



RESEARCH
UNIVERSITY
EXCELLENCE INITIATIVE

1st Progress Review Conference of the Universities participating in the “Excellence Initiative – Research University” programme

PRE-EVENT QUESTIONNAIRE

GDAŃSKI UNIWERSYTET MEDYCZNY / MEDICAL UNIVERSITY OF GDAŃSK

- 1) What evidence can be provided for early cultural change within the university, following selection in the first round of IDUB (e.g. acceptance of an enhanced and widely held ambition to perform cutting edge research)? Which measures have been undertaken to date for creating, supporting and maintaining an atmosphere and attitude of change and positive development throughout the institution?

One of the main ideas for the development of MUG as research university described in the application and plan is implementation of strong core facility units at the University. The core infrastructure in the form of a well linked and spatially concentrated network is capable of leading breakthrough-generating research. It can also facilitate innovation, market implementation and raise quality of education.

In first months of IDUB Program implementation on MUG the Translation Medicine Centre (TMC) has been further developed with hiring new researchers and buying new equipment. MUG's TMC closely cooperates with University Clinical Centre. As a result of this cooperation TMC is able to run more effective research on patients.

In August 2020 Senate of MUG established new university-wide unit – Central Biobank of Medical University of Gdansk. This unit was created to coordinate and support activities related to the collection and storage of biological material for scientific or educational purposes.

Another crucial core facility unit that is currently being developed is Centre for Targeted and Untargeted Metabolomic Analysis. MUG has already hired experts that are responsible for the preparation of the Centre, including highly specialized laboratory. New location for this unit has already been chosen and it is planned that the unit will start operating in 2021.

In order to facilitate the work of research teams by increasing the scientific excellence of published results and submitted grant applications MUG is working on establishing Centre of Biostatistics and Bioinformatics Analysis. This core facility will offer a wide range of big data service for MUG researchers supporting their projects.

Last but not least, all three Leaders of Priority Research Areas have already started identification and creation of research groups. Research teams are all connect to one selected PRA, but teams are multidiscipline in order to examine majority of aspects of each research issue.

2) How is the implementation of the plan proposed by the university being governed? Who are the leaders of the implementation process? What are the measures for internal monitoring of progress in implementation of the plans?

Prof. Tomasz Bączek (vice-rector for research in years 2012-2016 and 2016-2020) has been responsible for the implementation of the „Excellence initiative – research university” Program on MUG. He cooperates closely with specially hired project manager, who is responsible for coordination of the Program on MUG.

On 15th of July MUG established two new departments that are dedicated to execute and govern the plan proposed by the University:

- “Excellence Initiative – Research University” Office,
- IDUB Support Department.

MUG identified and selected three Priority Research Areas:

- Oncology,
- Cardiology and Cardiovascular Medicine,
- Biochemistry, Genetics and Molecular Biology.

From the very beginning MUG selected leaders for each PRA, who are: Prof. Jacek Jassem (Oncology), Prof. Krzysztof Narkiewicz (Cardiology and Cardiovascular Medicine) and Prof. Ryszard Smoleński (Biochemistry, Genetics and Molecular Biology).

Internal monitoring of progress in plan’s implementation is currently in final development phase. It is planned that Program Steering Committee will be established by the end of September 2020. Steering Committee will monitor Program realization on strategic level, meeting at least twice a year.

Another authority that is responsible for strategic monitoring of IDUB is the International Advisory Council. International Advisory Council should be formally established by the end of 2020.

3) What measures has the university undertaken to disseminate and promote the plan among the academic community?

After the Ministry announced that MUG is among top 10 Polish universities chosen for the IDUB Program an information meeting for all the University researchers was held in December 2019. During the meeting the main IDUB aims, actions and plans were presented by the University Authorities.

The official ceremonial inauguration meeting of the IDUB Program on MUG was held in January 2020. During this meeting the University Authorities presented the vision of MUG as developed research university and actions that are planned in order to reach the desired level and status. On later phase PRA leaders held a number of meetings to identify main research groups within PRA scopes (with emphasis on cross sectional research).

Moreover, MUG established web page dedicated for IDUB Program. In the final version one would be able to get all the information on:

- PRA and research fields within them,
- Science Centers established and operating within MUG (core facilities),
- Grant calls,
- News,
- Documentation.

4) What are the main measures taken by the university to improve the quality of university governance and management, including quality-enhancing organizational changes?

MUG undertook few steps in order to develop a strong foundation for University's quality improvement framework.

First of all, an important adjustment to University's organizational structure was introduced. The newly created unit (Process Management Team) will comprise of two areas: process management and research supporting services. On one hand the unit will provide process management expertise in order to facilitate quality improvement efforts and support researchers in achieving higher efficiency. On the other hand it will create the strong starting point through research assistants for deploying administrative research supporting service center.

In order to achieve operational readiness of the unit, MUG has opened the recruitment process in July, for two of the following positions: one for the process expert and one for research assistants (one person for each of the PRAs).

Taking into consideration the strong voice of the researchers, MUG started continuous improvement program in few areas critical to research effectiveness. For example, the traveling process was heavily reengineered. Right now, MUG started similar improvement activities in procurement area.

MUG plans to achieve significant quality improvement with the support of technology. One of the key solutions is the workflow platform, which will enable digital flow of documents.

By the end of August, MUG will also deploy BPM solution - Adonis, which will support University in process management efforts.

5) What are the main administrative measures taken by the university in the Priority Research Areas (POBs) including focusing and integration of research teams? What additional sources of research funding dedicated to POBs have been secured to date following success in the IDUB competition?

Currently, all POB leaders are finalizing identification of research fields and dedicated research teams. Depends on POB there will be 10-15 research fields.

Each research team will have 1 or 2 coordinators in order to maximize team's effectiveness. It was agreed that also young researchers will take the role of coordinators.

Each research field will have:

- list of team members,
- specified research subjects,
- specified needs for cross-sectional cooperation,
- list of key projects realized so far.

POB Biochemistry, Genetics and Molecular Biology will mainly focus on providing research tools, performing supporting role for all the research activities of other POBs. Simultaneously, this POB will ensure consistency of all research actions.

Additional research funding for POBs has not yet been secured. Before MUG received treasury bonds, IDUB activities were pre-financed from the University budget.

MUG will financially support core facility development including:

- Centre of Biostatistics and Bioinformatics Analysis,
- Centre for Targeted and Untargeted Metabolomic Analysis
- Cardiovascular Phenotyping and Imaging Centre.

Moreover, MUG researchers managed to obtain external financing for some projects:

1. PLN 83.4M from Medical Research Agency for five clinical research projects,
2. PLN 1.1M for Research on AI solutions in analysis of MRI images with possible neoplastic changes.

6) What consideration has been given to inter-institutional collaborations within Poland to enhance, for example, research that crosses traditional disciplinary boundaries? What progress has been made regarding establishment of a federation or merging with other institutions from the region, especially in case of universities which received relevant recommendations?

In August 2020 MUG, together with Gdansk University of Technology and Gdansk University, initiated the process of establishing Fahrenheit Union of Universities in Gdansk. The MUG's Senate has already formally approved the formation of the Union. All three Universities agreed on the statute of the Union. The Union will be officially activated when authorities of all Gdansk Universities approve its formation and statute. This is scheduled for the end of September.

It is allowed to join the Union by other public universities. It must be approved by Senates of all three Universities that formed the Union.

The main aim of the Union is optimization of the participating Universities' resources. The Union can be responsible for:

- analysis of resources and potential of joint activities of participating Universities,
- development of assumptions and scenarios of university federalization,
- proposing solutions supporting research and development work conducted at universities and supporting joint education of doctoral students,
- conducting a common promotion and ranking policy, especially internationally.

MUG and Gdansk University of Technology strengthened their cooperation since the beginning of this year (the joint two-days conference in February) and then with the attempts to start new joint projects. The recent outcome of this cooperation is a joint project executed by intercollegiate team on new technologies for SARS-CoV2 patient monitoring.

7) What measures have been undertaken to identify, train, and support the next generation of international-quality researchers? How implementation of the IDUB plan contributed to enhancement of doctoral training, including recruitment to doctoral schools?

The First MUG PhD School has been created according to the newly implemented "Constitution for Science" requirements, as means to offer the PhD students complex environment fostering the interdisciplinary development, highest quality classes. We aim for the best starting from strict recruitment criteria which should allow for choosing new doctoral students from among the best (in current recruitment for 2020/21 we have 70+ candidates for 35 places (around 2 candidates per place, and 3 candidates per place in medical sciences). The teaching curriculum has been completely reorganized, and multiple new subjects were added.

The First MUG PhD School is ready to recruit and teach foreign PhD students in English in all three covered disciplines (Medicine, Health Sciences and Pharmacy). Two such PhD students have already been recruited and are starting their activities in the School. One person is from Greece and the other one is from Iran. Both of them will execute their research projects within International Research Agenda 3P – Medicine Laboratory. Prof. Piotrowski will be their academic tutor.

Within the POWER 3.5 Program to be realized in 2021-2023, the School is offering interested PhD students interdisciplinary learning activities, including facultative classes, summer schools and workshops.

Moreover, MUG recruited one PhD student in PRECODE project (PancREatic Cancer OrganoIDs rEsearch), in which each Partner recruited one early stage researcher. In this case MUG took on board pharmacy researcher from Chongqing University in China.

8) What progress has been made to date in implementing human resources development programmes and in recruitment of researchers (whether Polish citizens or not) from universities outside Poland?

In April 2020 MUG joined a project “Interdisciplinary HR development center – think tank for the development of key competences of future human resources for Polish science” lead by the University of Silesia in Katowice. The aim of the project is to strengthen the position of Polish universities by supporting the development of key competences of employees, including scientists and administration employees. As a result of this project MUG will get the possibility to use special online tool that will measure and analyze competencies of our employees.

MUG HR Department has searched for international experience of implementing human capital management programs at all levels of leadership at universities. Proper methodology and supplier were found together with cost estimation. MUG is initially ready for implementation consultations with the supplier. MUG has also executed market research for standardized tool for employee satisfaction surveys. We want to monitor the satisfaction of working at the university in order to observe the legitimacy of implementing our HR initiatives.

MUG has already hired two researchers from universities outside Poland. Both are working on Excellence Initiative – Research University actions described in MUG’s plan:

1. Biobanking Expert/Researcher from Queen Mary University of London (QMUL),
2. Senior Engineer/Researcher from University of Bergen.

9) What specific steps have been taken and what progress in implementation of the plan has been made to date to enhance international engagement (e.g. research collaborations with foreign universities or research institutes)?

In recent months MUG developed an implementation plan with schedule to implement a support system for scientists in obtaining grants under the Horizon Europe Program. System was prepared along with tools for acquiring partners, strengthening existing partnerships and supporting the preparation of international research projects, as well as in motivating scientists to prepare them.

We believe that this initiative will allow MUG's researchers to prepare and successfully execute international projects in the Horizon Europe Program.

MUG stated in the IDUB plan that cooperation with key partners (Uppsala University, University of Glasgow, Utrecht University, KU Leuven, Imperial College London) will be strengthened. In April 2020 MUG was invited by the Utrecht University to apply as their potential partner in a network of medical universities and institutions. Formal application was officially submitted but the decision has not been announced yet.

10) What kind of changes has the university initiated in the education system on undergraduate and graduate level?

MUG has already started a new Power 3.5 Program at the University. Power 3.5 Program is dedicated for both undergraduate and graduate level.

For graduates interdisciplinary PhD student education program will be launched. Within the Power 3.5 Program 50 PhD students will get complex support for 24 months. The support will include:

1. modification of the education program (introduction of new interdisciplinary subjects),
2. intensification of research work (enabling PhD students to exchange experiences with scientists from other research units in the country and from abroad,
3. providing various forms of financial aid (scholarships, funds for Open Access publications, support for the implementation of research projects).

MUG will introduce significant changes to the existing PhD education program by including additional classes related to the proposed project profile. Subjects in the field of the so-called soft skills will be also implement to the program.

11) The worldwide impact of measures and limitations introduced as a consequence of the COVID19 pandemic should be taken into account in the implementation planning, and institutions should be driven by the will to maintain strategic development as planned. The good use of digital means of communication has a crucial role to play. Thus, universities should see to it that they are up to this challenge. What actions have been taken by your university in order to reduce the negative impact of the pandemic on the implementation of the university development strategy?

The COVID19 pandemic has undoubtedly slowed down all activities in last six months all over the world. The consequences of the pandemic hit MUG as well. Safety and health of our students, researchers and all employees is always our priority. Simultaneously, MUG continues to proceed with all tasks (from those on strategic level to day to day actions) as much as current national restrictions and guidelines allow.

In order to execute the IDUB's plan as much as possible specified digital means of communication has been already implemented among academic community. The main communication channels use currently by MUG are Microsoft Teams and Zoom applications. Both applications allow to organize online meetings with large number of internal and external participants.

In the first months of pandemic MUG switched almost 100% to remote work. After the national restrictions were reduced our employees and researchers were able to work in mix system in order to minimize risk of COVID19 infection.

It must be emphasized that MUG, as a leading medical university in Poland, is engaged in numerous actions against COVID19 pandemic.

Despite of all obvious COVID19 obstacles and limitations regarding travel, meetings, conferences MUG is determined to fully execute plan that was presented within IDUB application.