**„ION IONESCU DE LA BRAD” UNIVERSITY OF LIFE SCIENCES FROM IAŞI**

**ACADEMIC YEAR 2023/2024**

**CONTEST 2nd SEMESTER**

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| **POSITION DESCRIPTION:** |
| **Post** | **Scientific Researcher grade II** |
| **Position in the Staff Regulations** | **XI/4C** |
| **Faculty** | Veterinary Medicine |
| **Dpartment** | **Public Health****ROVETEMERG Research Center** |
| **Curriculum subjects** | **Diagnostic bacterioscopic, bacteriologic și serologic în bolile infecțioase ale animalelor.** |
| **Scientific field** | **Medicină Veterinară** |
| **Job Description** | * Participates in the achievement of the objectives of research projects as coordinator or member of the research team;
* Performs microbiological analyses and experiments related to research activities;
* Processes and statistically interprets the results obtained;
* Conducts scientific research under the guidance of the coordinators;
* Ensures the implementation of experimental models and techniques specific to the field of activity;
* Processes and publishes the results of the research carried out;

 Participates in and contributes to training to acquire the techniques and methods used in the research activity;* **Specific technologies/methods that need to be known and applied:**
* Classical and automated microbiological processing and analysis techniques used in the research activity;
* Serological processing and analysis techniques used in research activities;
* Microbiological techniques applied and adapted in interdisciplinary research.
* **Skills required:**
* Creativity, adaptability, initiative, and ability to communicate with team members.
* Knowledge and use of PC operating systems: Windows, MS Office (Excel, Word for Windows, PowerPoint), image editing programs, technical editing, statistical programs, databases, graphics..
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| **Specific activities of the post** | * Carry out research activity in the fields of competence;
* Writes and publishes research results in specialized, indexed journals;
* Participates in the writing and publication of scientific works, in indexed specialized magazines;
* Participates in national and international competitions for winning research grants;
* Prepares proposals for scientific research grants in the field;
* Coordinates and drafts research reports in the framework of the projects he/she coordinates and contributes to the preparation of research reports by writing the parts that fall to him/her in the framework of the projects he/she is involved in;
* Participates in national and/or international scientific events with communications on the results of his/her own research activities.
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| **Topics of the competition** | **Theme*** Microbiological techniques for determining the aetiology of infectious diseases in animals.
* Principles of collection and processing of biological samples in microbiological research.
* Techniques for determining the susceptibility and resistance profile to antimicrobial agents.
* *In vitro* evaluation of the antimicrobial activity of phytoextracts and essential oils as adjuvants in antimicrobial therapy.
* Testing and evaluating natural polysaccharide composites loaded with innovative antimicrobial molecules for animal antimicrobial therapy.
* Immunological methods used in the clinical laboratory and in microbiological research.

**Bibliography**1. General microbiology,, Cătălin Carp Cărare, Ed.Ion Ionescu de la Brad Iasi, 2014
2. Bacteriology, Eleonora Guguianu, Casa de Editură Venus, Iași, 2002,
3. Special bacteriology- Răpuntean Gh., Răpuntean S. – (2010) Cătălin Carp Cărare, Eleonora Guguianu, Cristina Rîmbu, Ed. Ion Ionescu de la Brad Iași, 2015
4. Infectious Diseases of Animals, Bacteria– Tudor Perianu, Ed. Universitas 2011
5. Elements of practical immunology- Emil Tîrziu, Waldpress Publishing House, Timisoara, 2002, 253 pages
6. Immunology and Immunopathology–Cristina Horhogea, Ed. Ion Ionescu de la Brad Iasi, 2015
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| **Work tasks** | * Carrying out specific research activities within the framework of the research contracts ;
* Knowledge of the health department's equipment and devices, their functioning and utilisation;
* Improve the working methods and techniques used in the microbiological laboratory;
* Performing analyses and determinations with the department's equipment and devices;
* Participation in the development and publication of scientific works in collaboration with the staff of the department and other departments of the Faculty, as well as the University of Life Sciences "Ion Ionescu de la Brad" Iași;
* Training of students/doctoral candidates working on the preparation of bachelor's/doctoral theses in the field of microbiology.
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| **Salary** | The position of **Scientific Researcher grade II** will be paid according to OUG 128/28.12.2023 with the amount of 8120 lei. |