

Medical University of Gdańsk

Assessment report in the first competition under the “Excellence Initiative – Research University” programme

1st criterion - substantive quality of an application:

- a) the quality of a SWOT analysis with respect to the objectives referred to in paragraph 4 of Communication from the Minister of Science and Higher Education of 26 March 2019 on the first competition under the “Excellence Initiative – Research University” programme, including the quality of the analysis used to identify priority research areas;
- b) conciseness and concreteness of the SWOT analysis and the plan;
- c) relevance of the identification of the specific objectives referred to in paragraph 6(2)(a) and paragraph 8 of Communication from the Minister of Science and Higher Education of 26 March 2019 on the first competition under the “Excellence Initiative – Research University” programme in relation to the SWOT analysis results;
- d) appropriateness of the indicators chosen to describe the university’s potential and to measure the extent of the objectives’ attainment;

Substantiation

The executive summary of the application is poorly written (too many generalisations) and difficult to evaluate; the remainder of the proposal is impressive and well-written. The SWOT analysis is impressively systematic and thorough and includes clear comparisons of past performance with other Polish universities, facilitating the selection of Priority Research Areas (PRAs). The social impacts of different areas of research are also considered along with an assessment of EU research priorities. The SWOT analysis also includes comparison with three other prominent medical universities in Poland, assumed (correctly) to be competitors in the current exercise. Comparisons show that the selected PRAs of oncology and cardiac/cardiovascular are genuinely strong; the third (biochemistry, genetics and molecular biology) serves more as an enabling theme. The ambition of the MUG is to significantly rise in the Shanghai ranking (as a proxy for quality); the university is currently in the top 400 for medicine. However, the question is whether the ambition will be realized with the plan proposed. The plan is very disperse, with 82 different strategic initiatives defined and 39 actions developed, resulting in subcritical funding for many of them to significantly increase world impact. However, at the interview it was pointed out that the initiatives and actions can be grouped into many fewer coherent initiatives. Only about 25% of the grant will be invested in research, about 25% in the development of core facilities (this is a good move, because sustainable), and 50% in the other 5 objectives (international collaboration, quality of education, professional

development, university governance and other). The indicators chosen to follow progress are sometimes not specified enough. The plan to involve of an International Advisory Board is key to sharpening the process monitoring and selection of indicators, provided that their advice is heeded.

2nd criterion - relevance of assumed objectives to enhancing the international significance of the university's activity:

- a) the extent to which specific objectives contribute to attaining the objectives referred to in paragraph 4 of Communication from the Minister of Science and Higher Education of 26 March 2019 on the first competition under the “Excellence Initiative – Research University” programme;**
- b) sustainability of specific objectives after the plan implementation period, taking into account, in particular, actions to be carried out in 2026.**

Substantiation

The research objectives build on strengths of the MUG and are very concrete (specific). Some of the core facilities are very timely (genetic research lab, lab for single cell analysis, metabolomics center) and are sustainable investments (i.e. will still have impact after 2025). The research programmes seem well chosen and focus investment in selected labs, belonging to the group of prominent scientists of the MUG. About half of the grant is invested in objectives 2-6. It might have more impact to spend part of that (e.g. half) to achieve a critical mass of prominent researchers in the PRAs of the MUG (especially by attracting new PIs to MUG in these fields). The creation is proposed of a Consortium of European Medical Centres (universities) with particular emphasis on cooperation with the following key partners: Uppsala University, University of Glasgow, Utrecht University, KU Leuven, Imperial College London. The list is impressive. The proposal appears to be realistic, exploiting connections with expatriate Poles in leading positions at major European universities; this is a smart approach. These universities (and others) provide the focus for the proposed bilateral international personnel exchange programme and there is evidence from the interview that collaborations are ongoing. Attention is paid to ensuring the sustainability of improvements beyond 5 years and maintain the status of internationally recognized university, and appropriate plans are described. Encouragement of research staff to apply for external funding is seen as key; plans are suggested to promote this.

3rd criterion - adequacy of described actions to the assumed objectives:

- a) appropriateness of the actions selected, including actions of ground-breaking and innovative nature, in the context of the specific objectives' implementation;**
- b) feasibility of the activities given the university's potential and budget;**

Substantiation

The actions selected for objective 1 (increasing impact) are well justified and specific, with clear objectives in mind. Whether the actions selected for objective 2 will be feasible and/or have impact is less clear. e.g.:

- The mentoring programme is a good initiative, but how will the 5-7 mentors be identified and convinced to closely interact with/come to MUG (for some time)?
- The international scientific council/external audit is also a good idea, but will only have impact if their recommendations (based on excellence) influence future investments, made in research topics/groups at the MUG.

With regard to quality of education, developing a PRA-curriculum is a smart objective, as is the most talented student programme; together these represent about 9% of the total programme. Many good ideas and actions are proposed, but the approach is again too dispersed to have major impact. It would have been much better to choose 1 option: e.g.: 4 years scholarship for most talented (international) PhD students. There is a well-considered programme for leadership development. The SWOT analysis recognises that the present strong divisions between academic units is a weakness, but no attention is then given in the proposal as to whether the academic structure of the university is right for maximisation of research success. Fairly obvious (though not invalid) points are made in the proposal about improved researcher support, increased administrative efficiency, etc. The current administrative workload of researchers was identified as a problem and will be addressed by establishing the Center for Service Excellence, Central Administration for Research. Progress in knowledge transfer is to be facilitated by a programme of mentoring to be provided by overseas scientists. A Programme for International External Audit is to be established – an interesting idea. The plans for funding of recruitment of internationally competitive scientists/Pis are not well developed.

4th criterion - potential of the university in terms of:

- a) the impact of the university's research activity on the development of world science, especially in priority research areas;**
- b) research collaboration with research institutions of high international reputation, especially in priority research areas;**
- c) the quality of education provision for students and doctoral training, especially in fields of study and disciplines of science related to priority research areas;**
- d) the solutions deployed for the professional development of the university's staff, especially young scientists;**
- e) the quality of university governance and management;**
- f) other specific objectives to raise the international significance of the university's activities if these objectives have been determined in the plan.**

Substantiation

Of the three PRAs, oncology and cardiovascular are genuinely strong while the third is essentially an enabling area to support the first two. The starting point in achieving enhanced international impact is relatively strong, with a high national ranking, ongoing international collaborations, and substantial co-publications (highly cited international component, 31%). The university leadership is convincing and at the interview a strong sense of passion and commitment was communicated from the rector and his senior team. Only about 25% of the grant will be invested in research, about 25% in the development of core facilities (this is a good move, because sustainable), and 50% in the other 5 objectives (international collaboration, quality of education, professional development, university governance and other). The indicators chosen to follow progress are sometimes not specified enough. The plan to involve of an International Advisory Board is key to sharpening the process monitoring and selection of indicators, provided that their advice is heeded. Potential will be enhanced if the feed-back from the intended international advisory board is sought at an early stage.

Summary of assessment

This is a strong proposal, based on an extensive SWOT analysis leading to clear identification of Priority Research Areas. Appropriate plans are presented for the support of researchers and their expansion of international activities. There is a strong base for internationalisation and some indication that international expert advice will be sought. Importantly, the plan proposes the establishment of an association (“Union of Universities”) of Gdansk universities: MUG, Gdansk University of Technology and University of Gdansk. Potential federalisation is to be explored. MUG already offers education programmes in biotechnology (through a joint Faculty) with the University of Gdańsk. The rationale for closer association between the Gdansk universities has not been presented in depth (but one would expect this to include a positive interaction between basic science departments and MUG). There is also intercollegiate study in medical engineering with the Gdansk University of Technology. The partnership with Gdansk University of Technology is suggested particularly to facilitate interactions with business. That a substantial importance is attached to the formation of a federation of Gdansk universities which is highly relevant and most likely essential for future success. MUG is recommended to:

- Continue to build the impressive international collaborations identified.
- Ensure delivery of the plans and in particular the key aspect of research staff applying for external funding.
- Continue to pursue merger with Gdańsk University of Technology and University of Gdańsk.

Overall, the level of ambition is commendable and there is a high likelihood of success.

Total score

33.50 / 40

Recommendation

Positive

Position on the ranking list of positively assessed applications

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