the ground up through individual contacts established at the departmental level, while rector's trips often have minimal impact on this process. It is crucial to ensure that there is adequate infrastructure at the central level, particularly a functional electronic mobility agenda that alleviates unnecessary bureaucracy for faculties and allows them to focus on their core activities. The rector's office should also provide qualified methodological support and establish a more effective synergy in task division between faculty and rector's foreign departments.

Another area where we can improve is in attracting foreign students. I propose offering a significantly larger portion of subjects in English alongside Czech. It should become standard practice for instructors to switch to English during classes when foreign students are present. This practice would not only benefit international students but also provide domestic students with opportunities to communicate in English and connect with their peers from abroad. By taking these steps into account when extending or submitting new accreditations, we can enhance our university's international profile and better prepare our graduates for a globalized workforce.

1.5 Microcredentials and lifelong learning

An important trend in the organization of education within a pan-European framework is the modularization of certain professionally comprehensive blocks through the introduction of microcredentials. This approach allows individuals to tailor their higher education experiences by forming their qualifications in parts across different institutions, obtaining credentials flexibly according to immediate demands. For the university, this represents an opportunity for additional income beyond the state budget, and many schools are actively pursuing this avenue. Currently, Palacký University is performing relatively well in this regard, receiving approximately 30 million CZK annually through lifelong learning initiatives, which is slightly above average when considering the K indicator within segment 4 (approximately 14% compared to 12.3% according to indicator A). With this solid foundation, we should not miss out on the opportunities that microcredentials present. The rector's role will be pivotal in stimulating the transfer of experience from departments that are particularly active in offering microcredentials to those that are less engaged. By doing so, UP can position itself as one of the leading players in the field of microcredentials.

2. Research

Palacký University aims to establish itself as a strong research university where the education of the young generation is intertwined with advancing knowledge. Currently, UP is recognized as one of the top-rated institutions in the Czech Republic for research, having received an "excellent" grade A in the 2020 evaluation alongside five other universities. In contrast, the remaining 24 public and private institutions evaluated under the 2017+ Methodology received grades B, C, or D. With another comprehensive evaluation scheduled for 2025, it is vital for UP to maintain its position among the best. I am cautiously optimistic about our chances of succeeding in the upcoming evaluation and defending our status. However, we cannot take this for granted. One of my primary priorities in the first year of my term as rector will be to ensure that we perform well in evaluations by the international panel. To avoid a downward trajectory, we must continuously work to secure good prospects for the next five-year period. The competition will be fierce; many high-quality institutions rated B are striving to elevate their status to A. Therefore, it is essential to assess what has been accomplished thus far and identify areas that require further action. This includes enhancing our research management systems, promoting collaboration across faculties, and ensuring that our research output meets international standards.

2.1 R&D evaluation, feedback from foreign panels

As vice-rector, I was responsible for overseeing the evaluation of research at UP. In 2023, I initiated a "practice evaluation" aimed at preparing us for the national evaluations scheduled for 2025. This involved assembling 22 panels of foreign experts from various scientific fields who reviewed our self-evaluation reports, analyzed selected publications, and provided a number of relevant recommendations. While these panel reports are intended to guide our progress, they have unfortunately gone largely unnoticed thus far.

The evaluations highlighted several areas where we have reserves. One significant issue is the high dropout rate of doctoral students across various departments. Additionally, many departments lack broader international cooperation, which limits their research potential. While some high-quality departments have invested in top-notch equipment, they do not utilize it effectively. Furthermore, the majority of departments receive far fewer foreign projects than would be expected from a research university. There are also instances of isolated groups within certain fields that fail to communicate with one another; better results could be achieved if these groups collaborated more closely. Some panels expressed concern about excessive publication in predatory journals, while others noted that some departments are content with less prestigious publishers for their monographs. Additionally, there is relatively little interdisciplinary research conducted in cooperation between faculties, and untapped potential exists for deeper collaboration with industrial partners. Another point raised by the panelists was that scientific integrity is often addressed superficially and formally, indicating a need for a more detailed guide to good research practices.

The leadership's task now is to build on these recommendations and implement appropriate measures that will help us advance. Our university possesses enormous potential in many areas, and it would be a great shame to let it lie idle. The rector must leverage available motivational resources to ensure that the wealth of talent within our institution is utilized as effectively as possible.

In July 2023, Palacký University became a signatory to the Agreement on Reforming Research Assessment (ARRA). This commitment entails significant responsibilities; instead of relying solely on simple bibliometrics, we must deepen qualitative assessments through peer review. Signatories of the agreement are expected to allocate sufficient resources to establish a robust evaluation process. Practically, this means that our work will be scrutinized more frequently by external evaluators, and our leading

scientists will need to dedicate part of their time to assess the work of others. The university management should support these activities by considering them in the evaluation of academic staff. The evaluation of research at our institutions should primarily serve a formative role, providing recommendations on how to effectively enhance quality. In line with ARRA principles, we must abandon the mechanistic use of quantitative parameters that often distort field research and create inappropriate incentives.

I believe it would be beneficial for UP to collaborate with other research universities—both within the Czech Republic and as part of the Aurora Alliance—when evaluating research at individual faculties. Conducting mutual comparisons and benchmarking against similarly focused institutions can provide valuable insights. Some faculties have already taken initial steps in this direction; others will need suitable inspiration. It is crucial for the rector to actively support, stimulate, or initiate activities that lead to high-quality formative evaluations through all available means. By addressing these challenges and implementing effective strategies based on feedback from foreign panels, we can enhance our research capabilities and maintain our position as a leading research university in the Czech Republic and beyond.

2.2 International projects, Horizon Europe, ERC, FP10, etc.

The weakness of most Czech universities and research organizations lies in their relatively low income from foreign projects compared to other European countries, coupled with an overreliance on domestic grants, structural funds, and institutional support. While some institutions have achieved success in securing international funding, many find themselves struggling to catch up. The rector's role is crucial in stimulating a shift towards a better position for our university, both in the short and long term.

In the short term, it is essential to establish a high-quality Project Centre focused primarily on international grants. Although the existing Project Service is beneficial for managing structural fund projects and assisting faculties without their own project centers, it is insufficient. We need a dedicated workplace that actively seeks out international project opportunities, provides training for potential researchers, facilitates connections between potential partners, and offers methodological support for faculties in their project agendas. Effective electronic management of the project agenda is also necessary to streamline access to information about ongoing projects, potential collaborations, completed projects, and any obligations arising from them. We can draw inspiration from other universities where such systems are already functioning well. Before international project activities become routine for academics at UP, there is room for bonuses and assistance for those who initiate these efforts, strive to secure projects, and collaborate with colleagues from different departments.

In the long term, it is vital to nurture the growth of the young academic generation so that establishing rich foreign contacts becomes second nature. For students aspiring to an academic career, completing a study abroad experience during their master's program—typically through Erasmus—should be standard practice. All doctoral students should gain substantial foreign experience through conference participation and several months spent at reputable foreign institutions. After obtaining their PhD, future academics should aim to acquire several years of postdoctoral experience, potentially through programs like the Marie Curie Fellowship or by leveraging contacts made during their studies to work alongside international colleagues. If they return to UP after gaining this experience—many of whom will feel drawn back by the "genius loci" of Olomouc—they will be well-prepared to establish their own research groups integrated into international collaborations and projects. The rector's task will be to encourage university departments so that what is currently practiced only in some areas gradually becomes the norm across all faculties at UP.

2.3 Honest science

I want high-quality and honest science to be conducted at Palacký University. There is pressure for performance everywhere, which sometimes leads to shortcuts being taken in research that compromise academic integrity. While such shortcuts may yield short-term gains for some, they ultimately have devastating long-term effects on the academic sphere. This results in a loss of public trust and sets a poor example for students. The rector must not turn a blind eye to these issues; instead, there should be a strict enforcement of the principles of academic integrity, even if this occasionally leads to temporary financial disadvantages. Prevention is crucial in this context. Beginning researchers should be educated about examples of both good and bad practices, making training in scientific integrity an essential component of their curriculum. This education will help instill the values of honesty, fairness, respect, and responsibility that are fundamental to academic work. By fostering an environment where integrity is prioritized, we can ensure that students and researchers understand the importance of maintaining high ethical standards in their work.

2.4 Efficient use of resources, sharing of equipment

There are many excellently equipped workplaces with top-notch instruments at UP, which form the basis for numerous outstanding results. However, both internal inspections and visits by foreign evaluators have identified significant reserves: lab records indicate that some very expensive instruments were utilized for only a small portion of the year, despite their potential for measurements or student education in other parts of UP. Although there is a general lack of space at UP, as noted in Senate materials, inspections have repeatedly uncovered empty laboratories. This represents a senseless waste of public funds and resources that, if utilized more effectively, could contribute to further high-quality scientific outcomes. A straightforward measure for university management would be to standardize the maintenance of lab books to enable continuous monitoring of our capacity usage. This should begin with the most expensive instruments and, once the system is established, gradually extend to less expensive ones. Additionally, we should reward those workplaces that can use their equipment more effectively—either through independent use or by sharing it with others.

2.5 External income

High-quality universities are expected not to rely solely on state budget funding but also to assert themselves in the market environment. Knowledge transfer parameters, such as contractual research, income from licenses, or consultancy activities, are centrally monitored, and universities are evaluated based on these metrics, including the K performance indicator. We have significant reserves in this area: in the so-called segment 4, we only have 7.66% for external income compared to our 12.33% share in indicator A. Although this primarily depends on the initiative of individual departments, the rector should encourage and stimulate these activities through appropriate intervention mechanisms and help find and mediate cooperation with external entities.

3. Third role

In addition to the central tasks of education and research, the university fulfills a number of "third roles," which typically refer to all other relationships with external non-academic entities. The most common examples include cooperation with industrial or agricultural enterprises and other companies, collaboration with local governments and government offices, partnerships with artistic and cultural institutions, popularization activities, nurturing talented youth, expert activities, and participation in public debates on various pressing issues. The vast majority of these activities arise from the initiative of individual departments. The rector's role is primarily to express support for those engaged in these activities, help mediate the necessary contacts, and assist in finding funding schemes for these initiatives. I will be pleased if we maintain the high level of established activities that already have a long-standing excellent reputation, such as AFO or Fort Science, while also successfully developing newer initiatives, like the recently established hackathon focusing on the use of open data from the Olomouc region. I will strongly welcome the emergence of additional activities, such as engaging in cooperation with the Olomouc municipality through the EUniverCities initiative and leveraging Bc, Master, or PhD theses to create socially relevant knowledge.

4. Employee Care

The university management must ensure proper care for employees. Labor relations at the faculties are entirely the responsibility of these faculties, but the rector should pay particular attention to the fair treatment of people across the university. This issue deserves more extensive discussion than can fit into a ten-page thesis, so I will highlight a few key points that I want to focus on. It will be necessary to completely rework the internal wage regulation. After all the ups and downs, our current system still does not meet the requirements, and I do not believe we can achieve a quality result on our own. I will seek an external entity with a clear mandate to undertake this as a contract, which will also be responsible for any legislative shortcomings. The regulation should enable a transparent, fair, and motivating wage policy. I am very keen for the university to offer benefits such as a university kindergarten for the children of our employees and students and to provide suitable and attractive training that allows young staff to quickly find their way in the academic environment. At the same time, we older employees should have opportunities to keep up in areas that are becoming increasingly challenging for us—such as social networks. Additionally, I would like these benefits to encourage a healthy lifestyle by offering easily accessible sports activities.

5. Principles of financing

One of the most important tasks of the rector is to submit a budget proposal. The basic principles that I want to adhere to are relatively simple:

• Basic stability should result from the fact that nominal amounts should not decrease year-on-year for any faculty (unless resources from the Ministry of Education, Youth and Sports decrease).

• Where incoming finances are determined algorithmically "from above," adhere to this algorithm as much as possible when dividing into faculties.

• Use any deviations from this algorithm for motivational mechanisms stimulating desired activities.

• Introduce new measures gradually and cautiously: first announce which parameters will be monitored, then introduce the relevant measure to a limited extent, and only after it has proven itself and its possible shortcomings have been debugged, expand it.

More specific procedures for the most important parts of the budget will be mentioned below.

5.1 Contribution to educational and creative activities

The budget defined in the Higher Education Act in §18 (2) a) is referred to in UP-jargon as "resource eleven." For the entire UP, it amounts to approximately 1.6 billion crowns and consists of the so-called "fixed part" according to indicator A, which is divided proportionally between universities (UP accounts for 6.33% of all Czech schools, approximately 1.17 billion CZK), the so-called "performance part" according to indicator K, where different schools compete in several performance parameters (for UP, it was a total of 334 million CZK in 2024), and then the indicator P intended for "social priorities" (currently for medical and teaching programs, totaling approximately 100 million CZK, with plans for other fields in the future).

The fixed part (indicator A) is guaranteed to schools provided that the total number of students does not fall below a predetermined limit and that its average KEN (a coefficient quantifying economic demands) does not decrease. Each study program has its KEN set at the national level, ensuring that universities do not replace students in economically demanding programs with those in less demanding ones. Until the Ministry proposes a different financing model, which is very important to expedite, it makes sense to adhere to this principle in the inter-faculty division as well. Some voices suggest abandoning this approach and encouraging faculties to compete for students; however, this would have a negative motivational effect, leading to pressure to accept more students and reduce academic standards. Since it is a zero-sum game, this would not bring new finances into the system but would instead result in greater effort and less efficient work. I would only consider it meaningful to use part of any increase in indicator A to reward desirable activities, such as combining programs, collecting feedback from graduates and their employers, or stimulating the creation and effective functioning of "program councils" composed of representatives from our graduates' employers.

The performance part (indicator K) is divided at the national level according to eight sub-indicators in which we compete with four other universities in the so-called 4th segment. Some of these indicators make good sense (e.g., bonuses for artistic activities, mobility, external income), while others are questionable (e.g., employment of graduates—an indicator that essentially quantifies the number of graduates multiplied by KEN at very low unemployment; further includes the number of employed "foreigners," meaning citizens from countries other than the Czech Republic). For those indicators that provide good motivation, relevant funds should flow to those who contributed to fulfilling the indicator. For others, I consider it reasonable to gradually create motivational instruments supporting a shift in the desired direction. Some should be adopted from schools where they have proven successful (e.g., incentives for cooperative interfaculty teaching), while others will first be discussed.

The P indicator for "social priorities" is directed towards specific workplaces, and university management will not interfere with it. However, the rector should actively engage in discussions at the national level regarding including other necessary areas in financing through the P indicator. I believe that a reasonable national policy would involve gradually increasing the P indicator and transitioning to a contract financing system (e.g., following the Austrian model), with UP management being proactive in shaping this system.

5.2 Institutional support for the long-term conceptual development of a research organization (DKRVO)

In UP-jargon, the so-called "resource thirty" refers to funding from the Ministry of Education that, unlike "resource eleven," cannot be used for educational purposes but is strictly allocated for research and research-

related activities. Defined in the Research Support Act in Section 3(3)a), this funding amounted to a total of 838 million CZK in 2024 at UP. This is a significant portion of our budget, and its amount depends on research evaluation. Therefore, it is vital for UP to succeed as best as possible in the upcoming evaluation, as universities that do not rank among the best have significantly lower DKRVO.

Currently, the allocation of DKRVO among faculties largely stems from the results of the national "coffee-mill" competition, which scored results and allocated funds proportionally across eleven subject groups. UP had been very successful in this regard, with its share of DKRVO increasing from 6.0% in 2011 to 8.5% in 2017. Following excellent results in the evaluation according to the 2017+ Methodology in 2020, UP's share further increased to approximately 9.2% of all Czech schools. In contrast, Charles University saw its share decline from 33% in 2011 to 25% in 2017, although it rebounded to 26% after ranking among the best schools in the 2020 evaluation. Given that one percentage point today represents about 90 million crowns per year, this shift has been significant for UP. However, many other universities have since improved their research quality, making it challenging to maintain our position.

At both the national level and at UP, research quality is not evenly distributed. While some fields are fully comparable to global standards, others do not yet meet international benchmarks. This disparity is evident in both "hard" bibliometric parameters and peer-review evaluations of selected results or social relevance. In the 2020 national ranking, our faculties were rated as excellent, very good, and good in Module 3, which focused on social relevance. The management's task will now be to allocate DKRVO effectively to maintain our strengths in internationally comparable research while stimulating progress in other fields. This approach requires careful planning to ensure funds are utilized effectively. The national landscape presents challenges as well—particularly in social sciences and humanities—where there are significant reserves compared to developed countries. Improving research quality in these areas will be one of our main challenges, and I want UP to play a leading role in this endeavor.

I intend to establish a DKRVO allocation system modeled after successful universities ahead of us. This model would divide DKRVO into three components: a stabilization component based on a "contract" between the rector and the dean, a performance component, and a motivational component. The contract component would guarantee each faculty a certain amount of funds for several years (typically five), with faculties committing to meet specific indicators related to previously agreed goals within this framework. The performance component would be variable over time and reward recent achievements—this may include measurable outputs from modules M1 and M2, competitive projects, or other parameters like discipline-standardized citations or significant international awards. The motivational component would support specific desirable activities such as submitting international project proposals, mentoring schemes for beginning researchers, and interdisciplinary cooperation between faculties. The specific parameters will be determined through discussions that maximize input from independent external experts—especially from the UP International Council and members of international panels who evaluated our institution during the "practice" evaluation in 2023. The goal will be to consider field-specific needs so that DKRVO serves its purpose effectively across all research areas—supporting our long-term conceptual development.

5.3 Levies

A question that has been overlooked for a long time, which I would like to open, concerns the levies to the rectorate and central units. How should they be allocated to individual workplaces? The basic philosophy is that the main tasks of the university-education and research-are fulfilled by individual academic workplaces. The rectorate and central units then provide them with the necessary conditions and services. For the system to function effectively, the financing of these services should be transparent, fair, and motivating. Currently, the system where levies are calculated in proportion to turnover in some items does not provide much incentive for efficient resource use. We can take inspiration from other institutions where levies are determined using principles similar to the "full-cost" methodology for calculating indirect project costs. This model was discussed by UP along with other schools participating in a focused project in 2011, but unfortunately, none of its results were implemented here. In this model, the consumption of services is estimated using "cost-drivers," which are relatively easy to identify and use for calculations. Workplaces would then "pay" in proportion to the services consumed. For example, if part of the levies is determined based on the used area of rooms—as some schools do—there would be a strong incentive to use space efficiently, making empty laboratories unthinkable. Since central unit services are always consumed by people, a frequent cost-driver could be the number of individuals (employees and students) at each workplace. However, in the interest of solidarity, I propose that wage costs rather than headcount or full-time equivalents (FTE) be considered: a workplace that can afford higher wages would contribute more to financing central units. When introducing changes, I intend to proceed predictably and cautiously: first, have

the discussed measure approved and then gradually introduce it on a small scale (a small percentage of total levies). Only after addressing any shortcomings and ensuring its effectiveness will it be expanded further.

6. University Development

6.1 Strategy and Investment Development

The long-term development of the university should be supported by a well-developed strategy. This strategy should be outlined in a document that clearly specifies the investment activities the university aims to undertake, the order in which these activities will occur, and the rationale behind them, as well as how it intends to secure financing for these initiatives. The current situation is not satisfactory; for example, while the Strategic Plan mentions intentions to build a campus in the Middle East, it lacks information about our interest in expanding our campus in the city center if a suitable opportunity arises. Regardless of the approved strategy, decisions regarding strategically important investments are often made chaotically based on ad hoc negotiations without thorough economic analysis. A case in point is the Senate resolution requesting detailed economic analyses of the potential purchase of the Hanácká Kasárna building after the Senate had already expressed a positive stance on the purchase and the Board of Trustees had given its consent. I will advocate for a new and well-developed Strategic Plan for the university. This plan should be based on well-defined and discussed interests from the university's components and developed professionally with assistance from an external entity. Faculty senates should have the opportunity to express their opinions on this document, and only after that will I submit it for discussion by the Scholarly Board and for approval by the university Academic Senate and the Board of Trustees.

6.2 IT support, facility management

The development of the university is unthinkable without a quality background in information technologies. No workplace can function effectively without them, and efficient management is impossible without quality data collection, processing, and evaluation. From my time as vice-rector in charge of IT, I understand the complexity of this issue, and it is clear that improving our IT infrastructure will be a demanding long-term process. Among the services provided by central units, I want IT to be the main priority. I will strive to ensure that as much of the university's agenda as possible can be carried out electronically, minimizing the need for printing and signing papers, thereby making necessary data easily accessible for decision-making. I consider it a success that we managed to electronicize the agenda of business trips using our own capacities, and I want us to advance in many other "everyday" matters, such as the agendas of academic bodies—scientific boards or senates—and accreditation processes. I aim to establish a functional "facility management" system that enables effective management of university buildings. Although its gradual implementation was recommended by the IT Commission back in 2021, UP management has yet to find the courage to step out of its comfort zone and push this matter forward. While it may cause some initial discomfort, I am convinced that the long-term benefits will be significant. In addition to these advancements, attention must also be paid to cybersecurity. Beyond professional technical security measures, the most critical aspect involves working with people; it is often said that the most vulnerable part of any cybersecurity system is found between the chair and the monitor. Therefore, targeted training and awareness regarding errors and their consequences should be standard practice.

7. Sustainable development

The issue of sustainable development was under my responsibility when I was vice-rector. I was fortunate to have a dedicated team that helped us introduce this agenda at Palacký University (UP) and elevate it to a level that has inspired other universities in the Czech Republic and within the Aurora network. We were among the first to develop a comprehensive sustainable development strategy, conduct an energy audit, and launch numerous activities supporting biodiversity, such as creating flowery meadows and implementing sensible waste management practices like using gastro-waste to produce biogas. I want UP to continue on this path. I would be pleased if the university, in cooperation with the municipality, worked to make Olomouc more friendly to cyclists and pedestrians, encouraging our students and employees to use these healthier modes of transport while minimizing car usage. It is essential for UP to contribute its expertise and engage in critical discussions supported by solid arguments in the realm of sustainable development, avoiding ideological shortcuts. This commitment will ensure that we not only lead by example but also effectively address the pressing challenges of sustainability in our community and beyond.

8. External influence

The rector must prioritize drawing attention to the significant underfunding of Czech higher education and demand corrective measures. This issue has been frequently addressed by university representatives, such as the Council of Higher Education Institutions and the Czech Rectors' Conference (CRC), but these efforts are not sufficient. Independent statistics from Eurostat and the OECD highlight that higher education in the Czech Republic receives a significantly smaller share of public finances compared to developed countries. According to the latest edition of "Education at a Glance," government spending on tertiary education, including university research, is only 1.9% of total government spending in the Czech Republic, and 1.2% when excluding research (including structural funds). In contrast, the OECD average stands at 2.7% (including research) and 2.0% (excluding research). The difference of 0.8 percentage points translates to approximately 18 billion crowns missing from higher education annually if we aim to meet the OECD average. For UP, this would mean an additional 1.1 billion crowns per year.

Even if we were to accept that Czech higher education is supported significantly below the OECD average (which we should not), it is crucial to recognize that the share of universities in public finances has been declining over the long term. A recent analysis by the Council of Higher Education Institutions and the CRC reveals a significant decrease in real university income from 2009 to 2023, resulting in a cumulative deficit of 10 to 11 billion crowns. This decline logically impacts quality: it is unsustainable to provide quality education with insufficient funding, and rectors must consistently communicate this reality to politicians. Within the CRC, UP should advocate for a change in the funding system. Instead of annual disputes over minimal increases that barely cover inflation, we should transition to a contract funding system similar to Austria's model. This would involve schools signing multi-year contracts with the state, committing to specific indicators in research, education, and community engagement while receiving pre-agreed funding from the state. Such a system would facilitate long-term planning and reduce energy spent on minor details. Additionally, we should abandon the current dual-track system of "contribution" and DKRVO, which separates research activities from educational ones. The greatest value of universities lies in the synergy between research and education. While the CRC is active in highlighting underfunding issues, discussions about changing the funding system have not been prominent; I would like to initiate this debate.

I have also proposed changes as part of recent suggestions by the Council of Higher Education Institutions for a new University Act. One proposal I intend to promote within the CRC is opening senates to representatives of technical and economic workers, similar to practices in Austria. This change would reflect our current reality, where many technical staff identify closely with their institutions alongside academic staff and students.

The research evaluation system is also crucial; here too, the rector should engage actively in national discussions.

Beyond national issues, rectors must participate in debates regarding European education and research policy through CRC activities as well as organizations like Aurora or the European University Association (EUA). Key topics will include shaping the next EU Framework Programme for Research and Innovation (FP10), balancing research integrity with performance pressures, academic freedoms concerning security issues, and addressing open-access policies and their economic implications—particularly how public funds are transformed into profits for a few publishing houses with minimal costs for producing scientific publications.

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Tomáš Opatrný, January 5, 2025