# HUMAN RESSOURCES DEVELOPMENT STRATEGY FOR RESEACHERS OF THE UNIVERSITY OF NOVI SAD WITH ACTION PLAN

## **INTRODUCTION**

The European Commission adopted in 2005 a Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. These documents should ensure that in the European research area all researchers have the same rights and obligations. European Charter defines the rights and obligations of researchers and institutions, and Code speaks about the need for transparency and uniform conditions of employment throughout the European research area.

Human Resources Strategy at the University of Novi Sad should respond to the needs of the development of the University in accordance with European principles of dealing with human resources expressed in the Charter and Code. The University has signed the *Declaration on Accession to the Charter and the Code* of researchers in 2010 and by creating the Strategy seeks to take all necessary measures to implement Charter and the Code in its work, that is, to provide conditions for the creation of an open and transparent labor market, better working conditions and the attractiveness of scientific careers, develop different skills and more stable social status of researchers. In this way, the University of Novi Sad is trying to become an attractive place for researchers, not only within the province of Vojvodina, Republic of Serbia and the region, but also in the European Research Area.

The strategy is the result of the analysis of the current situation and problems of the University, observed through the prism of the objectives set out in the Charter and the Code of researchers and a list of actions that would contribute to resolving identified deficiencies and improve the overall situation of researchers.

It is based on the following document:

Communiqué from the Commission "A Mobility Strategy for the European Research Area" (2001)

Communiqué "Researchers in the European Research Area: One profession multiple careers" (2003)

Green Paper of the European Research Area - Report of the Expert Group: Realizing a single labor market for researchers (2008)

Communiqué of the Commission "Better careers and more mobility: a European partnership for researchers" (2008)

Human Resources Strategy for Researchers consists of four key areas:

- 1. Ethical and professional aspects
- 2. Recruitment
- 3. Working conditions and social security
- 4. Training

Section *Ethical and professional aspects* includes issues related to: freedom of research, ethical principles, professional liability, contractual and legal obligations, good practices in research, publication and use of data, participation in public life, non-discrimination, evaluation and assessment.

The section on *Recruitment* is based on the Code, which discusses the following topics: recruitment, selection, transparency, assessment of skills and the recognition of mobility experience, recognition of qualifications, the position of the workplace,

In the section titled *Working conditions and social security* the following topics are discussed: recognition of the profession, research environment, working conditions, stability and permanence of employment, funding and salaries, equal gender representation, promotion, evaluation of mobility, career counseling, intellectual property, co-authoring, participation in management.

Section entitled *Training* deals with topics like: mentoring, continuous development and mentoring and counseling.

In all four areas we identified opportunities for changes that should ensure that the objectives set out in the Charter and the Code become reality.

# 1. ETHICAL AND PROFESSIONAL ASPECTS

**Research freedom** is only subject to limitations arising from scientific standards, ethical principles, human rights and environmental issues. The right to research is guaranteed by existing laws and the University Statute. The researchers are free to choose the scientific areas of their research. Seniority culture is strongly developed at the University.

Ethical principles are defined by the Code of professional ethics. There is an existing University Committee for professional ethics, which is in charge of

discussing the alleged violations of the mentioned Code. All the faculties have their own Ethics Committees.

**Researchers' professional responsibility** is defined by the existing laws and codes. There is an online PhD database which improves the transparency of PhD theses. Concerning problems, the revoking of scientific titles is not an option, since the existing laws and procedures do not recognize this possibility. Plagiarism is not monitored effectively and systematically.

The features and issues concerning the **professional attitude** of researchers imply that there is a general lack of awareness concerning the strategic issues of their research environment.

A general awareness of the **contractual and legal obligations** of the researchers exists, although it is not full (but only partial). In the end, there is an insufficient awareness concerning data protection and confidentiality.

# SUGGESTED ACTIONS

- 1. Designing and implementing a programme that stimulates and motivates young researchers, while lobbying for relaxing the conditions for national projects management;
- 2. Designing and implementing a research promotion plan of the University of Novi Sad, which among other things considers raising awareness about the professional ethics at the University;
- 3. Improving and enhancing the efficiency of the Ethical committee;
- 4. Defining the standards and procedures for revoking scientific titles;
- 5. Developing the University system for self-archiving maintaining public database of papers, patents and other results;
- 6. Implementing a tool for an automatic monitoring of plagiarism, based on the data in self-archiving public database of papers.

# **2. RECRUITMENT**

**Recruitment** at the University of Novi Sad is regulated by the *Statute of the University of Novi Sad*, the *Law on Scientific and Research Activities* and the *Law on Higher Education* (LHE).

At the University of Novi Sad the practice of recruiting researchers from the pool of the best students is still dominant. Foreign citizens can apply for PhD studies under the same conditions as the citizens of Serbia, and they are eligible for a PhD grant in case there are bilateral agreements between Serbia and the country of origin of the PhD student.

However, there are almost no foreign researchers working at the University, and there are only a few returning researchers. Host institutional grants for PhD students are not transferable and the procedures for employment of the foreign citizens are not transparent. Job openings are not advertised in a transparent way. In many cases position ads are advertised only in local newspapers. Faculties do not submit their position ads to the University administration and there are no career development prospects and working conditions descriptions in the ads.

**Selection of candidates and advancement in researcher carrier** at the University of Novi Sad is regulated by the *Statute of the University of Novi Sad*, the *Law on Scientific and Research Activities* and the *Law on Higher Education* (LHE).

The criteria for selection and advancement in researcher career are transparent. Evaluation reports are standardized at the University level. Templates of the evaluation reports are available at the University web site.

According to the Survey on the rights and the responsibilities of the researchers working at the University of Novi Sad, the most valued characteristics of the successful applicants were: published papers (98.4%), teaching publications (89.3%) and teaching experience (88.9%). In some cases, other factors are valued, such as: mobility (63.4%), professional skills (57.2%) and foreign languages (50.2%). The factor identified as less important, but still significant, are professional certificates (31.7%). Only few respondents highlighted the importance of industry (11.9%) and entrepreneur (7%) experience.

Career breaks are typically not considered as an obstacle for promotion.

Experience gained through mobility is typically regarded as a plus. There are clear rules for sabbatical use: all researchers with teaching positions held for the minimum of 5 years can apply of a one-year sabbatical leave.

However, there is only a sporadic involvement of foreign researchers in evaluation committees. There is no community of evaluators, members of the committees are invited based on personal contacts. Participation of members in the evaluation committees is usually not remunerated. In most cases, no interviews with candidates are carried out. Candidates who did not pass are rarely or not at all informed about the weaknesses and strengths of their applications.

Moreover, there are no standard sets of criteria and/or unique approach to evaluating the applications, although the templates exist at the level of the University. Candidates are quantitatively evaluated on the basis of the rules mostly favouring journal publications, and these rules do not consider the full spectrum of skills, knowledge and experience of the candidates. Creativity and potential for independence in research are not evaluated.

**Recognition of qualifications** at the University of Novi Sad is regulated by the *Bylaw on the student's mobility and academic recognition of the mobility period*, the *Statute of the University of Novi Sad* and the *Law on higher education* (LHE).

There is a clear procedure for the recognition of foreign degrees and qualifications at the University (both domestic and foreign) which is in accordance with LHE. All the information about the procedure for foreign degree recognition is published on the University website in Serbian and English. On the average, the process of degree recognition takes 2 months.

However, the recognition of knowledge and skills acquired by non-formal or informal education (courses, trainings) is not regulated, since the University acknowledges only high-school diplomas.

**Postdoctoral positions** are not regulated at the national level.

## SUGGESTED ACTIONS

- 1. As a part of the internationalization process, develop and submit the recommendation to the faculties including guidelines/methodology to implement a course in English or any other foreign language;
- 2. Further develop and promote University Alumni;
- 3. Make the procedures for diploma recognition shorter and more efficient;

- 4. Design and publish the procedures for employment of the foreign citizens on the University website;
- 5. Through the participation of the University representatives in the inter-university bodies, lobby for making the national host institutional PhD grants transferable;
- 6. Develop a form for submission of faculty position ads, in Serbian and English. Implement this form on the University website;
- 7. Develop a web page with searchable listings of positions advertised by the faculties;
- 8. Develop an online searchable database of researchers' profiles, with the possibility to search for possible committee members / mentors (based on the scientific field) which satisfy the criteria;
- 9. Design and implement a professional skills development programme at the university and faculty level, which among other skills considers responsibilities of the selection committee members;
- 10. Increase the transparency of the employment and career advance process;
- 11.Extend the evaluation procedures with a segment in which every Faculty/University will be obliged to reach out to the candidates that did not pass and inform them about the weaknesses and strengths of their applications;
- 12. Work continuously on refinement and harmonization of evaluation criteria among different faculties at the University;
- 13.Develop additional evaluation criteria that will recognize creativity and research independence as an advantage, even an informal one
- 14.Create a portal on the University web site with links to web pages of the respective faculties containing information specific to recognition requirements of those faculties;
- 15.Increase the efficiency of the degree recognition process;
- 16.Design and implement a professional skills development programme at the university and faculty level, which among other skills considers research project proposal writing. EU funding could be used to create new post-doc positions;
- 17. Through the participation of the University representatives in the inter-university bodies, lobby for establishing the national post-doc grants system.

# **3. WORKING CONDITIONS AND SOCIAL SECURITY**

The regulation of the profession in Serbia is defined at the national level. Educational and scientific titles at the University of Novi Sad are regulated by the Statute, in accordance with the relevant provisions of the Law on Higher Education (LHE) and the Law on Scientific Research (LSR). Educational and scientific titles at the University are consistent with the stages of career development of researchers, ranging from teaching assistant to full professor, and from research assistant to research fellow.

The issue of employment stability is adequately resolved at the University of Novi Sad. Pursuant to the Law on Higher Education (*Službeni glasnik Republike Srbije* 68/2015), the typical duration of an employment contract for a teaching assistant is three years; assistant professors and associate professors are employed for a period of 5 years, while full professors are employed permanently. After the expiry of those time limits, the researchers and teachers may be re-elected to the same or higher positions.

All job openings at the University are advertised in local newspapers. The competition is open only in the local language. The University does not publish job openings on the EURAXESS Jobs portal.

All the teachers at the University of Novi Sad are adequately involved in the decision-making bodies. The decision-making bodies at the faculty level are **the Election Council**, **the Teaching and Scientific Council and the Faculty Council**. All the teachers participate in the election councils of the faculties. The representatives of the departments within the faculties (including assistant professors, associate and full professors) participate in the work of teaching and scientific councils of the faculties. The representatives of the faculties. The representatives of the faculties (including and scientific councils of the faculties. The representatives of the faculties. The representatives of the faculties of the faculties. The representatives of the faculties participate in the Professional Committee, the Senate and the University Council. They include teachers of every academic title.

Researchers' salaries and funding depend on the economic situation in the country. Social security, health and pension contributions are paid by the University to the full extent.

In general, the salaries are considered as low (SURVEY). The salaries in the field of higher education have been defined at the national level. Also, at the national legislation level, there is no clear difference between obligations and financing of educational and scientific work, which is a common problem of scientific and educational institutions.

Gender equality in the field of higher education in Serbia is one of the important topics. According to the Strategy of Scientific and Technological Development of Republic of Serbia for the period from 2016 to 2020, "Research for Innovation", 51% of researchers in Serbia are women (10793).

There is a positive perception of gender equality among the researchers at the University of Novi Sad (SURVEY). The University of Novi Sad is the first university in the history of higher education in Serbia which had a female rector (the academician Olga Hadžić, 1996-1998). However, when it comes to leading and management positions, there is a gender imbalance. Out of 14 deans, only 3 are women.

The strategy of career development and human resources is part of the National Strategy of Scientific and Technological Development of Republic of Serbia for the period from 2016 to 2020. One of the important aspects in career development is mobility. Mobility of students, teachers and administrative staff is regulated at the level of the University, and the level of the faculties. The University of Novi Sad is an active participant in the CA1 + Erasmus, Erasmus Mundus and other mobility programs. Mobility has become a part of the evaluation for promotion of teachers to higher positions.

The University of Novi Sad has a EURAXESS centre within the International Relations Office. However, most researchers are not familiar with the existence of this Centre at the University (SURVEY). The EURAXESS Centre does not send statistical data to the European Commission.

Although there is a Career Development Centre at the University of Novi Sad, as well as human resource centres at the faculty level, career advice for young researchers is usually given by the mentors. Researchers do not use or rarely use the opportunities provided by HR offices at the faculties.

The University of Novi Sad implements a system of evaluation of lecturers by students, which is one of the conditions for appointment into the teaching positions. The survey results show that researchers are generally overburdened with teaching duties. Supervisions and extra-curricular activities as well as activities at PhD studies are not expressed through the working hours.

The development of an adequate research environment at the University of Novi Sad is one of the most important objectives of the Strategy. There are more than 250 laboratories, research centres and research groups at the University of Novi Sad. The University takes into account the visibility of all forms of research available The laboratories activity. data on the are at https://www.uns.ac.rs/index.php/c-nauka/naucni-potencijal-c/laboratorije-c, the information on the scientific research centres at https://www.uns.ac.rs/index.php/cnauka/naucni-potencijal-c/naucno-istrazivacki-centri and the catalogue of research and innovation potential of the University of Novi Sad is available at <a href="https://www.uns.ac.rs/images/doc/WBCInnoSrp.pdf">https://www.uns.ac.rs/images/doc/WBCInnoSrp.pdf</a>

However, the level of development of research infrastructure is not considered as satisfactory (survey). The laboratories lack modern equipment, and many centres lack adequate space.

Protection of intellectual property is an important condition for the creation of an adequate research environment. The procedure for registration of patents is a result of the work financed from the budget of the Republic of Serbia, and is strictly defined in the Law on Scientific Research. All research results (including patents) that are reported as the outcomes of the project funded by the budget of the Republic of Serbia are the ownership of the organization where the results are generated (LSRA).

The Danube Technology Transfer Centre was established at the University of Novi Sad and is involved in creating technology transfer capacity, knowledge and experience exchange, strengthening the network of partners in the market economy in the country and the region.

The University of Novi Sad maintains a central repository of all PhD theses and the students are obliged to submit an electronic and a printed copy to the University, which decreases the risk of plagiarism.

The University of Novi Sad includes the University Centre for Intellectual Property (IP Centre) whose mission is to educate and inform the academic, research, business and student societies in Novi Sad and Vojvodina in order to promote the role of intellectual property and raise awareness about the importance of IP in a knowledge-based society. The overall goal of the IP Centre is to help in IP protection, mainly through writing patent documentation and tracking procedures as well as to support transfer and commercialisation of the knowledge developed through research and creative work at the University of Novi Sad.

However, there are no patents in the relevant national or international databases, registered by the employees with the affiliation of the University of Novi Sad. There is no repository of scientific papers and patents that would allow better visibility of scientific results.

#### SUGGESTED ACTIONS

- 1. Promote project opportunities, especially those related to the research strategy at the University of Novi Sad, which can fund the improvement of research infrastructure.
- 2. Publish vacancies on the University website and/or the EURAXESS Jobs portal.
- 3. Consider introducing salary bonuses for teaching overtime.
- 4. Through participation of the University representatives in the interuniversity bodies, lobby for a clear distinction between teaching and research positions of individual researchers, including separate remunerations.
- 5. Consider activities related to overcoming gender balance in management positions.
- 6. Promote the EURAXESS centre and its services related to outgoing mobility.
- 7. Take measures to have the EURAXESS statistics submitted to the EC.
- 8. Define a set of HR services, related to professional development (whether they are provided by the legal department or a new one HR.
- 9. Regulate relations between the University and the researchers in the field of technology transfer, copyright and mutual obligations.
- 10.Develop and maintain a central repository of scientific papers, patents and other results.
- 11.Establish a system for objective, accurate and complete tracking of teachers' duties (by hours), while considering not only classes, but also office hours and extra-curricular activities with students.
- 12.Implement an HR planning system (regarding employment and career development), which will consider objective teaching and research requirements, based on the reporting system.
- 13.Implement the full reporting process; implement the monitoring system, particularly in terms of teaching and mentoring.

## 4. TRAINING

The establishment of doctoral schools at the University created a framework for a structured relationship between supervisors, mentors and students far beyond the relations that existed before the establishment of the above mentioned schools. These relations are regulated by the law, the statutes and rules and regulations of the University. Students' progress is monitored, their supervisors and mentors write reports, work together in research and publish scientific papers. A certain number of PhD students participate in projects of the Ministry of Science, for which they receive financial support. Some of them also participate in the teaching process through tutorials.

For the past couple of years the University has organised various forms of training aimed at young researchers: research projects writing, research papers presentation, communication skills, *curricula* creation, scientific research methodology, teamwork, entrepreneurial skills and the like.

Together with researchers, the University administration are invited to participate in courses such as ECDL (European computer driving license) or English language courses. These forms of training are sporadic and based on voluntary participation. They are organised at the central level for all the University researchers and on the level of various faculties, in which case the information about the courses available to other university researchers is generally poor.

Given that the appointed supervisors and mentors of doctoral students are usually senior researchers, there is a wrong presumption that their experience is sufficient to guarantee successful supervising or mentoring. In those roles they are also assumed to be capable of being career advisors and managers as well as scientific research popularisers. Under the influence of "capacity development projects" such as TEMPUS and ERASMUS + and the intensive exchange of experience with European universities, the awareness of the need for continuous professional development of researchers at all levels in the near future becomes common. However, apart from the general and declarative commitment, these forms of training are still not regulated by the law and regulations of the University and faculties. Their performance, availability and efficiency is still not evaluated and tested.

Therefore, in the preparation of the Human Resources Strategy, we suggest the following measures to improve the current situation at the University for which the Vice-rector for Research, Quality Board and doctoral studies councils would be responsible.

#### SUGGESTED ACTIONS

- 1. Make recommendations and instructions to the faculties of the need to improve the methodology for reporting on the performance of the doctoral programmes, the progress and the results achieved.
- 2. Compile a set of questions for the survey which would be periodically sent to students to evaluate doctoral studies. Determine who will analyse the results and make decisions on possible actions resulting from the analysis.
- 3. Develop and run professional development programs at the university and faculty levels for researchers of different levels.
- 4. Develop and distribute to all faculties a common form for reporting and assessment of activities aimed at professional development, whose important elements of assessment would be availability, efficiency and applicability of training courses.
- 5. Make a guide and recommendations to universities on how to establish a binding relationship between the counsellor and counselees, the mentors and doctoral students.

## Implementation of the Action plan

To implement the actions, listed within the Action plan, the following process is foreseen for each of the actions:

[1] Adoption of the Strategy and the Action plan in the corresponding bodies of the University.

[2] Discussion about the implementation of the proposed measures in the relevant bodies of the University.

[3] Designation of persons of the working group responsible for the implementation of the proposed measures and the corresponding time frame.

[4] Implementation of the proposed measures by designated persons and/or bodies within the current timeframe.

[5] Workgroup is composed of: the Vice-rector for Research, contact person responsible for the Re@WBC project at the University and the participants in the project plus representatives of certain bodies of the University when necessary, will meet regularly (every 3 months) to follow the implementation of the Action plan.