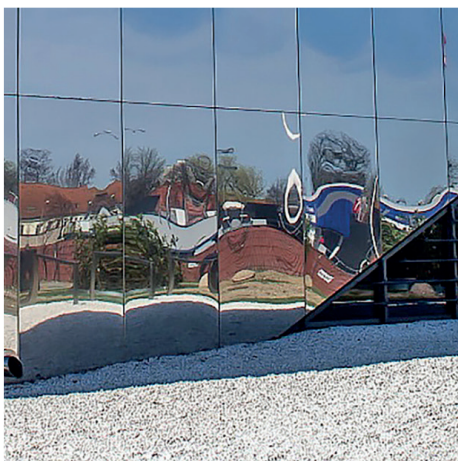
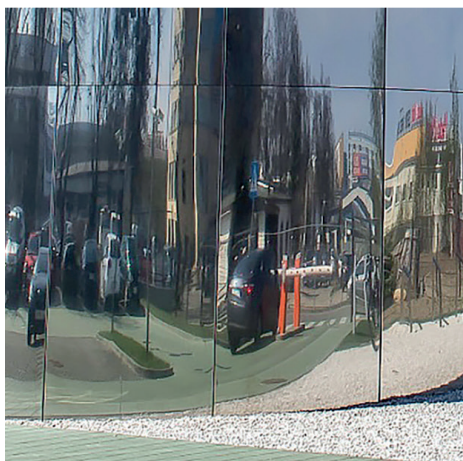
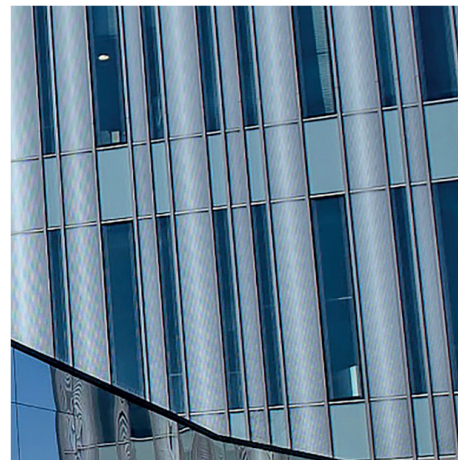
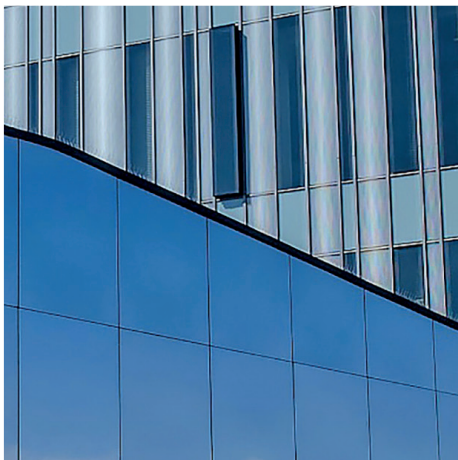


DEVELOPMENT STRATEGY

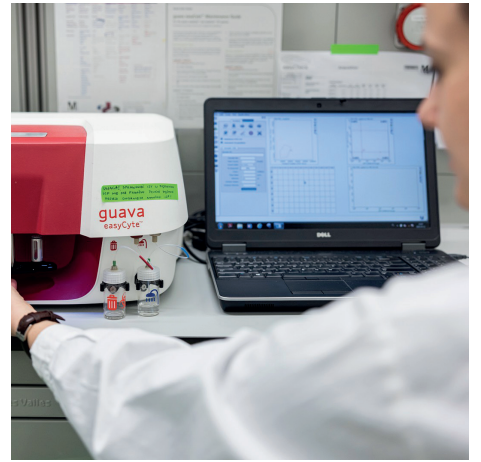
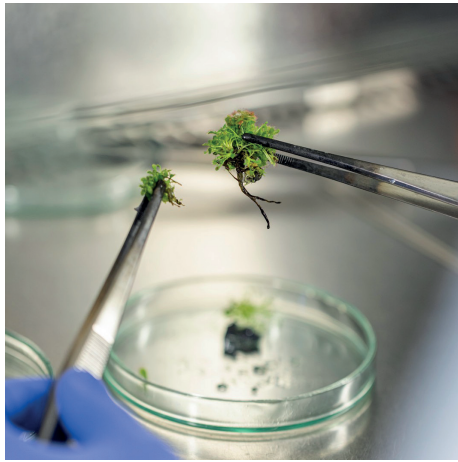
The Intercollegiate Faculty of Biotechnology
of the University of Gdansk and
the Medical University of Gdansk
for 2022-2028



Contents

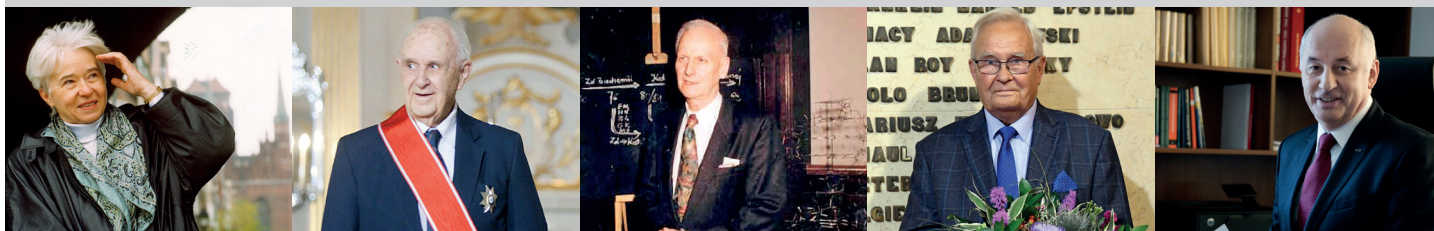
The Intercollegiate Faculty of Biotechnology of the University of Gdańsk and the Medical University of Gdańsk Introduction	4
History of the Faculty	6
Mission and Vision of the IFB	7
Good practices	8
Strategic Goals of the IFB of UG & MUG	11
Strategic Goal 1 Highest quality in research	12
Strategic Goal 2 Highest level of education	14
Strategic Goal 3 Integration and cooperation with the academic, social and economic environment	16
Strategic Goal 4 Effective Faculty Management	18





The Intercollegiate Faculty of Biotechnology of the University of Gdańsk and the Medical University of Gdańsk Introduction

The Intercollegiate Faculty of Biotechnology of the University of Gdansk and the Medical University of Gdansk (IFB) was established in June 1993 by a unanimous decision of the Senates of the University of Gdańsk (UG) and the then Gdańsk Medical Academy (GMA), with the full support of the rectors of both universities: Professor **Zbigniew Grzonka** and Professor **Stefan Angielski**. The key people in the establishment of the Faculty were Professor **Anna J. Podhajska**, Professor **Karol Taylor**, Professor **Wiesław Makarewicz** and Professor **Maciej Żylicz**. Significant substantive support at that time was also provided by Professor **Wacław Szybalski**, a professor at the University of Wisconsin Madison and a world-class molecular biologist.



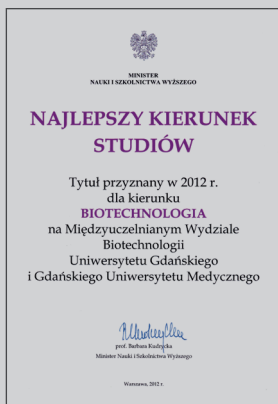
The Faculty is a unit that is unique on a national scale, as it was created by two universities. It is responsible for conducting interdisciplinary research and didactics that combine biomedical and biomolecular issues and their applications in biotechnology benefitting health and improving the quality of life. The quality of the Faculty is also based on the reputation of the native universities, which were among the elite group of the top twenty Polish universities qualified for the “Excellence Initiative – Research University” program. The Medical University of Gdańsk (MUG) obtained the status of a research university, becoming the first medical research university in Poland.

Currently, the IFB consists of 20 teams that conduct research

activities within two scientific disciplines, i.e., biological sciences and medical sciences. The primary research topic is the molecular basis of the functioning of the cell and body, and the subject of research includes viruses, microorganisms, plants and human cells.

The IFB is a leading scientific institution in Poland. Since 2002, the Faculty has had the status of the European Centre of Excellence in Medical Safety and Molecular Biomedicine and has taken the highest positions in rankings by the Ministry of Education and Science in the area of scientific efficiency. In 2017, the IFB received the highest possible A+ rating for scientific and research and development activities awarded to scientific units by the Committee for the Evaluation of Scientific Units.

The IFB also conducts the highest rated teaching activities in the country. In 2011, the Polish Accreditation Committee (PKA) awarded the highest distinguishing assessment of the quality of education to the Faculty, while in 2012, the Ministry of Science and Higher Education awarded the title of the Best Study Field to the study field of biotechnology run by the IFB. The Central Council of Science and Higher Education has recognized the set of learning outcomes prepared by the Faculty for the field of biotechnology as a model set. In 2020, the PKA awarded the Certificate of Excellence in Education in the category “*Excellent Field – Excellence in Education*” to the field of biotechnology at the level of first- and second-cycle studies



with a general academic profile. The field of biotechnology at the IFB was the only biotechnology faculty in Poland to receive this distinction.

The concept of education at the IFB includes an interdisciplinary program of studies in the area of biotechnology benefitting health and improving the quality of life.

The education process is carried out at the Faculty in cooperation with other UG and MUG units and is based on the highest teaching standards. The curriculum for first-cycle studies is based on the idea of concept-based learning and is implemented in the form of thematic modules. This concept goes beyond the simple transmission of information developed for traditional education and focuses on understanding and linking facts into a coherent and logical whole, combining theory with practice. In addition, the main principle that has been applicable at the IFB for over 25 years is the involvement of students in the implementation of research projects.

The functioning of the faculty follows the idea of responsible research and innovation, which assumes open access to the results of scientific research, as well as the inclusion of social needs and ethical issues in undertaking scientific research. In regard to the activities of the Faculty, the matter of the equal treatment of all members of the academic community and the prevention of discrimination and mobbing are particularly important.

Taking into account the abovementioned facts, the Intercollegiate Faculty of Biotechnology of the University of Gdańsk and the Medical University of Gdańsk can be perceived as a modern scientific and research unit that conducts world-class scientific research and educates new generations of researchers and specialists in the area of biotechnology at the highest level to improve the quality of health and life.



History of the Faculty



1993
Establishment of the **Intercollegiate Faculty of Biotechnology of the University of Gdansk and the Medical University of Gdansk** by the decision of the Senates of both universities.



1994
Organization of the first **Biotechnology Summer School**, upon the initiative of Professor **Anna J. Podhajska**.



1998
Opening of the **new IFB building** at ul. Kładki 24 in Gdańsk.



1999
Obtainment of a permit to award **doctoral degrees in biological sciences** in the field of biochemistry.



2005
Opening of the new IFB headquarters at the **Medical Academy in Gdańsk** in the building of the Tri-City Academic Experimental Animal Farm.



2016
Opening of the **new IFB headquarters** on the university campus at ul. Abrahama 58, located in one of the most modern scientific and educational buildings in Poland.



2012
Obtainment of the **title of the Best Field of Study** awarded by the Ministry of Science and Higher Education.



2011
Obtainment of the **highest distinguishing rating of the quality of education** awarded by the Polish Accreditation Committee.



2010
Launch of **interdisciplinary and international doctoral studies (LiSMIDoS – Life Science and Mathematics Interdisciplinary Doctoral Studies)**.



2010
Obtainment of a permit to award **postdoctoral degrees in biological sciences** in the field of biochemistry.



2017
Obtainment of the **highest possible A+ rating** awarded by the Committee for the Evaluation of Scientific Units for scientific and research and development activities.



2018
Celebration of the **25th anniversary** and reunion of IFB graduates.



2019
Update of the **agreement** on the functioning of the IFB between the University of Gdańsk and the Medical University of Gdańsk.



2019
Establishment of the **Intercollegiate School of Doctoral Biotechnology** of the University of Gdańsk and the Medical University of Gdańsk.



2020
Obtainment of the **Certificate of Excellence in Education** in the category "Excellent Field – Excellence in Education" awarded by the Bureau of the Polish Accreditation Committee.

Mission and Vision of the IFB

The starting point for the development of this strategy was the clear definition of the mission and visions that present our ideas of the future of the Faculty. According to the authors, this strategy is a key document of the Faculty, as it defines the directions of scientific and didactic activity on which its human, financial and organizational resources focus.

The mission and vision of the Faculty set out in this document are consistent with the development strategies of both parent units: the University of Gdańsk and the Medical University of Gdańsk.

Mission

The highest quality of research and education in biotechnology to improve health and quality of life.

Vision

The leading Faculty in Poland, based on the support of two universities, namely, the University of Gdańsk and the Medical University of Gdańsk, created an inspiring, modern environment for conducting research and education at the highest level in order to dynamically respond to social and economic needs.

Good practices

For the more than 25 years of the existence of the IFB, several good practices have been developed that have enabled the Faculty to achieve a high position in terms of both the quality of research and education. According to the authors, the **good practices** developed throughout the years constitute the DNA of the Faculty, while their retention and development will allow them to maintain the Faculty's position among the leading national scientific units.

Good practices implemented at IFB include the following:



1. Functioning of the International Scientific Council of the IFB.
2. Functioning of the Core Facility Team of Specialized Laboratories.
3. Functioning of the Team of Teaching Laboratories.
4. Organizing annual “*Biotechnology Summer Schools*” on an international scale.
5. Participation of Polish and foreign students in the scientific activities of the IFB.



- 6.** Organization of internships both in Poland and abroad for students of all levels of study.
- 7.** Holding interviews in English for the recruitment process for second-cycle studies.
- 8.** Involvement in teaching activities by researchers employed under scientific grants.
- 9.** Participation of students in research and the implementation of projects (e.g., “*InnovaBio Pomorze*”).
- 10.** Supporting the most talented secondary school students interested in studying at the IFB.
- 11.** Periodically issuing an English-language report on the Faculty’s scientific activities.
- 12.** Sharing reports on the assessment of one’s own unit within science and teaching.



THERE ARE PEOPLE AT
THE HEART OF
OUR PLAN:

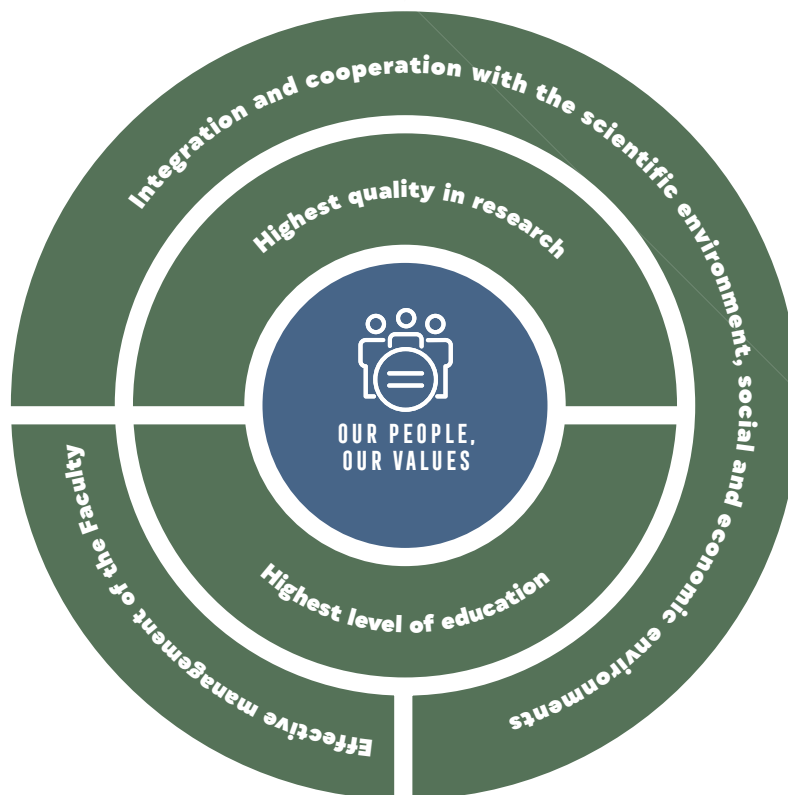
OUR STAFF,
OUR STUDENTS,
AND OUR VALUES.



Strategic Goals of the IFB of UG & MUG

The implementation of the Faculty's vision as a leading scientific and research unit in Poland ensuring the highest quality in research and education will be implemented through striving to achieve four superior strategic goals that cover all areas outlined by the mission and vision of the Faculty, i.e., **scientific research, education, integration and cooperation with the academic and social/economic environment, as well as the effective management of the Faculty.** The paths leading to the achievement of these strategic goals set operational goals and actions that should be undertaken by the Faculty authorities in close cooperation with scientific, teaching, and administrative staff, as well as doctoral students and students of the Intercollegiate Faculty of Biotechnology.

Drawing on our almost 30-year-long intercollegiate experience in the functioning of the Faculty at the interface of two universities, we strive to consolidate scientific research and education in the area of biotechnology as part of the Fahrenheit Union of Universities, which associates three leading universities of Pomerania, i.e., University of Gdańsk, Medical University of Gdańsk and Gdańsk University of Technology. The most important task of this association is to make the best use of the resources and potential of the three universities of which it is comprised.



Strategic Goal 1 Highest quality in research



The highest quality of the conducted research is the first of the strategic goals. Its strengthening and systematic improvement is a natural direction for the development of research teaching and research workers. The implementation of this goal is in line with the The Fahrenheit's Union of Universities in Gdańsk (FarU)s assumptions and will allow for the further strengthening of the Faculty's position among the leading scientific units in the country and the increase of its recognition on a global scale.

Conducting research in a scientific and teaching unit of an intercollegiate nature poses a number of challenges that scientists have to face. The proposed support and solutions are aimed at the greater integration of the scientific staff at various stages of their career, support of scientists at various levels of their activities, further internationalization of the conducted research, and maintenance and expansion of the facilities of the Faculty's specialized equipment.

Operational goals

A. Continuous improvement of scientific excellence

B. Development of research topics

C. Acquiring funds systematically for the purpose of research and research infrastructure

Activities

1. Systematic monitoring of the level and effectiveness of scientific research by the Faculty authorities and the International Scientific Council of the IFB.
2. Development of promotion criteria for academic teachers.
3. Supporting the scientific development of doctoral students by financing scientific projects and participation in conferences and training courses, as well as financial awards for the best presentations at the reporting sessions and publication honored by scientific awards from the Rectors of the University of Gdańsk and the Medical University of Gdańsk.
4. Support for the participation of employees in conferences and training courses that enhance their scientific competences.
5. Support for the costs of publications with the affiliation of the Faculty published in prestigious scientific publishing houses.
6. Activities aimed at raising funds for incentives for employees and research groups distinguished by scientific achievements.
7. Measures to relieve the burden placed on research and teaching staff in the area of teaching and administration.
8. Introduction of the custom of cyclical presentations of scientific achievements of IFB employees in the form of a Faculty seminar.

1. Establishing criteria for the creation and closure of plants and workshops.
2. Establishment of new plants/workshops based on the criterion of research and scientific excellence in an open competition.
3. Activities aimed at consolidating and intensifying internal scientific cooperation between the research groups of the Faculty, including through a cyclical informal integration event for employees, doctoral students and invited guests and establishing a financial award for publications created in cooperation between the UG and MUG units, with the leading participation of one of the Faculty's employees.
4. Activities for the acquisition of intercollegiate projects (e.g., as part of the FarU) and international projects.
5. Activities aimed at acquiring new laboratory spaces within MUG and optimizing the occupied laboratory space within individual UG teams.
6. Increasing the frequency of Faculty seminars conducted by invited guests.
7. Developing a legal and organizational framework that enables affiliations of cooperating units within the Faculty.

1. Activities aimed at obtaining placement on the Polish Research Infrastructure Map.
2. Supporting employees in applying for funds from external sources.
 - Gradual involvement of employees of the dean's office in the preparation of the administrative part of applications.
 - Promotion of the exchange of experience between people experienced in obtaining grants and people applying for funding.
3. Setting up a team for the strategic management of large research equipment and its use within both the Faculty and the FarU.
4. The training of administrative staff in the areas of project management and public procurement.

Strategic Goal 2 Highest level of education



Education in the field of biotechnology takes place as part of the cooperation between the University of Gdańsk and the Medical University of Gdańsk and fully fits into the strategies of both universities. The concept of education assumes the interdisciplinary education of students that covers the biological sciences and medical sciences in the area of biotechnology for the improvement of health and the quality of life. The professional experience of the staff and the nature of the scientific research carried out at both universities create conditions for conducting didactics that combine biomedical and biomolecular issues and their application in biotechnology. **Education is based on the highest teaching standards in the area of international cooperation, and students at each level of study are involved in the implementation of research projects carried out at the Faculty. Teaching at the first level of study is based on thematic modules (concept-based learning).**

Currently, the Faculty conducts education as part of one field of study, namely, biotechnology, for both first- and second-cycle studies. **The proposed strategy, while maintaining the existing education in the area of broadly defined molecular biotechnology, aims to extend the education of students to new areas related to biotechnology, i.e., medical-pharmaceutical biotechnology and marine biotechnology.** In addition, the establishment of the Fahrenheit Union of Universities will give us the opportunity to exchange didactic experiences and broaden the education offerings based on the scientific Tri-City environment.

Operational goals

A. Development of the teaching offer

B. Supporting teachers, doctoral students and students

C. Increasing internationalization

D. Improving the quality of didactics and the organization of the education process

Activities

1. Reform of the second-cycle education program in the field of biotechnology; the program will be developed with the participation of the Faculty's partners representing both the FarU and the social/economic environment and will be assessed by the employers' expert team and the International Teaching Council.
2. Establishment and coordination of an English-speaking second-cycle field of study in cooperation with MUG in the area of medical-pharmaceutical biotechnology.
3. Creation of an English-speaking second-cycle field in cooperation with the Faculty of Oceanography and Geography of the University of Economics in the area of marine biotechnology.

1. Establishment of a Faculty didactic award for academic teachers nominated for the Celestyn Mrongowiusz Award.
2. Establishment of the Professor Anna J. Podhajaska Award for the best presentation at Faculty student conferences.
3. Annual "Orientation Week" meeting for students in the first year of their first- and second-cycle studies aimed at integrating students into the scientific and teaching environment of the IFB.
4. Support for the activities of the students' scientific clubs.
5. Financial support for the active participation of students in scientific conferences.

1. Increasing the number of subjects taught by researchers from abroad.
2. Increasing the number of subjects offered in English.
 - Introduction of a bonus for the development and implementation of a subject in English.
3. Activities aimed at increasing the mobility of academic teachers.
4. Activities aimed at increasing the international exchange of students as part of the Erasmus, NAWA, Fulbright Foundation, European University of the Seas (SeaEU) consortium and others.
 - Increasing the number of available places for students to take international trips to prestigious universities as part of signed contracts.
 - Promotion of programs and projects related to student exchanges as part of the information days organized for students and doctoral students, e.g., "Erasmus Day: information and networking from the lab desk to everyday life"
5. Activities within the European Maritime University consortium.

1. Establishment of program councils for new fields of study.
2. Establishment of the International Teaching Council.
3. Making the study program more attractive by introducing modern teaching methods, remote learning methods and courses implemented in cooperation with business partners.
4. Organization of cyclical didactic meetings for academic teachers.
5. Improvement of the system for planning didactic classes.

Strategic Goal 3 Integration and cooperation with the academic, social and economic environment



Building links within the academic environment, particularly with universities associated with the framework of the FarU and the social/economic environment, is another strategic goal of the Faculty. **The Faculty has the ambition to create an inspiring, modern and dynamic research environment that responds to the needs of both society and the economy.** People who manage the economic environment and the owners of dynamic biotechnology companies that operate in the region of Pomerania are often graduates of the Faculty.

The proposed solutions are aimed at expanding cooperation in the areas of conducted research, implemented joint research and development projects, activities aimed at increasing the potential resulting from research and scientific development and human capital, student and staff exchanges, support for educational programs, joint organization of international conferences and events, and activities aimed at supporting technology transfers and the commercialization of research results.

Operational goals

A. Integration and cooperation with FarU member universities

B. Conducting research focused on social/economic needs

C. Promoting the Faculty

Activities

1. Activities benefitting the integration of the biotechnological environment in the region of Pomerania (e.g., organization of joint seminars, scientific meetings, lectures, integration days for biotechnology, student and doctoral initiatives).
2. Development of principles for the use of large research equipment by the Faculty within the FarU.

1. Further development of cooperation with business partners, government administration and self-government units, public health units (including hospitals, diagnostic laboratories, and the National Sanitary Inspection), and technology parks.
2. Further support for the completion of master's theses and implementation doctorates in cooperation with the business environment and increasing the number of permanent contracts with companies for the purpose of completing student internships.
3. Increasing the number of implementation projects and upon the request of the industry.
4. Developing a policy for the commercial use of research equipment (within the departmental team for the strategic management of large research equipment).
5. Further development of the competences of the Research and Implementation Laboratory and the extension of accreditations granted by the Polish Centre for Accreditation.

1. Intensification of activities aimed at promoting the scientific achievements of the Faculty's employees.
2. Increasing the number of popular and scientific activities undertaken by the Faculty, taking into account the idea of responsible research and innovation and the continuation of the current promotional campaigns, i.e., Biologists' Night, academy fairs, open days, science festivals.
3. Strengthening cooperation with secondary schools—thereby acquiring the best candidates, as well as new cooperation agreements with secondary schools both in the country and abroad — and organizing and annual Biotechnology Week for high school students (including a biotechnology knowledge competition, scientific debate, thematic workshops for high school students).
4. Popular-scientific activities aimed at adults, including cooperation with the University of the Third Age; organizing popular-scientific lectures and appearances.
5. Application for external funds to finance promotional activities of the Faculty.
6. Effective coordination of promotional activities of the Faculty.
 - Inclusion of the coordinator for cooperation with secondary schools, a representative of the doctoral students and a representative of the Bio-Med Scientific Club on the team that organizes the promotional and educational events of the IFB for UG and MUG.
 - Activation of the student environment as part of the "IFB Student Day" organized annually by the Bio-Med Scientific Club and the Student Council.
 - Financial support for the activities of the scientific clubs and Student Council.

Strategic goal 4 Effective Faculty Management



The efficient management of scientific research, the education process, human resources, the infrastructure and the finances of the Faculty is necessary for the effective implementation of all the strategic goals described above.

Therefore, changes and activities aimed at increasing the competences of administrative staff, optimizing scientific information collection and flow, and increasing the level of management of the education process are proposed.

Operational goals

A. Improving the quality of administrative support

B. Optimizing the collection and flow of scientific information

C. Increasing the level of management of the education process

Activities

- 1.** Adjusting the scope of the duties and competences of employees of the dean's office to the current needs of the Faculty.
- 2.** Improving the competences of administrative employees by participating in workshops/training courses/language courses.
- 3.** Actions aimed at raising funds for incentives for top employees.

- 1.** Improving the flow of information at the Faculty (modernization of scientific databases).
- 2.** Reorganizing the Polish and English-speaking parts of the Faculty.
- 3.** Organizing cyclical integration meetings for employees and doctoral students of the Faculty.

- 1.** Improving the system of planning the teaching loads of employees and teaching internships for doctoral students in cooperation with the Intercollegiate Doctoral School of Biotechnology.
- 2.** Appointing a Faculty team for international exchange consisting of a coordinator, an administrative assistant and a student representative.

This document was developed by the authorities of the Intercollegiate Faculty of Biotechnology of the University of Gdańsk and the Medical University of Gdańsk and composed by the following:

- dr hab. Ewelina Król, professor at the University of Gdańsk (Dean of the Faculty);
- dr hab. Mariusz Grinholc, professor at the University of Gdańsk (Vice-Dean for Student Affairs and Education);
- dr hab. Rafał Sądej, professor at the Medical University of Gdańsk (Vice-Dean for Science);
- prof. dr hab. Anna Żaczek (Vice-Dean for Internationalization and Development).

Consultations: Faculty Council and the Team for Strategy of the Development of the IFB, composed of the following:

- Prof. dr hab. Jacek Bigda;
- Prof. dr hab. Igor Konieczny;
- Prof. dr hab. Krzysztof Liberek;
- Prof. dr hab. Ewa Łojkowska;
- dr hab. Danuta Gutowska-Owsiak, professor at the University of Gdańsk;
- dr hab. Marcin Okrój, professor at the Medical University of Gdańsk;
- dr hab. Michał Szymański, professor at the University of Gdańsk;
- dr Aleksandra Markiewicz;
- dr Katarzyna Węgrzyn.

and members of the Faculty Council.



The Intercollegiate Faculty of Biotechnology of the University of Gdańsk and the Medical University of Gdańsk

Dean's Office for Student Affairs

☎ + 48 58 523 63 20 |

✉ dziekanat@biotech.ug.edu.pl

Dean's Office for Research and Project Management

☎ + 48 58 523 64 06

✉ biuro.dziekana@biotech.ug.edu.pl

More about our Strategy: <https://biotech.ug.edu.pl/strategia>

Photographs: Tomasz Nowicki, B. Zabłotny, archives UG, IFB UG & MUG, Foundation for Polish Science

