

Strategy

for Human Resources Development in Science and Innovation at Sofia University "St. Kliment Ohridski" for the period 2021-2030

1. Vision and Core Values in Human Resource Management of Sofia University St. "Kliment Ohridski"

The strategy has been developed in the spirit of the latest European trends for the development of human resources in science (COM(2020) 628 final, A new ERA for Research and Innovation), taking into account national specificities and the needs of Sofia University and following an analysis of the situation at Sofia University "St. Kliment Ohridski".

The target group of the strategy is researchers in a broad sense, including the scientific and teaching staff and researchers who are the main part of the academic staff of Sofia University "St. Kliment Ohridski".

Aim of the strategy: to create an attractive working environment for attracting, engaging and developing talented researchers to contribute to the establishment of Sofia University "St. Kliment Ohridski" as an educational, scientific and cultural center of European importance, as well as to contribute to the achievement of scientific excellence that contributes to the well-being of society and the Bulgarian nation.

Subgoals:

- Improve the environment for science and innovation and motivate researchers;
- Improve training and career development of researchers;
- Improve the selection and evaluation system for researchers;
- Introduce measures to attract young promising scientists and researchers;
- Effectiveness and efficiency of activities in support of human resources for science and innovation;

This strategy pays particular attention to the principles of *openness, transparency and performance-based evaluation*. For the different scientific levels, requirements should be tailored to the type of position so as not to discourage younger and inexperienced scientists. Emphasis in their evaluation will be placed on new results from the last 2 years so as not to disadvantage them compared to established researchers with a track record of many years of experience.

The main principles for the work of the units of Sofia University "St. Kliment Ohridski" in support of human resources in science and innovation are:

- **Facilitation** - ensuring policies, systems and processes are accessible, easy to use and understand;
- **Assistance** - providing academic staff with support focused on understanding their problems and providing practical solutions;

- **Anticipation** - applying a strategic planning approach to the management of human resource programmes and activities at St. Kliment Ohridski University of Sofia, responding to changes in academic staff needs in a timely manner and providing long-term solutions.

2. Status at Sofia University "St. Kliment Ohridski"

2.1. University Mission and Vision

Sofia University "Saint Kliment Ohridski" is the main national higher education, scientific research, cultural and information centre with high international recognition.

- The University is a model of research and teaching work of broad cultural and social significance.
- The University forms the core of the Bulgarian intellectuals and shapes the Bulgarian national consciousness.
- The University contributes significantly to Bulgarian participation in the world development of science and education.
- The University plays an active role in the design and implementation of policies of national, regional and international importance.

The Mission of Sofia University "St. Kliment Ohridski" is to preserve, enrich and transmit through the centuries knowledge and the human quest for truth and knowledge. The University develops science and trains students in all its fields, educates highly educated, nationally responsible personalities who lead the Bulgarian nation to spiritual uplift and prosperity.

The Vision of Sofia University "St. Kliment Ohridski" is related to the aspiration to consolidate its role as an educational, scientific and cultural centre of European importance.

- The educational programmes of Sofia University should meet the European quality standards and approach the world's leading models.
- The University strives to master the best practices in the development, management and use of science for the vital purposes of society and the individual.
- The University will continue to expand its crucial role in the formation and development of policies, strategies and projects for the development of the country.
- The University strives to be a leader in learning, scholarship and key projects for the development of society.

A major role in the implementation of the vision and mission of Sofia University is played by the activities of all academic and research staff in the implementation of policies set by the Academic Council, the management of the faculties and research units of Sofia University, supported by the administration for training and science, as well as the University Center for Quality Management.

The University Quality Management Centre (UQMC) coordinates activities for the implementation, improvement, maintenance and development of a unified quality management system at the University. The quality management system includes activities, standards and procedures and outlines the necessary actions and powers of individual units and governing bodies for the effective functioning and development of Sofia University. An Analysis and Research Laboratory operates within the UQMC, which conducts research into stakeholders' views on the quality of University activities and services.

The following documents are essential to the **Human Resource Strategy (HRS4R)** and its associated Action Plan:

- Regulations on the conditions and procedure for acquiring scientific degrees and holding academic positions at Sofia University;
- Rules for the Implementation of the European Charter for Researchers and the Code for the Recruitment of Researchers at Sofia University (the Charter and the Code);
- Code of Ethics of the Academic Community of Sofia University ;
- Strategy for the commercialisation of the scientific results of the Sofia University "St. Kliment Ohridski";
- Regulations for postdoctoral studies (scientific specialization);
- Regulations for the management of intellectual property rights at the Sofia University "St. Kliment Ohridski".

In connection with the acceptance of Sofia University "St. Kliment Ohridski" as a member of the European Open Science Cloud (EOSC) Association at the end of 2020, targeted activities are needed to overcome the challenges of the Open Science initiative and especially to prepare the academic staff of Sofia University.

With the acceptance of the Strategy for Human Resource Development in Science and Innovation at Sofia University "St. Kliment Ohridski" will begin the process of integrating the concepts of Open Science in the research and innovation activities of the collegium.

2.2. Key issues and areas requiring action

The review of the processes and internal documents at the Sofia University "St. Kliment Ohridski" shows the need to take action to address weaknesses such as:

- Lack of a comprehensive approach to support the career development of researchers, including guidelines and rules for scientific guidance and mentoring;
- Lack of professional support in preparing project proposals and protecting intellectual property;
- Inconsistent monitoring of academic staff needs for new specialized services, infrastructure, etc;
- Insufficient information network for announcing training and further qualification opportunities for the academic staff of Sofia University "St. Kliment Ohridski";
- Insufficient efficiency of available information services, including electronic systems for projects, researchers and publications;

- Difficult discoverability of units and resources that support researchers in their activities;
- Incompleteness of information on the website about different units, procedures and documents, especially in English.

All these shortcomings need to be addressed as an important step in the implementation of the Action Plan for the Strategic Development of Human Resources in Science required to maintain the **HR logo** awarded by the European Commission.

3. Strategic Development in Human Resource Management of Sofia University "St. Kliment Ohridski"

3.1. Improving the environment for science and innovation and motivating researchers

Providing interesting and challenging research activities, as well as an attractive and stimulating working environment, are some of the prerequisites for attracting and retaining scientists and researchers with potential and capabilities. Recognition of achievements, reward and motivation systems, are also important to engage and sustain researchers.

In order to overcome the problem of aging of the academic staff of Sofia University "St. Kliment Ohridski", it is particularly important to take measures to improve the organizational environment, to introduce modern technologies and scientific infrastructure and to ensure competitive pay.

The main activities to implement the sub-objective include:

- Improve access to modern scientific infrastructure, scientific databases and up-to-date information sources;
- Supporting researchers' work processes through convenient and efficient systems based on modern technological solutions;
- Implement a new pay system that is attractive, fair and flexible, and helps to attract and retain talent;
- Introduce an incentive programme that is managed systematically, openly and transparently and is based on clear criteria and recognition of researchers' achievements;
- Improve opportunities for sharing knowledge and scientific results between researchers by introducing open data systems, open science and open educational resources;
- Creating conditions to improve teamwork and knowledge sharing among researchers and facilitating the organization of roundtables and discussions, scientific seminars and forums, knowledge fairs, etc.;
- Enhancing the package of additional opportunities for the academic staff by offering new services, including in attracting foreign researchers and scientists - providing accommodation opportunities, assisting family members to find work/school, etc.

- Providing important social services related to the upbringing of the children of faculty and researchers at Sofia University "St. Kliment Ohridski" to enable parents to develop their academic activities more successfully.

3.2. Improving the training and career development of researchers

In recent years, national policy on higher education, science and innovation has paid serious attention to the need to strengthen scientific capacity and train highly qualified researchers contributing to the creation of new knowledge and innovation. A specific challenge for the academics is to collaborate with industry in science and innovation to create new products and technologies, and to jointly solve problems in the economy and society.

Particular attention should be paid to upgrading the qualifications of researchers so that at each stage of their professional development they receive competent assistance and training to acquire the knowledge and skills they need. While for PhD students and young researchers more attention should be paid to their structured training, for established and leading researchers forms such as specialisations, exchange of experience, mobility to other countries and sectors should dominate.

The main activities to implement the sub-objective include:

- Establish a mentoring programme for young researchers;
- Stimulating the formation of teams of leading researchers developing schools of young researchers;
- Developing a career development plan for each newly recruited researcher and periodically updating their plans after attestation;
- Conducting periodic surveys of researchers to explore their needs for additional knowledge and skills;
- Development of an annual training and qualification programme for academic staff with specific activities for PhD students, post-docs, established and leading researchers according to their needs;
- Encouraging researchers to collaborate in science and innovation and establishing research teams/groups (if none have been established) led by a lead researcher, and providing advice and guidance (from mentors) to post-docs and young scientists;
- Improve scientific supervision by developing a Guide to Doctoral Training (introduces the basic principles and requirements for PhD students and supervisors) and conducting periodic surveys of PhD students;
- Supporting researchers' careers and enhancing their knowledge and skills through participation in major scientific forums, specializations and exchanges with leading scientific institutions, etc.;
- Stimulating a diverse research career, including experience in other sectors and abroad, including collaboration with industry.

3.3. Improving the selection and evaluation system for researchers

In the recent amendments to the Law on the Development of Academic Staff in the Republic of Bulgaria, significant changes were introduced to increase the requirements for researchers. Although the changes are aimed at better integration into the European research area, they do not take into account key components of the European Union's policy on researchers. Therefore, in order to ensure high quality in research and compliance with the principles of the Charter and the Code and OTM-R recommendations¹, it is necessary to systematically apply in the procedures for selection of new researchers at Sofia University "St. Kliment Ohridski" as follows:

- *Open, efficient and transparent* publication of each job offer - through wide dissemination of the advertisement, presented in Bulgarian and English on the portal of Sofia University "St. Kliment Ohridski", as well as on the EURAXESS Jobs portal and other widely known job portals in Europe.
- *Adverts targeted to the type of position being offered* - prepare adverts for the positions being offered using a common template and clearly define the knowledge, skills and competencies required. A list of criteria against which the candidate will be assessed should also be provided.
- *Transparent selection according to clear criteria* - the job advertisement will provide candidates with information on the criteria, timetable and selection procedure, will clarify the scientific objectives, the required knowledge and competences, will point to opportunities for future career development, will present the advantages of the working environment at Sofia University "St. Kliment Ohridski".
- *Equal opportunities* - the selection procedure and the evaluation criteria adopted will ensure that the applicant's previous experience, including mobility experience, is recognised. The same criteria and procedures will be used to assess the knowledge, skills and competences of the different candidates. The selection will not discriminate in any way between candidates on the basis of gender, ethnic origin, age and usual place of residence.

Research assessment will take into account OTM-R recommendations to balance quantitative and qualitative assessment indicators, taking into account diverse research pathways, career breaks, overall professional development and contributions, including practical applications of the results obtained:

- the potential to generate useful results for society;
- attracting funding for research, innovation and teaching;
- team leadership;
- international experience (including mobility);
- scientific and applied results and achievements;
- science outreach activities;
- scientific leadership and mentoring;
- Teaching;
- Knowledge transfer and exchange activities;

¹ recommended in Report of the Working Group of the Steering Group of Human Resources Management under the ERA on Open, Transparent and Merit-based Recruitment of Researchers, European Commission, 2015

- organisational activities of benefit to the Sofia University "St. Kliment Ohridski" and to society;
- leadership of activities related to research and innovation.

The main activities to implement the sub-objective include:

- Updating the procedure for the selection of new researchers and differentiating it from the procedure for the academic advancement of researchers at Sofia University "St. Kliment Ohridski";
- Conduct a broad discussion with the academic community to introduce uniform requirements for the launch of a procedure for the academic advancement of researchers at Sofia University "St. Kliment Ohridski" and criteria for the selection and appraisal of researchers;
- Development of a package of documents for the implementation of a procedure for the selection of researchers and for the academic advancement of researchers at Sofia University "St. Kliment Ohridski";
- Extensive information and training of academic staff involved in the modified procedure;
- Taking action to attract leading researchers from abroad, including from the Bulgarian diaspora, and to remove administrative obstacles in this process.

3.4. Introduce systematic measures to attract promising young scientists and researchers

In recent decades, many Bulgarian researchers have left the university and the country, and many young people have gone abroad to pursue higher education or doctoral degrees. However, the main problem facing Sofia University "St. Kliment Ohridski" is related to the ageing of the academic staff and the difficulties in attracting young people with the training, attitude and potential to devote themselves to research.

Well-structured activities and collaboration with schools and teachers are needed to generate interest in science and innovation among the younger generation. A good prerequisite is the role of Sofia University "St. Kliment Ohridski" in the training of future teachers and the availability of pedagogical specialties in most faculties, as well as career centres. Another prerequisite is the increased focus on STEM education and the Ministry of Education's funding of specialised STEM centres across the country, as well as specific science-education programmes. This provides an opportunity for St. Kliment Ohridski University of Sofia to consider targeted collaboration with selected schools and STEM centres.

In many countries, the "nurturing" of talented researchers and scientists takes place throughout the students' education. It is necessary to massively involve the students of Sofia University "St. Kliment Ohridski" in research and innovation activities and projects, as well as in various activities to familiarize them with the profession of the researcher and innovator.

When planning activities to attract young talent, including from other countries, it is particularly important to have good coordination between the participants and to broadcast the same message, which shows the unique features of Sofia University "St. Kliment Ohridski" as an employer and the specific and creative nature of scientific and innovative activities. Therefore, PR specialists should prepare the communication campaign in advance and train the participants.

The main activities to implement the sub-objective include:

- Preparation of Guidelines for communication (with students) in order to build an attractive image of Sofia University "St. Kliment Ohridski" as an important centre for science and innovation and their integration into the Programmes described below;
- Developing a Program to work with teachers and students to introduce them to the research profession and scientific excellence;
- Organizing annual Open Days and Knowledge Fairs with visits to science labs, participation in science demonstrations and discussions on science topics and projects with students;
- Development of a Program with specific incentives and organizational measures to engage students in scientific and innovation activities of Sofia University "St. Kliment Ohridski";
- Periodic discussions of leading scientists and innovators with students, as well as Science and Innovation Career Days;
- Stimulating PhD students and young researchers to participate in science communication activities with pupils, students and citizens, in the events of Sofia University "St. Kliment Ohridski" to attract young talent and in the European Night of Scientists;
- Stimulating established and leading researchers to participate in Science for Citizens activities, and promoting scientific achievements (personal or team) to the general public;
- Encourage researchers to work more actively with outstanding students and to identify potential talent among students and attract them to research careers.
- Deploy an international communication campaign to showcase the unique features of the Sofia University "St. Kliment Ohridski" as an environment for science and growth and the specificity and creativity of the University's research and innovation activities.

3.5. Effectiveness and efficiency of human resources support activities in science and innovation

The main units of Sofia University "St. Kliment Ohridski" with functions in the field of human resources in science and innovation are: Research and Project Activities Department, Scientific Research Department of Sofia University "St. Kliment Ohridski" (SRD at SU), Technology Transfer Centre (TTC), Human Resources Department, Doctoral Students Sector, Postgraduate and Continuing Education Sector, Career Development Sector, Academic Ethics Committee of Sofia University "St. Kliment Ohridski". All of them

should improve the provision of services so that they meet the latest trends in their field and contribute to the success of the University in fulfilling its strategic goals, in line with its mission and values.

As guiding values in their work will be established:

- Building a collegial environment and academic communication with students, administration and academic staff based on honesty and mutual respect and recognition of ability and achievement;
- Offering high quality, expeditious and efficient services with a focus on the needs of researchers;
- Effective use of a performance management system;
- Investing in the professional development of the people of Sofia University "St. Kliment Ohridski";
- Promoting an inclusive, supportive and healthy organizational culture;
- Fostering collegial relations and a spirit of respect and mutual support among all members of the academic community.

The main activities to implement the sub-objective include:

- Enhancing the capacity of the Research and Projects Unit to provide effective expert support and advising the researchers in the preparation of science and innovation projects.
- Establishing a specialised unit at Sofia University to provide effective expert support and advising the researchers on knowledge validation, intellectual property protection and knowledge transfer, using and building on the resources available at the NIS and CTT of SU;
- Coordination of the work of the units of Sofia University "St. Kliment Ohridski" and coordination of all activities and processes for the strategic development of human resources in science and innovation (young talents, PhD students, postdocs, established researchers);
- Updating the activities of the units of Sofia University "St. Kliment Ohridski" in the field of human resources in science and innovation and strengthening their capacity and capabilities;
- Introduction of a periodic survey among the academic staff as a tool for continuous improvement of activities in support of researchers and for the formation of the image of Sofia University "St. Kliment Ohridski" as an excellent place to work;
- Establishment of an integrated system for management, monitoring and control of the strategic development of human resources in science and innovation;
- Provide a single entry point for information on human resource development activities in science and innovation on the website of Sofia University "St. Kliment Ohridski" and periodically update the information.

The Strategy was adopted by a decision of the Academic Council of 30.06.2021 with Minutes №11.