HR Strategy for Researchers (HRS4R)



Action Plan 2023-2025



Sofia 2022

Case number: 2021BG716882

Name Organisation under review: Medical University - Sofia

Organisation's contact details: Sofia 1431, bul. "Acad. Ivan Geshov" № 15, Sofia, Sofia City, 1431

Submission date: 29/11/2022

1. Organisational Information

Please provide a limited number of key figures for your organisation. Figures marked * are compulsory.

STAFF & STUDENTS	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research *	1629
Of whom are international (i.e. foreign nationality) *	18
Of whom are externally funded (i.e. for whom the organisation is host organisation) *	3
Of whom are women *	843
Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor. *	713
Of whom are stage R2 = in most organisations corresponding with postdoctoral level *	506
Of whom are stage R1 = in most organisations corresponding with doctoral level *	410
Total number of students (if relevant) *	10850
Total number of staff (including management, administrative, teaching and research staff) *	2032

RESEARCH FUNDING (figures for most recent fiscal year)	€
Total annual organisational budget	2738541
Annual organisational direct government funding (designated for research)	2366197

RESEARCH FUNDING (figures for most recent fiscal year)	€
Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)	360143
Annual funding from private, non-government sources, designated for research	45783

ORGANISATIONAL PROFILE (a very brief description of your organisation, max. 100 words)

MUS has a unique place in the Bulgarian education system. The high level of teaching, training and the achievements in the research work, health care and public activities are integrated – aiming that MUS would be innovator and meeting the public interest. The University strives for regional leadership while increasing the quality of the education on national and international scale. MUS trains the students for work in a competitive environment where the quality is a determinant factor for success. At the same time MUS aims at cultivating tolerance, team oriented, responsibility, autonomy and ability to solve problems and take decisions alone.

2. Strengths and weaknesses of the current practice

Please provide an overview of the organisation in terms of the current strengths and weaknesses of the current practice under the four thematic headings of the Charter and Code at your organization.

Note: Click on the name of each of the four thematic headings of the Charter and Code to open the editor and provide your answer.

Ethical and professional aspects*

Strengths of the current MUS' practice:

On a national level, the domestic legislation of the Republic of Bulgaria foresees a procedure for obtaining an opinion from the Ethics Committee for Multicentre Trials in order to introduce a substantial change in a clinical trial and non-interventional study. The procedure aims to evaluate the compliance of the planned clinical trial with the norms of good clinical practice, the requirements of the Medicinal Products in Human Medicine Act.

The licensing regime that has been introduced on a national level requires the performance of documentation evaluation that addresses a major change in a clinical trial and non-interventional research. Legal definitions of the terms "principal investigator" and "coordinating investigator" have been introduced. The "principal investigator" is the medical doctor or the dentist, designated by the sponsor, who leads the overall execution of the clinical trial in accordance with the approved protocol and good clinical practice guidelines and is responsible for the researchers. The "coordinating researcher" is a researcher appointed to coordinate researchers from different centres participating in a multicentre trial.

Ethic committees performing review have to provide independent advice on the extent to which a biomedical research proposal complies with recognized ethical standards. Scientific research must necessarily conform to commonly accepted scientific principles and be based on thorough knowledge of scientific literature and other relevant sources of information.

The university is using the achievements of current legislative framework of clinical trials in Bulgaria in regard to planning and conducting clinical trials. A big challenge before the MUS is related to the implementation of the national clinical be law explicitly states that trials may conducted in compliance with the fundamental principles of human rights and human dignity in regard to protection of any medical and biological study under the Helsinki Declaration and only in hospital care facilities, mental health care centers, Health care centers of skin-venereal diseases, complex oncology centers and diagnostic-consultative centers, which have received a positive accreditation assessment for overall activity. Accreditation has also been required for activities performed in a functional medical institution conducting a clinical trial, in accordance with the Law on medical institutions.

There is a differentiated approach in the MUS in relation to the individual scientific fields, and accordingly there are specifics for researchers in the field of Medicine, Pharmacy, Dental Medicine and in the field of health management and public health policies. For example, the university as a more special Healthcare Organization (HCO) - medical (scientific) organization accepts and is a party to various multilateral formats of ethical associations (e.g. Association of Research-Based Pharmaceutical Manufacturers in Bulgaria (ARPharM or the Association)). In the various associations, academic employees of the university can also participate as consultants, whether in groups or individually, for services such as speaking at and/or chairing meetings, involvement in medical/scientific studies, clinical trials or training services, participation at advisory board meetings, and participation in market research where such participation involves remuneration and/or hospitality. The consultants are entitled to adequate remuneration for the services they provide and refund for the costs incurred in relation to their contractual duties. The arrangements that cover these genuine consultancy or other services must, to the extent relevant to the particular arrangement, fulfill a list of criteria.

MUS has researcher representatives in all ethics committees that exist at the national and local level: Ethics committees in healthcare establishments, Ethics committees for research in medical universities, Ethics committee for multi-center trials, Ethics committee for research, Ethics committees to the Bulgarian Medical Association, the Bulgarian Dental Association, as well as in the Bulgarian Nursing Care Association.

There is a special *Department of Medical Ethics and Law, Faculty of Public Health* at the MUS, which is dedicated to upgrading the knowledge of medical professionals with additional knowledge in the direction of their professional ethical qualification. Within the Faculty of Dental Medicine there is a separate course "Social Medicine and Medical Ethics" (SMME).

Weaknesses of the current MUS' practice:

It was indicated that there is a need for a change and improvement of the awareness of the medical specialists of the ethics committees operating in Bulgaria. Healthcare establishments in Bulgaria should improve their

information channels in regard to the existence of the ethics committees and the benefits of their activity. Such change would result in an improvement of the quality of the provided healthcare services, and on its turn this would lead to better health of the Bulgarian citizens.

Significant weakness comes from the situation concerning the clinical trials on minors and adults unable to express their consent freely.

The person responsible for this policy on the university's level is Assoc. Prof. Elitsa Deliverska, MD, Vice Rector for Postgraduate Studies:

Department of Medical Ethics and Law, Faculty of Public Health, Medical

University - Sofia, Bulgaria, 8, Bialo more str., 1527 Sofia, Bulgaria E-mail: mdeliverska@yahoo.com Recruitment and selection*

Strengths:

MUS has autonomy as a HEI and scientific organization how to conduct the recruitment and selection process,

ensuring

4 key points:

- objectivity in evaluating the scientific development of its researchers;
- guaranteeing the public interest related to the quality of the educational process and scientific research, by defining uniform requirements and controlling their compliance, as well as controlling the quality of scientific research:
- in the context of the Strategy for Internationalization of the MUS (2019-2023), strives for international recognition, exchange of experts and information during the conduct of the procedures, with a view to building a unified educational and scientific research space;
- The specific conditions and procedure for acquiring scientific degrees and for occupying academic positions are determined by the relevant regulations of the University in compliance with the uniform state requirements.

The University has created and maintained/updated a public register as an electronic database, in which are entered:

- 1. the persons who have acquired the educational and scientific degree "Doctor" and/or the scientific degree "Doctor of Sciences";
- 2. protected dissertation works, and
- 3. the qualified persons.

The MUS sends to the National Center for Information and Documentation one copy of the protected dissertation works and their abstracts on paper and electronic media, information on the issued diplomas for the acquired educational and scientific degree "Doctor" and scientific degree "Doctor of Sciences", as well as for persons elected to academic positions within 14 days from the date of issue of the diploma, respectively from the date of election.

In the selection of researcher staff, the MUS lays down its minimum requirements, each of which is determined by the numerical values of one or several objectively measurable indicators related to the relevant

scientific field and/or professional direction. such as: 1. scientometric indicators that reflect scientific results and their impact in scientific literature, and/or indicators that reflect measurable achievements such as: number of author monographs, number of publications in refereed and indexed editions, number of chapters in books, number of studies and/or overviews, number of citations without self-citations in refereed and indexed editions by other authors of the candidate's publications, number of submitted applications for international patents, number of submitted applications for national patents, number of issued international and/or number of national patents, number of delivered reports - including plenary and invited, at scientific conferences, received honors and awards, number of participations in scientific and/or organizational committees of international conferences, participations as an editor or as a member of the editorial team in refereed and indexed editions, number of successfully completed scientific projects led by the candidate in the relevant field scientific and other similar achievements, and other copyrights;

2. indicators that reflect measurable academic results in the teaching activity, such as: number of dissertations defended under the supervision of the candidate for the acquisition of the educational and scientific degree "doctor", number of new lecture courses introduced, number of new exercises developed for lecture courses, number of textbooks issued abroad, number of published textbooks and/or teaching aids in the Republic of Bulgaria, including electronic textbooks, management of master's and/or bachelor's programs and other similar academic achievements in teaching activities. Every year, the MUS in its internal regulations updates additional requirements for candidates for academic positions according to the current situation.

Weaknesses:

The last update of the Terms and the procedure for acquiring scientific degrees and occupying academic positions in the MUS is dated 25.01.2019. All evaluations of compliance with the minimum national requirements and/or other additional ones, as well as the evaluation of results, scientific contribution and originality of the presented works, of the dissertation works, are largely subjective and it cannot be proven how the quantitative and qualitative indicators prevail.

The rector of the MUS appoints by order the composition of the scientific jury - its members and a technical assistant to support its activities. There is no case in which an established foreign scientist in the relevant scientific field participated in a formed jury. At the moment, there is no attitude in the heads of the receiving structural units of the University, which ensure the organization of the reception of documents, the preparation and the holding of competitions, that there should be a change in the selection process in the direction of removing personal interests and subjective factors.

The problem areas in the overall assessment for the minimum number of points per candidate are the following:

- Participation in a national scientific or educational project: this is verified without actually being possible to verify in unified databases;

- Participation in an international scientific or educational project: it is not specified in what direction the participation is and whether it is in the relevant expert field;
- A published university coursebook or a coursebook that uses the university network still nowhere fully respects digital interactive materials.

Working conditions*

Strengths:

The management of the MUS annually conducts successful negotiations with the Trade Unions, the result of which is the new collective labor agreement (CLA) from 01.01.2022, which is valid for 2 years and contains the following novelties:

In connection with the Covid-19 pandemic, absence from work is allowed on the day after vaccination, with permission from the administration.

According to the decision of the Academic Council dated 23.11.2021, the indexation of the salary is realized on the condition that the Law on the State Budget for 2022 is adopted.

Based on this increase, the incentive base for clinical teachers for student training in Bulgarian is being updated. The Methodology for one-time additional material stimulation (DMS) for scientific activity at the end of the calendar year is approved. It is for scientific activity, but also in connection with a decision of the Council of Ministers from July 2021, with which MUS acquired the status of a research university. The criteria for payment of DMS are on the following scale:

- from 3 to 5 publications (as the first author) with an impact factor and/or with no less than 1 monograph/teaching/scientific aid, and/or with 1 participation in a scientific project as a leader, an amount x BGN 60 is paid/monthly total (12 months x BGN 60) BGN 720 at the end of 2021.
- from 6 to 10 publications (as first author) with an impact factor BGN 90/month total (12 months x BGN 90) BGN 1,080 at the end of 2021.
- over 11 publications (as first author) with an impact factor BGN 120/month in total (12 months x BGN 120) BGN 1,440 at the end of 2021.

As of 01.01.2022, a one-time DMS for scientific activity is introduced - BGN 1,000 at the end of the year upon fulfillment of 3 cumulative conditions: 2 publications with an impact factor (as first or last author), when they are unrelated to the academic development of the lecturer, and no less than 1 monograph/teaching/scientific aid and 1 participation in a scientific project as a project manager.

The new bonus system, approved with the Methodology for scientific activity by the Academic Council, is adopted due to the fact that in the Development Policy of the MUS, in Objective 5 "Attracting and retaining young teachers" there is an indicator "Increasing the share of gross labor remuneration tied to efforts, scientific and project activity and contribution to the achievement of the university's goals" (item 5.1.3) with a target value for the mandate. The scale according to the methodology is aimed at a larger number of holders of rights in the third category, where more assistants, principal assistants, docents fall, i.e. young teachers. The bonus system is subject to negotiation with the trade union partners both in the annex to the CLA.

For the last financial reporting year, the MUS increased wages in compliance with the new Collective Labor Agreement, by charging the promised salary increase retroactively, starting from 01.01.2022. All university staff and faculties' members received a 10 percent pay raise despite insufficient funding under the 2022 State Budget Act.

Extra social welfare benefits for the employees of the MUS are thought by the new management in the direction of attracting investments from the private industry and large pharmaceutical companies and other interested stakeholders in this process.

Weaknesses:

At the beginning of 2022, allegations of irregularities in the process of carrying out scientific and teaching activities in the Department of Internal Medicine were made public with a Report Note with No. 951/16.02.2022. This is a good case study of how management handles such situations. Currently, the Department of Internal Medicine at the Faculty of Medicine of the MUS has a total of 45 academic staff, of which 9 are professors, 7 associate professors, 7 chap. assistants and 22 assistants, with less than half (22 members in total) of the scientific and teaching staff working at UMBAL "Alexandrovska" EAD as teaching doctors. Other bases - university hospitals, in which the Department of Internal Medicine conducts training, are UMBAL "St. Ivan Rilski" EAD and UMBAL "St. Anna" EAD. In this case, the problem with the relationship between university and hospitals stands out, as well as the double trust conditions under which researchers develop themselves.

Despite the centralization in the provision of working conditions at the MUS, the individual academic units have a large role in determining the specific labor parameters. For example, similar type of labor problems are put on the agenda of the Faculty Council, which is the competent governing body of the higher education institution. The organization of the educational process, as well as the questions related to which medical institution will be the training base, must be decided according to the relevant normative order.

3. Actions

Strengths:

The main goal of "Training and development process" at the MUS is in the direction of overall institutional and social recovery from the crisis caused by the COVID-19 pandemic, as well as the adoption of new principles in the context of a more sustainable, fair and successful research activity. The Department of Human Resources and Career Development at the Rectorate in the first half of 2022 developed a set of measures and reforms with the strategic goal of laying the foundations for a green and digital transformation of the university in the context of the ambitious goals of the European Green pact. The measures undertaken to the Strategy of the MUS for the development of human resources are fully aligned with the priorities of the "Next Generation EU" program, which was launched in month of July 2020, to adapt employees to global challenges.

A large financial resource for education and training is provided through the Recovery and Resilience Mechanism, incl. The National Plan of the Republic of Bulgaria for recovery and sustainability, in the section: "policies for the next generation, children and youth".

The trainings for researchers planned for the next calendar year provide for the acquisition of skills related to:

- the digital transition: using the advantages of the broadband infrastructure; increasing the digital skills of teachers and researchers, accelerating the implementation of digital technologies in the university and its academic units, as well as the deployment of electronic administrative services and electronic services (including files, databases, etc.);
- MUS is among 10 strategic educational research institutions that are part of the National Strategic Framework for Qualification Improvement. The university has already started reforms, incl. developed tools and mechanisms for transition to a competence approach (in terms of learning content and assessment of achievements). A functioning mechanism to capture and retain outstanding scientists and researchers through inclusive policies at the employer university level is yet to be developed. But for this purpose, a comprehensive modernization of the academic environment must be undertaken in the short term;
- the MUS' policy of "Equality of women and men and equal opportunities for all gropus" has excellent achievements, which implies that all employees of the university are included in the training process based on an impartial, transparent and fair principle. Equality is also available in priority areas such as: minimal gender differences in pay and income; promoting equality of women and men in decision-making processes; overcoming gender stereotypes in various academic fields and so on.
- The modernization of the educational infrastructure of the MUS began with the arrival of the new management in September 2020, but due to the mandated position of the rector and deputy rectors, it is very important to have continuity after the end of this high management, namely after the middle of 2024.

The rector's leadership of the MUS in the person of ACAD. PROF. LATCHEZAR TRAYKOV, MD, DSC, RECTOR, Prof. Tsvetalina Tankova, MD, DMedSc, Vice Rector for International Integration and Project Funding, Prof. Karolina Lubomirova, MD, Vice Rector for Academic Affairs, Prof. Valentina Petkova-Dimitrova, DSc, Vice Rector for Science and Accreditation, as well as Assoc. Prof. Elitsa Deliverska, MD, Vice Rector for Postgraduate Studies, fully shares responsibility for the development of higher education with the Ministry of Education and Science. The management promotes the creation of conditions for active research activity, transfer and commercialization of knowledge and technologies, rejuvenation of the teaching staff and attraction and retention of young scientists.

Weaknesses:

A continuing problem of low digital skills among faculty/administration and researchers has been identified at MUS. Only 14% have skills above basic, and more than 2/3 lack even basic digital skills. I.e. in conclusion, a relatively low human resource capacity for the development of modern projects and initiatives with intensive use of knowledge and high added value can be identified.

The scientific research and innovation for which MUS researchers are known at the European and international level do not have a direct impact on improving the overall image of the university (i.e. graduates of the institution do not derive qualitative value for changing the overall organizational culture).

There is still a lack of developed courses to acquire analytical skills and develop creative thinking, increasing the abilities of researchers for timely adaptation to technological transformation and the resulting changes in the European labor market. The main task of the MUS' management is to accelerate the modernization and digitization of educational approaches, methods and practices. Increasing the digital skills of the university workforce will also increase the level of innovation and research endeavours. Internal staff training should provide for the training of smaller numbers of people, covering different groups of learners, including by offering online and distance learning, interactive content and updating plans and programs to include and upgrade knowledge and skill requirements for the professions of the 21st century: digital, green, portable, key competences.

The Action Plan and HRS4R strategy must be published on an easily accessible location of the organisation's website.

Please provide the web link to the organization's Action Plan/HR Strategy dedicated webpage(s):

https://mu-sofia.bg/en/hrs4r/

Please fill in the list of all individual actions to be undertaken in your organisation's HRS4R to address the weaknesses or strengths identified in the Gap-Analysis. The listed actions should be concise, but detailed enough for the assessors to evaluate the level of ambition, engagement and the expected implementation process. The institution should strive to provide a detailed plan, not just an enumeration of actions.

Note: Choose one or more of the principles automatically retrieved from the GAP Analysis with their implementation ratings.

Proposed ACTIONS		
Action 1	GAP Principle(s)	
Strategic Human Resource Planning		
	() 11. Evaluation/ appraisal systems() 12. Recruitment() 13. Recruitment (Code (Code)(-/+) 15. Transparency (Code)(-/+) 16. Judging merit (Code)(++) 19. Recogn qualifications (Code)() 26. Funding and salaries	
	Responsible Unit Indicator(s) / Target(s)	
	Rector's Office Create a new MUS' strategy Figure out the right areas of foc	cus Pr

MEDICAL UNIVERSITY - SOFIA Proposed ACTIONS Action 2 **GAP Principle(s)** Using Gap Analysis Framework for providing a risk-based action (-/+) 7. Good practice in research(--) 30. Access to career advice(--) 34. Complains/ app 35. Participation in decision-making bodies(+/-) 36. Relation with supervisors **Responsible Unit** Indicator(s) / Target(s) Accounting Risk management processes Roadmap for the improvement in Department policies **Action 3 GAP Principle(s)** Collaboration with the Faculties, the Research Centers and Gro (+/-) 1. Research freedom(+/-) 2. Ethical principles(++) 3. Professional responsibility(++) 4. Professional attitude Responsible Unit Indicator(s) / Target(s) Department for Science Actions and Calendar The impact of the work done in ou community Training and dissemination Impact actions to and Accreditation (Rectorate) university daily life Permanent re-evaluation of internal co **Action 4 GAP Principle(s)** Stakeholder involvement and confirmation at an appropriate level (-/+) 35. Participation in decision-making bodies(+/-) 36. Relation with supervisors (-/+) 3 Supervision and managerial duties(-/+) 38. Continuing Professional Developmer Responsible Unit Indicator(s) / Target(s) The standard template to better communicate gaps and priorit Deans' offices at the transparent and reproducible practices Culture of collat oratior four Faculties Research leadership and services 11

MEDICAL UNIVERSITY - SOFIA Proposed ACTIONS Action 5 GAP Principle(s) Using resources, capital, or technology to their full potential (++) 4. Professional attitude(+/-) 5. Contractual and legal obligations(++) 6. Accountabili /+) 23. Research environment Indicator(s) / Target(s) **Responsible Unit** Vice-rectors for International Integration and Project A needs analysis Skill Gap Funding; for Academic Affairs; for Science and expertise) Compilation repo evaluate its accounting and Accreditation and for Postgraduate Studies Action 6 **GAP Principle(s)** New professional team to Support the Career Development of Re (++) 20. Seniority (Code)(++) 21. Postdoctoral appointments (Code)(++) 22. Recognition profession(++) 27. Gender balance(--) 28. Career development(++) 29. Value of mobility Access to career advice(+/-) 31. Intellectual Property Rights **Responsible Unit** Indicator(s) / Target(s) Governance-based approach to all aspects of resea Department "Research integrity, management Working Conditions and Social Securi ethics & legal aspects" and policies Action 7 **GAP Principle(s)** Improving the MUS' research culture, processes and behaviors (-/+) 7. Good practice in research(--) 11. Evaluation/ appraisal systems(-/+) 23. Research environment(-/+) 38. Continuing Professional Development **Responsible Unit** Indicator(s) / Target(s) Annual reports Ensuring visibility, recognition, career developme **Human Resource** implementation of the first MUS' Career Path 'Knowledge exchar Department partners Raise the visibility of the Action plan and champion its F Set up processes for systematically and regularly gathering the v (Rectorate) inform and improve the MUS's approach to and progress on imp Unselected principles: 12

(--) 8. Dissemination, exploitation of results(--) 9. Public engagement(++) 10. Non discrimination(--) 17. Variations in the chronological order of CVs (Code)(++) 18. Recognition of mobility experience (Code)(++) 24. Working conditions(++) 25. Stability and permanence of employment(++) 32. Co-authorship(++) 33. Teaching(++) 39. Access to research training and continuous development(+/-) 40. Supervision

The establishment of an Open Recruitment Policy is a key element in the HRS4R strategy. Please also indicate how your organisation will use the Open, Transparent and Merit-Based Recruitment Toolkit and how you intend to implement/are implementing the principles of Open, Transparent and Merit-Based Recruitment. Although there may be some overlap with a range of actions listed above, please provide a short commentary demonstrating this implementation. If the case, please make the link between the OTM-R checklist and the overall action plan. (max. 1000 words) *

MUS uses its Open, Transparent and Merit-Based Recruitment Toolkit concerning the academic positions Assistant, Senior Assistant, Associate Professor and Professor.

Candidates from external research organizations have to comply with the same criteria and requirements as the graduates. Assistants who have received two negative assessments over a three-year period may be dismissed in accordance with the regulations. The reviewer assesses the compliance with the ethical values in the scientific, academic and diagnostic-therapeutic work (Ethic Code of the MUS's Commission on the Ethics of Scientific Research).

Scientific research is assessed by: 1. Actual publications (independent or co-authored): a) original articles in scientific periodical (domestic or international), as well as the required number of publications in periodicals with an impact-factor where the latter has been set forth by the quantitative criteria; b) complete publications in peer-viewed collection of research papers (scientific anthologies) or reports from scientific events, along with the list of references and an abstract in English. c) monographs or independent books (peer-reviewed): - are considered as one scientific publication; - if the single chapters have own lists of references, they are considered separate publications; - contain data from own scientific research; - in order to assess the candidate's personal contribution, it taken into consideration if these are the result of independent or team work. d) textbooks and manuals (reviewed as a single publication).

- 2. Scientific reviews: are considered a single publication if they contain own research or systematic synthesis (generalization) of the candidate or his/her research team; contain summary and the candidate's personal position on the matter; have a complete list of references containing at least 20 titles; published in a peer-reviewed periodical, domestically or internationally; scientific review may account for up to 10% of the candidate's total publication volume;
- 3. Letters to the editor, short communications, case reports these are reviewed if they present own research results. 4. Proof of patents, inventions and industrial implementations are acknowledged as separate publications. 5. A list of all citations in Bulgarian and international scientific publications should be supplied.
- II. Following are admitted as scientific research:
- 1. Reports and summaries from international scientific events, abbreviated and without a list of references published in periodicals or reviews with an impact-factor.

- 2. Only publications in periodicals, indexed in the Science Citation Index (SCI), are admitted as publications with impact-factor;
- the impact-factor of a periodical is confirmed by means of a note or a certificate from the National Centre for Information and Documentation or the Central Medical Library to the MUS;
- all Bulgarian journals, published in English and with foreign scientists in their Board of Editors, that have been included and indexed in any of the international reference systems: Thompson Reuters, Scopus, EBSCO Publishing, eLibrary.ru, Pub Med, etc., are admitted as peer-reviewed international periodicals;
- all periodicals, included and indexed in worldwide acknowledged databases of scientific information, available on the website of the National Centre for Information and Documentation (http://mail.nasid.bg) are admitted as peer-reviewed Bulgarian periodicals.
- 3. Reports and summaries of domestic and international scientific events, abbreviated and without a list of references published in periodicals or reviews without an impact-factor.
- 4. Participation in domestic and international scientific research projects of departmental, national or international character, taking into consideration the form of personal participation (supervisory, executive, consultative, expert) as well.
- 5. National or international research awards or awards for participation in scientific events.
- 6. Membership in domestic and international scientific societies, including their management.
- 7. Membership in domestic or international Boards of Editors.
- 8. Lectures or plenary papers at domestic or international scientific events.
- 9. Supervision of PhD-students.
- 10. The personal contribution to the academic development of their team-members is taken into consideration for the academic positions Associate Professor and Professor:
- number of PhD-students that have successfully passed their defense;
- habilitated lecturers that had been trained by the candidate.
- 11. Membership in scientific panels.
- III. For the assessment of academic activity 1. The hourly workload resulting from student trainings/classes, practice with doctoral interns, work with students' clubs as well as with postgraduates is assessed. The lecturing of students, doctoral interns, postgraduates and all forms of postgraduate qualifications, as well as participation in further education in medicine, dental medicine, pharmacy and public health is taken into consideration for the candidates for the academic positions Associate Professor and Professor. The hourly workload is evaluated in accordance with the regulations of the MUS. 2. Published textbook or textbooks. All else being equal, lecturers who have published textbooks or have participated in the development of learning aids shall be favored for habilitation. 3. Lecturing abroad, an invitation to lecture abroad. 4. Development of curricula, tests, etc. 5. Participation in Boards of Examinations. 6. Foreign language skills, lecturing in foreign language. 7. Supervision of course papers and theses, review of projects and theses. 8. The reviewer shall take into consideration the candidate's pedagogic skills. IV. For the assessment of the diagnostic and therapeutic activity 1. Candidates for the academic position Senior Assistant must have at least 5 years of professional experience in their field of expertise and a certificate/diploma for the acquired specialization

according to the nomenclature of the Ministry of Health. 2. Candidates for the academic degree Doctor of Science and for the academic positions Associate Professor and Professor must attach a certificate/diploma for the acquired specialization according to the nomenclature of the Ministry of Health; the said certificate/diploma must be in their application field. Along with this the candidates must submit a proof of continuous clinical employment in their acquired specialty in the field of the academic position. 3. Candidates must present proof (a list of his/her operative interventions according to the nomenclature of the specialty, signed by the respective team leader and the director of the medical centre / health institution; complexity of the diagnostic and therapeutic procedures applied by the candidate; the used highly-specialized and unique diagnostic and therapeutic methods as well as other relevant proof); for therapists or non-surgical specialists – number of patients treated.

If your organisation already has a recruitment strategy which implements the principles of Open, Transparent and Merit-Based Recruitment, please provide the web link where this strategy can be found on your organisation's website:

URL: http://www.mu-sofia.bg/wp-content/uploads/2018/08/Supplement 3.pdf

4. Implementation

General overview of the expected overall implementation process of the action plan: (max. 1000 words)

Expectations regarding the main groups of Researchers according to the European Framework for Research Careers (R4/R3/R2/R1):

First Stage Researcher (R1) - Special focus is placed on the youngest researchers, as a number of initiatives are already being undertaken at the institutional level. The number of free trainings for PhD students to prepare projects under the "Young Researcher" competition, similar to the training conducted on 12.10.2022. "Science and Accreditation" Department organizes and implements a free course for PhD students of MUS.

MUS announces a new *dropdown menu*, e.g. a <button> on its official website under the Title "COMPETITIONS Grants 2023" (https://mu-sofia.bg/konkurs-grant-i-mlad-izsledovatel-2023g/) for the funding of scientific research projects with university's funds from the 2023 budget with a one-month deadline for submitting the documents, starting from 24.10.2022, as follows:

- for scientific teams based in the units of the MUS: Faculty of Medicine, Faculty of Dental Medicine, Faculty of Pharmacy, Faculty of Public Health, Medical College "Yordanka Filaretova" Sofia, Department of Language Training and Sports and Branch "Prof. Dr. Ivan Mitev" Vratsa. Documents that must be entered in the MUS' toolkit after being printed, signed and stamped on paper in duplicate;
- for doctoral students enrolled by Order of the Rector of the MUS for study in Departments of main structural units of the University;
- for scientific teams based in the University Hospitals (contracted with the MUS for the training of students, doctoral students and specialists and for conducting research activities);

- for doctoral students enrolled by Order of the Rector of the MUS for study in Departments on the territory of UMBAL/USBAL (university hospitals):

Researcher R2: Recognised Researcher - The System for competitive project financing of research projects on the basis of free competition and expert evaluation through funds from the budget subsidy of the MUS is actively operating to provide support for scientific research developments in the field of medicine in scientific fields that meet the following criteria:

- ¬ News about Bulgarian and world medical science;
- ¬ Perspective regarding practical health care;
- ¬ Availability of highly specialized scientific potential capable of realizing the research activity;
- ¬ Provided appropriate material and technical base for the realization of scientific research;
- ¬ The system gives priority to projects based on preliminary studies (including literature), pilot experiments and preliminary achievements and on

developed in line with international cooperation.

The purpose of the funds allocated under the outlined financial mechanism is not to ignore the existing resources in the stationary bases (the host institutions - faculty, branch, college, department, department, laboratory, section) or to cover the entire cost of research projects.).

The expectation from the implementation of the Action Plan is that this funding process will become more accessible to researchers, as the assessment methodology will be clear, understandable and widely trusted.

Researcher R3: Established Researcher - R3 researchers of MUS are often also heads of scientific research teams who are lecturers on a basic employment contract in MUS with proven scientific competence and experience, occupying the academic position "professor", "associate professor" or "principal assistant" in a unit of the University, as mandatory have the educational and scientific degree "doctor". In all types of work teams, at the discretion of the project manager, pensioners can be recruited for work through a civil contract. Mandatory it is a condition that the basic organization of this type of researchers is a unit of the MIA (faculty, branch, college, center).

On the basis of the proposed changes in the Action Plan, within a 2-year period, every lecturer/researcher in the MUS should be motivated to take part as a leading researcher - in one research project and/or as a member of the research team – in two research projects. This means that a researcher performing project implementation activities (with an employment contract in the units of the MUS, University Hospitals and other organizations) will not be limited to participate as a member of the research team - in two research projects (of course with the condition that this researcher is closely specialized in carrying out a specific scientific activity and there is no other person to carry out a given experiment - except for up to three research projects.).

Researcher R4: Leading Researcher - R4 researchers at MUS are not only leading scientists with proven professional experience and achievements, but they also hold managerial positions such as: Deans, Heads of Departments or heads of administrative support units of the University structure. During the implementation of the Action Plan, this type of researchers will have the function of monitoring, but also of drivers of change.

They will ensure that everything happens on time, using the prescribed forms for each key objective and the overall organization. The heads of Departments based on the territory of UMBAL/USBAL should not plan expenses for durable material assets regardless of their value. In case of non-compliance with the above requirements and in the event of incorrect/or incomplete data being submitted, the various reporting documents will not be accepted as successful implementation.

In the overall implementation of the Action Plan, the following points will be taken into account:

- the new strategic documents and their application methods in the individual academic units will take into account first of all the scientific contribution of each researcher, which is characterized by:
- New knowledge about processes and phenomena;
- Expanding the volume of existing knowledge about processes and phenomena;
- Practical or theoretical contribution;
- It may have a confirmatory nature, relevant for Bulgarian health care, medical science and education.

The main criteria in the a priori assessment phase are: scientific significance; adequacy of the methodical approach; practical significance; possibilities of the team to reach the intended goal; relevance - coincidence with national problems, interests, goals; novelty - lack of knowledge and solutions currently in the world; availability of foreign experience and effectiveness facts; real and objective planning of the elements of the financial plan; acceptable risk of a low (no) final result, depending on the type of the research; technical design and content of the project; need for ethical evaluation of scientific research.

Make sure you also cover all the aspects highlighted in the checklist below, which you will need to describe in detail:

Note: Click on each question of the checklist to open the editor.

How will the implementation committee and/or steering group regularly oversee progress? *

Detailed description and duly justification (max. 500 words)

The scientific and research collective of the implementation committee has at least 3/4 members who are on an employment contract with the MUS. They are researchers from the main units (faculty, branch, college, center, laboratory, department, section) who will be directly related to the implementation of the Action Plan. Among them is a Coordinating Researcher who is also a Research Team Leader with proven scientific competence and experience relevant to the policy objectives. In all types of work teams, at the discretion of the head of the Commission, pensioners can be recruited for work through a civil contract.

The "Science and Accreditation" department is responsible for the overall implementation of the Action Plan, whose members lead the steering group and report to Prof. Valentina Petkova-Dimitrova, DSc, Vice Rector for Science and Accreditation. steering group regularly oversee progress by appointing two reviewers for each key activity and one reporter with reviewer and super reviewer rights for each specific task of implementing the Plan. The reviewers submit their opinions in the form of reviews to the Commission within 10 (ten) days after receiving the materials for review.

The reviewers should be based on the expert opinion and according to the discussion conducted by

express voting and simple majority.

In case of untimely implementation of actions/tasks or a problem in the implementation of the Plan (overlapping of texts), the leading researchers may request the convening of a general discussion with all stakeholders in the process.

The research team submits to the "Financial and Human Resources" department of the Rectorate of the MUS the following regular 3-monthly reports on the actions performed in relation to the 4 key actions:

- interim until July 1, 2023 (inclusive);
- final (final) until December 1, 2023 (inclusive).

When presenting an interim report with zero implementation according to the time plan, the research team should be motivated by objective circumstances for the non-implementation of the planned actions and tasks. In case of non-compliance with the requirement, the problem of the principle of subordination applies. The reports are drawn up according to a template, according to the requirements of the "Financial and Human Resources" and "Science and Accreditation" departments of the MUS Rectorate.

Within one calendar year from the date of the publishing of the Action Plan, the lead Unit prepares and submits to the Steering group a report on the research activity. After discussion, the implementation committee accepted final assessment of the work performed under the actions. The main criteria on which it is based the stated conclusion are: regarding the scientific results; evaluation of the methodology - to what extent the logic of the scientific research is followed; participation with the achieved results in scientific events - are there any, evaluation of the forums and the type of events, whether the requirements for the application of evidentiary documents have been met. Only reports, posters or messages are considered; publications resulting from the development.

How do you intend to involve the research community, your main stakeholders, in the implementation process?*

Detailed description and duly justification (max. 500 words)

Participation in the administrative management of Sofia University, the faculties and departments in the implementation of the Action Plan, as the following positions are relevant::

Rector, Deputy Rector, Dean, Deputy Dean, Member of the Academic Council, member of the Faculty Council and various specialized committees, Secretary of Faculty Council, Head of Department, Course Leader and Chief Administrative Assistant.

Allocation of activities, tasks, and resulting issues to resolve, by decision-making level and execution level, as follows:

Activities

- I. Research activity
- II. Educational activity
- III. Expert activity

The reporting form of each researcher who is involved in the implementation of tasks under the Action Plan has the following form: Working Group Number?

Position	Rank and degree, first name, last name, last name	Signature
Chairman		
Deputy Chairman		
Secretary		

Anyone who has to take an active part in the implementation of the Action Plan or is a passive subject on whom actions from the Plan reflect, must have access to the useful information necessary for his level of participation and commitment. A general informative document concerning good practices in research has been finished and published at the Research and Transfer webpage (http://career.mu-sofia.bg/). As of the date of submission of the Action Plan, there is already a dedicated information page https://mu-sofia.bg/hrs4r/, but it must contain the following sections: Code of Good Practice, based on the European Code of Conduct for Integrity in Research, institutional affiliation, co-authorship, industrial and intellectual property, spin off creation, as well as consequences of non-compliance with the Code. The document must be available in Bulgarian and English.

Up to this point, the more engaged and dedicated attitude of representatives of P3 and P4 stands out, while the biggest problem is with P2 and to some extent with P1, because it turns out that their curricula are still very intensive and they fail to combine different commitments. For this purpose, some kind of information document of obligations and responsibilities has been developed for R1 and R2 should be developed. All predoctoral fellows supported by MUS should be required to sign a document accepting the obligations and rights derived from having a predoctoral support.

The Steering Committee largely relies on the currently implemented changes in the national legislation which should affect all recruitment process at national level, and the leadership of the MUS hopes that this will directly reflect on the university as well. The MUS is currently working in internal regulation writing for selection and recruitment processes. This document will be approved, but meanwhile, the University is using the regulations for R1 or R2 approved during last years or adapting procedures and contracts to new national laws.

Separate two pages https://mu-sofia.bg/hrs4r/ and http://career.mu-sofia.bg/ for the needs of the implementation of the Action Plan and the overall policy for the excellence in human resources management have already been created. The pages have new structures and new sections as follows:

- Documents related to recruitment
- Publication of current competitions and procedures in action for Development of the academic staff
- Link toward the Portal Euroaxess

How do you proceed with the alignment of organisational policies with the HRS4R? Make sure the HRS4R is recognized in the organisation's research strategy, as the overarching HR policy.*

Detailed description and duly justification (max. 500 words)

The cross links between the previous institutional policies and the new concept of the MUS for HRS4R is in the original form of gathering information from the directly affected stakeholders. In that sense, it was create a Frequently Asked Questions (FAQ) section on ethical issues and scientific integrity. Of course, the target is the entire academic community (R1 to R4).

The specialized COMMISSION ON ETHICS OF SCIENTIFIC RESEARCH (KENIMUS) existing in the MUS is directly related to the work of the SC, therefore, to a large extent, their members are the same representatives of R4:

Chairman: Assoc. A. Vodenicharova, dm

Members: Prof. R. Zlatanova-Velikova, PhD; Prof. Dr. R. Tarnovska-Kudreva, MD; Prof. Dr. K. Yaneva-Ribagina, MD; Assoc. Dr. G. Mateev, MD; Assoc. Dr. V. Stoyanova, MD; Prof. I. Yonkova, PhD; Prof. R.

Kaneva, DB; As. K. Ivanova and As. A. Miteva

Secretary: Natalie Dimitrova Info: https://mu-sofia.bg/nauka/nauka/etika-nauchni-izsledvania/

7 key actions are set in the HRS4R Strategy and Action Plan across four separate EURAXESS defined themes, as follows:

- Ethical and Professional Aspects Strategic Human Resource Planning; Using Gap Analysis Framework for providing a risk-based action plan tasks;
- Recruitment New professional team to Support the Career Development of Researchers;
- Working Conditions Collaboration with the Faculties, the Research Centers and Groups and the whole university community; Using resources, capital, or technology to their full potential
- Training Stakeholder involvement and confirmation at an appropriate level in the University; Improving the MUS' research culture, processes and behaviors to support researchers at all career stages

In the course of the implementation of the Strategy and the Plan, it should be assessed to what extent those involved with the working groups at the University will not be paid additionally. Because this will be the driving human force that will have a direct relationship to the practical implications of the Statement on Ensuring Research Integrity and mechanisms to embed the principles across the MUS.

For the needs of this control, the management of the MUS is currently discussing the creation of a People Management

Framework training module for Researchers and Research Supervisors.

Until now, there is no position of Research Integrity Officer, but the ICC is considering creating a full-time position to ensure compliance with related elements of the Code and Charter.

How will you ensure that the proposed actions are implemented?* Detailed description and duly justification (max. 500 words)

The proposed 7 main actions with their corresponding sub-activities should be located in the framework of the HRS4R strategy and interpreted as a tool for self-assessment of the current departments and services of the Ministry of Internal Affairs in Human Resources area.

Not only the administrative staff who deal with the administration of this process, but also especially the researchers should be aware that the implementation of the C&C make the institution more attractive to researchers looking for a new employer or for a host for their research project. The new leadership of the university in the face of ACAD. PROF. LATCHEZAR TRAYKOV, MD, DSC, Rector, has the ambition to transform the ecosystem into the institution as such offering supportive, encouraging and challenging working environment. This self-assessment and the consequent action plan were developed in an inclusive and open process involving an internal Working Group, as this implies that everyone who took part in the process clearly recognizes the benefits and resulting advantages of the initiative. In this context, the responsible units must provide novel solutions that guarantee the most favorable conditions as possible for the development of a scientific career and to reach a working environment that promotes equal opportunities, ethical integrity and work-life balance.

The proposed actions in the Strategy and in the Action Plan are not isolated, but are part of the larger institutional ambitious vision for digital and green transition of the university. For this reason, the construction and renovation of the modern scientific infrastructure and human potential of the MUS, guaranteeing the conduct of qualitative and competitive scientific research, is the main goal in order to increase the quality of educational and diagnostic activities.

In the course of the preparation, several main criteria for an objective assessment of the degree of implementation of the changes were brought to the fore, as they are:

- all researchers whose results have scientific significance must take part in the priority areas to the extent that their working hours and professional commitments allow;
- researchers who have national scientific significance should serve as ambassadors of good practices and their success stories should serve as role models;
- the inclusion of all researchers should be a continuous process until they all become fully dedicated to the principles of innovation, relevance of scientific work and degree of new knowledge to solve the problem; application in more than one scientific field; interdisciplinarity and application of scientific work in different scientific fields.

The foreseeable and traceable Methodology of reporting the implementation of the implemented actions should include:

- reasonableness and realism of the set goals;
- adequacy of the work program and the prospect of continuing research after the completion of the application process;
- real and objective planning of the elements of the financial plan: appropriateness of planned expenses and mobilization of resources from various sources, including from own;

- possibility of full exploitation and loading of the scientific infrastructure;
- providing access to the created infrastructure for university, national, regional and international teams.

How will you monitor progress (timeline)?*

Detailed description and duly justification (max. 500 words)

A new position should be created at the Human Resources Department - Technical Secretar (TS), which will be responsible for the archive and the correct keeping of information on the implementation of the Strategy and the Action Plan. This appointed TS will have a key role as a link between the SC, the Monitoring Working Group and the various working focus groups.

The reporting process takes place by means of reports, which are addressed by an employee to a direct manager, who, after a resolution and actions taken, should report the work done to the deputy rectors. The working groups will be composed of members of the services of the Vice-Rectorate for Research, which will be responsible for informing the SC of the implementation status of the HRS4R strategy and OTM-R Action Plan, as well as supporting the Working Groups in the development of deliverables and monitoring of compliance with proposed objectives.

The reports must be submitted within 10 days of the completion of a given task, and the databases must be updated every 4 months or at the beginning of each K. It is possible to test several forms of more flexible and functional operational testing and analysis of results. The technical secretary will also be responsible for carrying out the management and administration of all the documentation coming out of the process, as well as of creating and maintaining a common workspace in the cloud, convening periodic monitoring meetings and proposing, ad-hoc meetings, etc. .

There is still no approved Checklist form, and the detailed description and due justification is yet to be developed. Given that the end of the calendar year 2022 is coming the SC and the Monitoring Working Group should hold its first working meeting in January 2023, when they have to draft the design of the annual programming of the process and define the first tasks. The chosen form of regular work meetings is bimonthly follow-up meetings, while every month within the first Monday in the Rector's Council form, a reporter will go if there is a need for new moments or changes in the implementation of the Strategy and the action plan.

How will you measure progress (indicators) in view of the next assessment?* Detailed description and duly justification (max. 500 words)

The main output indicators for measuring the process of implementing the Strategy and the Action Plan should be:

- the extent to which the principles addressing ethical and professional aspects are followed (ahead or behind) at the institutional level:
- does every researcher really feel the freedom of teaching and research;
- whether equal opportunities are guaranteed at the first level of application and subsequently during career growth in the working environment;

- the extent to which the Ethics Committee of the MUS is involved in the process by updating with informed knowledge regarding new trends and current changes;
- the involvement in the process of several specialized departments within the University to ensure compliance with different principles as defined under the heading "Ethical and professional aspects";
- the extent to which the Selection and recruitment processes are regulated in a new Universities Act.

Although the MUS is a leader in the area of medical knowledge in Bulgaria, the development of innovations in medicine and research and the training of experts are among the weak points in the current structure of the institution. Any progress in the research field must be measured above all by how much new added value is created in key research areas, including: creation of centers of excellence, specialized research clusters and interdisciplinary centers.

The existing infrastructure with 61 universities departments, 13 largest multidisciplinary university hospitals for active treatment, 7 clinical institutes and 3 theory centers offers an optimal environment for research projects in the various medical specialist areas. Due to the legally regulated working conditions in state universities with a budget subsidy from the state government, to date social security is regulated and guaranteed to all employees, offering generous benefits (medical care, parental leave, care and sick leave - all as standard).

Leaving this aside, however, the lack of transparency regarding the remuneration scheme leads to great demotivation and non-engagement with the institution. The management of MUS shares the concept that if the institution enjoys an excellent international reputation and cooperates with internationally renowned universities, seeking highly qualified employees to ensure collaboration and excellence in research and teaching, it will succeed in becoming an attractive employer and every graduate student or employee respectively /researcher will feel attachment based on identification with successful good practices.

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