## **TEMPLATE 2 – GAP ANALYSIS - OVERVIEW**

Case number: 2022BG765736

Name Organisation under review: Roumen Tsanev Institute of Molecular Biology, Bulgarian

**Academy of Sciences** 

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**SUBMISSION DATE: 28.03.2023** 

DATE ENDORSEMENT CHARTER AND CODE: 7 April 2022

## **GAP** ANALYSIS

The Charter and Code provides the basis for the Gap analysis. In order to aid cohesion, the 40 articles have been renumbered under the following headings. Please provide the outcome of your organisation's GAP analysis below. If your organisation currently does not fully meet the criteria, please list whether national or organisational legislation may be limiting the Charter's implementation, initiatives that have already been taken to improve the situation or new proposals that could remedy the current situation.

Status: to what extent does this organisation meet the following principles?	Implementati on: ++ = fully implemented +/- = almost but not fully implemented -/+ = partially implemented = insufficiently implemented	In case of, -/+, or +/-, please indicate the actual "gap" between the principle and the current practice in your organisation.  If relevant, list any national/regional legislation or organisational regulation currently impeding implementation	Initiatives undertaken and/or suggestions for improvement:
1. Research freedom Legal Framework:	++		No more suggestions for improvement
<ul> <li>Higher Education Law, amended 20.01.2019;</li> <li>"Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB" from 28.01.2021;</li> </ul>			
• "Regulations for the organization of the internal order of the IMB" from 27.01.2012; Experienced researchers at IMB choose their own research topics, and the department heads choose and suggest the members of the team for approval by the Scientific Council			
at the IMB. Under several projects such as the Operational Programme "Development of the competitiveness of the Bulgarian economy 2007-2013" and "The National Science Infrastructure Roadmap" IMB established a new research infrastructure and ensured better conditions for research			

members. Scientists are free to collaborate with colleagues in and outside Academia. IMB is a preferred workplace for young scientists-the mean age of the institute's staff is below 35 years. Scientists have access to several scientific databases through the Bulgarian Academy of Sciences.  2. Ethical principles Scientific research activity in IMB is performed according to the accepted Code of Ethics (CE) of IMB from 23.11.2020. At the level of the institute, there is a dedicated commission that monitors compliance with CE.	++		No more suggestions for improvement
3. Professional responsibility While the regulatory frame is still missing researchers of IMB have always maintained the highest standard of research integrity and no cases of professional misconduct were ever reported.	-/+	IMB has no internal Rules and procedures for verification of the originality and authenticity of dissertations, prevention, and sanctioning of exam fraud and plagiarism.	Adoption of Internal Rules and Procedures for verification of the originality and authenticity of dissertations, prevention, and sanctioning of exam fraud and plagiarism.  Early career researchers will be regularly trained in "The European Code of Conduct for Research Integrity".  Achieving greater compatibility between the research program of the Institute and the topics of the research projects with external funding — an indicator of current consumer demand for scientific products.
4. Professional attitude "Regulations for the organization of the internal order of the IMB" from 27.01.2012.  The communication between the departments and management in IMB is active enough to ensure that all	++		No more suggestions for improvement

necessary information about the researcher's work pass to the interested parties. All staff members are familiar with the strategic goals of the institute.				
5. Contractual and legal obligations All important documents with national and sectoral regulations are available on the website of the institute. Intellectual Property Rights are regulatied at BAS level: RULES FOR THE PROTECTION AND MANAGEMENT OF THE OBJECTS OF INTELLECTUAL PROPERTIES OWNED BY THE BAS adopted by the Eighth General Assembly of BAS on 18.10.21	++	No more improvement	suggestions	for
6. Accountability Director of IMB, leaders of research projects and the chief accountant are responsible for the financial management and control of the scientific research activity in accordance with the principles of legality, proper financial management and transparency. Annual reports of the institute are freely available on the IMB website. Part of it is integrated into the annual report of the Bulgarian Academy of Sciences which is also publicly available. Pl are responsible for the transparent and efficient use of public funds to the funding bodies (e.g. Bulgarian National Science Fund) and are regularly audited.	++	No more improvement	suggestions	for
7. Good practice in research Institute's regulations:  • Safe Working Guidelines, from 16.08.2021; All staff and visitors are expected to familiarise themselves with and comply with the Safe Working Instructions. The staff is annually trained in Safe work practices.  • Emergency plan	++	No more improvement	suggestions	for

Internal instructions on the measures and means of protection of personal data in the Institute of molecular biology from 16.02.2018.  A person at the institute is responsible for compliance with these instructions. IMB is registered as a data controller at the Commission for Personal Data Protection and complies with the law and instructions for handling personal data. The Institute archives all documentation in a specific order and stores it in a specially designated archive room.			
8. Dissemination, exploitation of results Research results of IMB scientists are published in research journals of good standarts whenever possible as open access. The yearly output is approximately 50 papers. Researchers from the institute participate regularly in National and International meetings and conferences where they present their scientific work. IMB organizes a regular international conference.	+/-	Patenting or commercialization of research results at the level of the institute is relatively low and is regulated according to: RULES FOR THE PROTECTION AND MANAGEMENT OF THE OBJECTS OF INTELLECTUAL OWNED BY THE BULGARIAN ACADEMY OF SCIENCES adopted by the Eighth General Assembly of BAS on 18.10.21.	IMB will open a technology-transfer office with an applications officer who will coordinate and organize interactions between industry representatives and IMB scientists. The officer will assist also in writing common projects between the researchers from the institute and the industrial partners. We also plan regular training of the staff in patenting procedures.
9. Public engagement IMB has Strategies for the development and improvement of communication with society, from 19.03.2020, and PR specialist that implement it.	+/-	The communication of the institute's scientific results with the general public needs improvement. The website of the institute is not properly updated. Other communication channels are not effectively used such as social media. Very few scientists from IMB have regular media appearances.	A communications board of the institute will be created.  To improve communication with society IMB will organize regular science lectures for the general public (high school and university students) and OPEN DORES once a year.  IMB plans to organize workshops as part of the ERA chair project to present results known how and best practices tailored specifically to medical or industry stakeholders as well as policymakers.

		The website will be updated. Social media channels will be also used to share the latest scientific achievements of the institute.
10. Non discrimination  Bulgarian Academy of Sciences has a Plan to promote equality between women and men in the BAS: the decision of the BAS Management Board, protocol No. 7/24.3.2022. Currently at the institute number of women is higher than men at all levels, except Research assistants. The number is equal among the department heads. Institute has a dedicated committee that monitors compliance with nondiscrimination. According to the "Regulations for the organization of the internal order of the IMB" from 27.01.2012, the institute complies with the principles of non-discrimination against gender, age, ethnicity, religion or belief, sexual orientation, language, disability, social or economic condition. 7% of all staff is disabled people.	++	No more suggestions for improvement
11. Evaluation/ appraisal systems  According to the,,Regulations for the organization of the internal order of the IMB" from 27.01.2012 of IMB every two/three years is held an attestation of scientific staff and administrative employees that have been working at the institute for at least for 2 years. A specially appointed Attestation Commission, develop criteria based on which attestation is performed. Each researcher prepares self-assessment score card of his activity for the period of attestation. Assessing the scientists covers: Scientific research area, Applied science and innovation area, Training educational area, Scientific organizational area and Expert area. The results from the attestation are expressed as the sum of points and a critical minimum is	++	No more suggestions for improvement

determined below which it is assumed that the attested employee does not perform sufficiently well to continue the employment contract.				
Recruitment and Selection				
12. Recruitment  The procedure to appoint a researcher to the occupation of an academic position is carried out according to "Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB" from 28.01.2021. and "Regulations for the organization of the internal order of the IMB" from 27.01.2012.  The open positions are published on the institute's website and in media as well as in State Gazette. Some open positions are also advertised in Euraxess (https://euraxess.ec.europa.eu/jobs/search?f%5B0%5D=j ob_country%3A746&f%5B1%5D=keywords%3Achromatin %20biology) and Nature careers: https://www.nature.com/naturecareers/job/12796216/positions-available-in-chromatin-biology/ All applications are first checked if they meet the requirements for the position by a technical commission. The scientific merit of each candidate is determined by a scientific jury which reports to the Scientific Council that vote on each candidate during a secret ballot.	++	No more improvement	suggestions	for
13. Recruitment (Code) The recruitment at the institute is done, according to National Legal Framework: Labor Code - 06.11.2018; Higher Education Law, amended 20.01.2019; Law for Academic Staff Development, amended 05.05.2018 and "Rules for implementation of the low for the development of the academic staff in Bulgaria at IMB" from 28.01.2021.	++	No more improvement	suggestions	for

14. Selection (Code) According to the,,Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB" from 28.01.2021, all candidates for an academic position higher than Research Assistant are evaluated by a commission which mandatory includes external members. The opinions and reviews, prepared in written form by each member of the selection committee for the positions of associate and full professorss are published both in Bulgarian and in English on the Institute's website.	+/-	"Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB" is not translated in English.	An English version of "Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB" will be published on IMB website.
15. Transparency (Code) The selection criteria are described in details in "Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB " from 28.01.2021. The document is available on the institute's website. Furthermore, the documents of all applicants for an academic position are also published on the website.	++		No more suggestions for improvement
16. Judging merit (Code)  The minimal requirements for holding academic positions at IMB-BAS are described in "Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB " from 28.01.2021. For each position a different number of points are necessary. The indicators that give points are not only the scientific publications and citations but also the supervision of Master and PhD students, project management as well as teaching, patenting, and writing texbooks and etc.	++		No more suggestions for improvement
17. Variations in the chronological order of CVs (Code) Patenting and project management is also part of the indicators for the evaluation of candidates, according to "Rules for implementation of the law for the	++		No more suggestions for improvement

development of the academic staff in Bulgaria at IMB ", from 28.01.21. Therefore, the industry candidates are also properly evaluated during the recruitment process. Career variations are not penalised and candidates are evaluated on their professional merit.				
18. Recognition of mobility experience (Code) Already implemented. The institute's management encourages mobility. All scientists at IMB keep their permanent positions during research stay abroad, sometimes even for one or two years, according to "Regulations for the organization of the internal order of the IMB" from 27.01.2012.	++	No more improvement	suggestions	for
19. Recognition of qualifications (Code) All employees are appointed according to their qualifications. There is a National Classification of Professions and Positions, adopted by Ministry of Labour and Social Policy, on 1 January 2011. This classification includes names and the codes of all job positions. The President of BAS gives in an official ceremony diplomas for PhD, DSc, assistant professor, associate professor and professor.	++	No more improvement.	suggestions	for
20. Seniority (Code) The levels of qualifications required are in line with the needs of the position at the institute.	++	No more improvement.	suggestions	for
21. Postdoctoral appointments (Code)  Most scientists holding PhD at the institute are on permanent positions (as assistant professors). Assistant Professors are almost half of the academic staff. Very few are appointed to a temporal position via the National program "Young scientists and postdoctoral fellows - 2" (Decision of the Council of Ministers No. 206 from April 7,	++	No more improvement.	suggestions	for

2022). The advertisements for such positions were posted on the Euraxess platform. Post-docs will be appointed also in frame of ERA chair project.		
Working Conditions and Social Security		
22. Recognition of the profession Already implemented	++	No more suggestions for improvement
23. Research environment  IMB is well equiped institute. The institute's microscopy unit is a EuroBioimaging node.  All laboratories have the necessary molecular biology equipment and cell culturing facilities. Various experts are available at the institute: the staff consists of not only biologists but also physicians, chemists, chemical engineers, physicists and biotechnologists. As a part of the Bulgarian Academy of Sciences the institute's employees has easy access to the equipment of other institutes too. IMB is a partner in National and International projects. ERA chair project starting Jan 2023 will help to further develop IMB towards a world-class level of research excellence.	++	To continue the modernization of the equipment and to increase the number of foreign scientists number at the institute.
24. Working conditions  At present, it is possible to work from home in certain circumstances. Vacations are big (at least 35 days for the academic staff) and are not fixed. Paid maternity leave in Bulgaria is 2 years (The Social Security Code of Republic of Bulgaria). According to "Regulations for the organization of the internal order of the IMB" from 27.01.2012 the Scientific staff of the institute work with out fixed working hours.	++	No more suggestions for improvement
25. Stability and permanence of employment	++	No more suggestions for improvement

Almost all staff of the institute is in a permanent position in accordance with the <b>Labor Code</b> .			
<b>26. Funding and salaries</b> The salaries at BAS include all social security provisions.	+/-	The salaries at BAS are not attractive relative to average salaries in Europe. Young scientists are often supported with additional scholarships through different national programs or projects. The budgetary subsidies for science in Bulgaria are very low-only 0.81% of GDP in comparison with 2.27% for the EU.	Increasing the salaries at all levels by additional funding through projects. Increasing competitiveness of the research staff by training in Project management, Technology transfer; Financial advising; Writing competitive proposals for EU funding. All this courses will be available through the ERA chair project.
27. Gender balance At the managerial level there is good gender balanse: the department heads at the institute are almost equal women (3) and men (4). IMB implements Plan to promote equality between women and men in the Bulgarian Academy of Sciences: decision of the BAS Management Board, protocol No. 7/24.3.2022. In addition IMB has addopted its own Gender equality plan.	+/-	There is difference in the numbers of men and women at the professor (1:5) and assistant professor (5:15) levels which is due to low salaries in BAS which makes the academic career for males not attractive enough.	Increasing the salaries at all levels by additional funding through projects.
28. Career development  Human resources experts at the institute can provide the necessary information about requirements for all job positions at the institute. At the level of BAS there is a Career center consultant. The Training Center of BAS organizes an annual InfoDay where experts from the center provide information about career opportunities at BAS. These days are very useful not only for students interested in PhD programs but also for early career researchers already appointed at BAS.  IMB has accreditation for 3 doctoral programs and has enough senior scientists for supervision.	++		No more suggestions for improvement

<b>29. Value of mobility</b> Early career researchers are highly supported to join international courses, training, and specializations. Senior scientists help young scientists to apply for scholarships or support their mobility through projects. The Career center of Training Center of BAS regularly organizes information webinars for Maria-Sclodowska Curie actions, ERASMUS+, and EURAXESS mobility. Coordinators for each program at BAS level provide support to all interested staff members.	+/-	Industrial mobility is very low.	IMB will organize workshops to promote contacts and collaboration between medical and industrial professionals and IMB researchers. This is expected to enhance the intersectoral mobility of IMB staff.
30. Access to career advice The criteria for the career development of Scientific staff are described in detail in "Rules for implementation of the law for the development of the academic staff in Bulgaria at IMB" from 28.01.2021. All senior scientists provide career advice to the younger ones. A Career center at BAS level is also available.	++		No more suggestions for improvement
31. Intellectual Property Rights There are internal regulations: RULES FOR THE PROTECTION AND MANAGEMENT OF THE OBJECTS OF INTELLECTUAL OWNED BY THE BULGARIAN ACADEMY OF SCIENCES adopted by the Eighth General Assembly of BAS on 18.10.21	+/-	Most of the research staff is not familiar with the intellectual property rights especially the early career researchers.	A course,, Innovations and Intellectual Property knowledge" will be organized as part of the ERA chair project.
32. Co-authorship Co-authorship is regulated in the Law for Copyright and its Related Rights, from 9.06.1993. The principle is observed in the following documents: RULES FOR THE PROTECTION AND MANAGEMENT OF THE OBJECTS OF INTELLECTUAL OWNED BY THE BULGARIAN ACADEMY OF SCIENCES adopted by the Eighth General Assembly of BAS on 18.10.21 and the accepted Code of Ethics (CE) of IMB, from 23.11.2020.	++		Periodically informing the researchers on their rights on intellectual property and coauthorship by dedicated seminars.

33. Teaching The institutes of BAS are accredited for the training of graduate students. In IMB PhD students are trained in the 3 accredited programs. Teaching is not the main obligation for researchers but is required for their professional development. It is a mandatory component for holding academic positions taking into account the number of successfully graduated doctoral students. Published educational materials, and work with students are assessed. Teaching including lectures and practical courses are a component on the attestation of researchers.	++	No more suggestions for improvement
34. Complains/ appeals Complaints regarding labor relations are regulated by the Labor Code, according to which labor disputes are considered in court. Complaints, disputes, and conflicts that occurred in the process of research activity are addressed and solved by the Scientific Council of IMB. In the Code of Ethics (CE) of IMB, from 23.11.2020, there is a clause on receiving signals from the Commission on Professional Ethics at IMB.	++	Preventing potential conflicts by improving the psychological climate in the Institute, through joint events.
35. Participation in decision-making bodies  The governing body of the IMB is the General Assembly of the Institute, the Scientific Council and the Director.  Members of the General Assembly who have the right to vote are all scientists holding an academic position or owning a scientific degree.  General Assembly adopts and amends the rules and procedures of the Institute, elects or removes institute's representatives in the General Assembly of the Academy, adopts scientific and financial reports, discusses programs of the candidates for director and votes to the Director which is then the Board of Directors of BAS. The General Assembly elects the members of the Scientific Council (SC).	++	No more suggestions for improvement

One young scientist with an academic degree is also part of SC of IMB.  The SC is the main body defining the research policy of the institute. In the SC of IMB as a collective body of scientific leadership take part the majority of the qualified researchers who are elected by the General Assembly of scientists of IMB.						
Training and Development						
36. Relation with supervisors  The training activities for doctoral students are controlled and organized by the Training Center of BAS, according to The Rules for the activity of the Training Center (TC) and The Academic Council (AC) of the BAS, from 23.02.22. PhD students are trained according to an individual plan. Between PhD students and their scientific supervisor are established structured and regular relationship so that doctoral students receive full support from both their supervisor and the other researchers from the Institute in terms of their training.  Rights, obligations and relations between the PhD student, scientific supervisor and the Institute are regulated in a tripartite training contract signed by the parties.	++		No more suggestions for improvement			
37. Supervision and managerial duties	+/-	The researchers use a substantial part of their time complying with bureaucratic requirements, such as reports, budgets, and more instead of doing research or supervising.	Appointing additional administrative staff to help the scientists with non-scientific work in order to have more time for research and PhD supervision.			

38. Continuing Professional Development  IMB encourages the participation of researchers in scientific forums, fellowships, and training courses. More than 400 specialized courses, 10 IT courses, and 3 language courses are offered to the students within the Doctoral Programme of BAS. They are also available for staff that are not doctoral candidates at a special price.	++	Many courses will be available in the frame of the ERA chair project such as Project management, Technology transfer; Financial advising; Writing competitive proposals for EU funding; Procurement practices; Document management and information flow; Advanced molecular and cellular methods and techniques; Annual summer schools for early career researchers; Transferable skills to researchers; Ethical aspects of research work; Innovations and Intellectual Property knowledge. They will be open to all scientists at the institute.
39. Access to research training and continuous development  One of the main barriers to further education opportunities are limited financial resources of IMB and BAS and insufficient financing of science as a whole in Bulgaria. However, thanks to the ERA chair project the staff of IMB will have the opportunity to join different courses	++	No more suggestions for improvement
40. Supervision  IMB has a clear policy of support and supervision of PhD students and young researchers. Their research ideas and projects are discussed in the lab meetings, they are given clear research and methodological guidelines for their implementation. Every year the progress of the research topics are discussed and the upcoming activities are planned. After completion of a project, each researcher presents his results at a seminar to his colleagues at the Institute, where feedback of the achievements,	++	IMB will encourage all PhD supervisors to take part in course: "Supervision: Learn how to support doctoral candidates by using Supervision models and tools" This is a free online course, developed in the frame of DocEnhance project (https://docenhance.eu/project-profile/).

opportunities for development, and future guidelines are proposed.		
proposed.		