

Annex No. 3

The External Evaluation Report of a Doctoral Study Domain

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I. Introduction

the context in which this external evaluation report was drafted (the type of evaluation, the period of the evaluation visit, the composition of the Experts Committee etc.); The evaluation of Doctoral studies in Veterinary Medicine at University of Agricultural Science and Veterinary Medicine Cluj Napioca (USAVMCN) was realized from 1 november to 5 november 2021 in hybrid modality: through on line meetings performed on Zoom platform from 1 to 3 november 2021. A face to face working meetings, visiting the educational and research infrastructure and restricted only to romanian visitors, were performed on the 4 november. The timetable was given in advance and the times of meeting scheduled were respected. The evaluation took in account the period 2015-2020. The Expert member Committee was consituted by Prof. Romeo Cristina from Faculty of Veterinary Medicine of Timisoara (Rumenia) as Coordinator, Dr.Sergiu Aurel from Faculty of Veterinary Medicine of Timisoara (Rumenia) as Doctorate Graduate in USAMVCN and Prof. Brunella Restucci from Department of Veterinary Medicine and Animal Production of Naples (Italy) as external evaluator.

details about the doctoral school(s) of which the doctoral domain under review is part (number of doctoral advisors, number of students, institutional context, short history etc.); The USAMV CN is accredited as an Academic Doctoral Studies Organizing Institution (IOSUD) with two Doctoral Schools (Doctoral School of Agricultural Engineering Sciences and Doctoral School of Veterinary Medicine), thus being entitled to organize and develop academic doctoral courses. The PhD fields at USAMV CN are as follows: Agronomy, Horticulture, Animal Science, Biotechnologies and Veterinary Medicine. The PhD studies are full time courses only.

details about the doctoral study domain under review (number of students, institutional context, short history etc.).

Istitutional context: The University of Agricultural Science and Veterinary Medicine Cluj-Napioca (USAVMCN) organizes doctoral studies within the Organizing Institution of University Doctoral Studies (IOSUD) in the respect of the current legistation.

The Doctoral School of Veterinary Medicine (DSVM) is an intraistitutional structure of USAVM Cluj-Napioca and functions as an independent entity. It is led by a Director and a council of the doctoral



school which is made up of three internal doctoral supervisors, an external representative and a PhD student (gender relathionship 4:1).

The DSVM is composed of 21 PhD leaders (15:6 man:woman), 19 of which are full time employed in Veterinary Medicine Faculty while 2 are retaired. All the PhD active leaders have the Scientific Abilitation.

Number of students: The number of registered PhD student has been constantly increasing from 2015/16 academic year. The number of candidates enrolled is higher than the number of places financied from the state budget, so that the surplus student that are admitted have to pay tuition. The cost is quite expensive but no student has complained abou this feature.

Short history: The doctoral studies in Veterinary Medicine take 4 years, different to the other doctoral studies of USAVMCN. This is well evaluate by the PhD students and requested also by the PhD students enrolled in other doctoral sutdies. During the first semester of the first year the students attend 7 compulsory courses and partecipate in seminars and pratical works. The comupulsory courses are considered very useful by the students for their future post-doctoral employement (as example to write the PhD thesis or a scientific paper, to design a research grant). In the second semester the students partecipate in optional courses offered by IOSUD-USAVMCN. In addition to the individual learning program, the student develop professional competencies and soft skills that are very appreciated by the employers, as expressed during the meeting with employers. At the end of the first year the student draw up a questionnaire of satisfaction, which is held in high consideration by the DSVM, and an activity report. This report includes also the Research Project. PhD students submit to IOSUD the request to support the researh project and the bibliography. After that, the PhD student together with the PhD leader develops the individual training program for the doctoral research stage. A high flexibility is assured. A PhD student can change its PhD tutor or its doctoral thesis, if convenient. The student is followed by its PhD coordinator during the entire period of 3 years. Many research projects are conducted in collaboration or in *co-tutela* with other laboratories of the USAVMCN or with other Faculties. PhD students spend a period abroad for the avancement of their research project and thesis. The PhD student's knowledge and competences are always considered adequate by the other host facilities. All PhD students are very satisfied of their doctoral study program and their PhD coordinator. Also the graduate doctorates are satisfied and show enthusiasm in sharing their doctoral experience. Many of them already work in public or private companies where they carry out research projects financed by public grants.

II. Methods used

The meetings were well organised and transmitted in video-conference mode. Presentations and discussions were done in rumanian; I appreciated the the well done simultaneous translation service in English; nevertheless, and as I do not understand rumanian at all, I may have missed some minor issues occasionally, without misunderstanding major contents. My external evaluation report is largely limited to performance and quality assessment, methodology and procedures, benchmarked against international standards. Where applicable, textual sections and explanations of the written material provided by the University for the conference are herewith not repeted; the focus is on analysis and suggestions, where applicable.

- The analysis of the internal evaluation report of the doctoral study domain under review and its Annexes. The internal report and its Annexes in PDF were insered on Cloud Aracis platform. The link for the platform was sent by mail on 20 october 2021. The Internal report was well written and



exhaustive, even if few mistakes were present (i.e. tables 8 and 9 are not included in pag 12). All the annexes were written in romanian, therefore I couldn't understand everything.

- The analysis of documents made available by the IOSUD, in physical format, during the evaluation visit (if such documents have been requested); I performed the evaluation visit on a Zoom Platform and I didn't request any documents.

- The analysis of documents, data and information available on the IOSUD/Doctoral School(s) website, in electronic format;

- Visiting the buildings included in the institution's property, comprising (indicative and nonexhaustive list, which shall be changed according to the context): I performed the evaluation visit on a Zoom Platform and I didn't request any documents, that's why I can't make any judgement.

Meeting/discussions with doctoral students in the doctoral study domain under review: The meeting with doctoral students was conducted on-line by Zoom platform. The language used was rumenian with simultaneous translation made by student- interpreters. The meeting was exhaustive and pleasant. All the doctoral students are very satisfied with their choice and with the support they are receiving from the coordinators and the entire coordinating team. Some students are worried about the covid pandemic situation. They fear not to be able to carry out the research as they propose but in the same time they are confident of the help by their PhD coordinators.

- Meeting/Discussions with the graduates of the doctoral study domain under review: The meeting with doctoral students was conducted on-line by Zoom platform. The language used was rumenian with simultaneous translation provided by student- interpreters. All the graduates are satisfied and show enthusiasm in sharing their doctoral program experience. They spent a period abroad during their doctoral studies without having any problem of getting into a reasarch group.

- Meeting/Discussions with the graduates of the doctoral study domain under review: The meeting with doctoral students was conducted on-line by Zoom platform. The language used was the rumenian with the simultaneous translation made by student- interpretes.

All the graduates are satisfied and show enthusiasm in sharing their doctoral experience. They spent a period abroad during their doctoral studies without having any problem of getting into a reasarch group.-Meeting/Discussions with employers of the graduates in the doctoral study domain under review;

The meeting with doctoral students was conducted on-line by Zoom platform. The language used was rumenian with simultaneous translation made by student- interpreters.

Meeting/Discussions with the school officials of the Doctoral School(s) in which the doctoral study domain under review is operating; The meeting with doctoral students was conducted on-line by Zoom platform. The language used was rumenian with simultaneous translation made by student-interpreters.

Meeting/Discussions with the doctoral advisors in the doctoral study domain under review;

The meeting with doctoral advisors in the doctoral study domain under revision was conducted on-line by Zoom platform on. The language used was rumenian with simultaneous translation provided by student- interpreters.

Meeting/discussions with the representatives of the various structures of the IOSUD/Doctoral School(s) in which the doctoral study domain under review is operating:

The Council of the Doctoral School, the University Senate, the Board of Directors, the Quality Assessment and Assurance Commission, the Quality Assurance Department, the Ethics Commission (including with the student representatives of these structures);



- the Career Counselling and Guidance Center;
- student organizations;
- secretariats;

The discussions with the representatives of the various structures of the IOSUD/Doctoral School(s) in which the doctoral study domain under review is operating was conducted on-line by Zoom platform on. The language used was rumenian with simultaneous translation made by student- interpreters

III. Analysis of ARACIS's performance indicators

Domain A. INSTITUTIONAL CAPACITY

Criterion A.1. The administrative, managerial institutional structures and the financial resources

general description of domain analysis - University of Agricultural Science and Veterinary Medicine Cluj-Napioca (USAVMCN) is an academic educational institution accreditate by ARACIS board through a periodic 5 years evaluation. In addition, USAVMCN has been certified according to the EN ISO 9001 since 2010, and this certification will be valid until 2023. In USAMVCN a Code of Ethics contributes to the maintanance of academic integrity and assuring an universitary enviroment based on the cooperation and correct competition. Institution Organization Doctoral Studies (IOSUD) of the University of Agricultural Science and Veterinary Medicine Cluj-Napioca (USAVMCN) is a public institution of higher education and operates in accordance with the provisions of current legislation. The Rector legally represents the University and act through the Universitary Senate which is the highest forum for decision-mking and deliberations. The Rector is the credit officer of the University Senate. The management structures in USAVMCN are specified in the University Organization Chart and in University Rules of Operation and Organization. Both these documents are public on the USAVMCN website and are written only in romanian language.

The USAMVCN financial-accounting activity is carried out within the Economic Directorate which comprise the Finacial Bureau and the Accounting Office. The Universitary Senate and the Board of Directors approve the budget of expenditure and send it to the Ministry of National Education for ratification. Funds are also attracted also by research activity and financied research project and by the student fees.

At the level of Doctoral studies, the management structures are represented by the Council of Universitary Doctoral Studies (CSUD) and by the Council of Doctoral Schools.

The financial resources for doctoral studies in Veterinary Medicine are adequate. The academic quality of doctoral supervisors is high and there are numerous funded research projects that ensure adequate funding. PhD students who are admitted in numbers greater than the budget pay a fee equal to that paid by students. This ensures further funding. Over the last 5 years, the number of these students has increased substantially, a sign that the PhD is seen as high value by the students themselves.

Standard A.1.1.

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff were taken into consideration.

Performance Indicator A.1.1.1.



description of the facts, the findings from the assessed institution's documents and the evaluation visit itself Over the years, IOSUD USAVMC has organized the doctoral activity in compliance with current legislation. The system meets the quality requirements thanks to the production of over 100 procedures, which concern all aspects of the doctoral period in order to preserve the quality of scientific research and the welfare of students.

(a) **the internal regulations** of the Doctoral School are visible on the USAMVCN website (RU-66) and they are mostly written in rumenian language.

(b) **the Methodology for conducting elections** for the position of director of the Council of doctoral school (CSD), as well as elections by the students of their representative in CSD and the evidence of their conduct; All the informations (election calendar, application submitted, the active electorate, the results of elections) are posted on USAMVCN website and are written in rumenian language. The Methodology for conducting elections are described in RU5 in rumenian language. The Council of the Doctoral School of Veterinary Medicine is composed of 3 PhD tutors, 1 PhD student and 1 foreign council member. Therefore the ratio PhD faculty:PhD student is 3:1, which is acceptable.

c) the Methodologies for organizing and conducting doctoral studies (for the admission of doctoral students, for the completion of doctoral studies); The admission criteria are 50% average grade of bachelor's studes and 50% average grade for the 6 years of study. The minimum average is 8,00. Students with average 7,00 are admitted by paying the tuition fee. The cost is quite expensive but no student has complained. All candidates must hold a certificate of English language and B2 is the minium level required. Knowledge of Rumenian languge for international students is not required. All candidates must hold a declaration on their own responsibility that they hadn't had any discpilnary misconduct during the yaers of study. The candidates have to take an interview administered by two or more teachers with expertise in the field and have to propose a research project. The Methodologies for the completion of doctoral studies are indicated in the Doctoral Degree contract. The PhD students are obliged to publish, as first author, at least one article concerning the subject of the doctoral thesis in an international Journal with Impact Factor.

d) the existence of mechanisms for recognizing the status of a Doctoral advisor and the equivalence of the doctoral degree obtained abroad; In the numerous procedures, the procedure number 88 (PO-88) recnognizes the status of doctoral leader and the number 123 (PO-123) recognizes the title of the doctorate obtained abroad. The procedures have been elaborated in according to ISO-EN 9001:2015. The foreign doctorate degree is recognized only if it comes from an accredited Institution of a state member of the European Union included in a special list.

e) functional management structures (Council of the doctoral school), giving as well proof of the regularity of meetings; The CSD shall meet whenever necessary at the request of the Director of the CSD, the CSUD or at least one third of its members. Specific procedures report the duties of the CSD (RU-24 and RU-66) and are posted on the USAMVCN web-site in rumeniam language.

f) **the contract for doctoral studies** lasts 4 years (8 semesters) only for the Doctoral studies in *Veterinary Medicine*. This is higly appreciated by the PhD students. The contract clearly indicates the obligations of IOSUD and of the doctoral school and those of the PhD students. Special condition for an extension as well as for maternity leave, childcare leave, health problems, carrying out an activity

abroad or in another locality for more than 3 months, are provided in the contract. The request for extension / interruption of the doctoral studies formulated by the doctoral student based on "personal reasons" without being able to be included in the phrase "solid reasons" also may be the basis for the



legal interruption of doctoral studies. If the doctoral student fails to complete the thesis within the term established according to the doctoral studies contract and any additional documents, the doctoral student has a maximum grace period. The exceeding of this term automatically is leading to its expulsion.

The doctoral work program is established each academic year, by the doctoral supervisor, in agreement with the doctoral student. It includes the didactic activities, research programming and reporting activities, administrative activities, documentary activities and experimental research, carried out within USAMVCN, in partner institutions or in other research institutions, production or service units, as well as other specific activities (participation in conferences, special conferences). The doctoral student's annual work program is annexed to the study contract and can be modified along the way, with the agreement of the involved parties. This flexibility is higly appreciated by PhD students.

g) internal procedures for the analysis and approval of proposals regarding the training for doctoral study programs based on advanced academic studies.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself During the first semester of the first year the students attend 7 compulsory courses and partecipate in seminars and pratical works. The comupulsory courses are considered very useful by the students for their future doctoral job (as example to write the PhD thesis or a scientific paper, to design a research grant). In the second semester the students partecipate in optional courses offered by IOSUD-USAVMCN. In addition to the individual learning program, the student develop professional competences and soft skills that are very appreciated by te employers, as we found out during the meeting with employers. At the end of the first year the student draw up a questionnaire of satisfaction, which is held in high consideration by the DSVM, and an activity report. This report includes also the Research Project. PhD students submit to IOSUD a request to support the researh project and include the relevant bibliography. After that, the PhD student together with the PhD leader develops the individual training program for the doctoral research stage. A high flexibility is assured. A PhD student can change its PhD leader or its doctoral thesis if it is opportune. The student is followed by its PhD coordinator during the following 3 years. Many research project are conducted in collaboration or in cotutela with other laboratories of the USAVMCN or with other Faculties. PhD students spend period abroad for the avancement of their research project and thesis. The PhD student's knowledge and competences are always considered adequate by the other host facilities.

The questionarie of satisfaction and the Annual Report are analyzed by the Committee for Quality Assessment and Assurance of the Doctoral School (CEACSD) and by CSUD. On the basis of the analysis of these documents, CEACSD formulates proposal to improve the quality of education. All the PhD students are very satisfied of their doctoral study and PhD coordinator (meeting on 3 november 2021). Also the graduate doctorates are satisfied and, during the meeting, they showed enthusiasm in sharing their doctoral experience.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The institutional capacity was well illustrated in the Internal Report and every aspect was well described during the meetings, confirming what is reported in the report. The documents reported in the annexes are precise and detailed, in particular the RU-24, RU-66 and RU-5 even if written only in the Romanian language. The doctoral contract (annex A.1.1.1) is very well detailed and clear and even the PhD students recognize its validity. The QA Commission (CEACSD) analyzes all student satisfaction questionnaires and uses them as a basis for improvement. However, there is an absence of



detailled procedures to address any critical issues (which do not currently exist) and a lack of specific corrective actions. In a quality system this aspect should be taken into consideration.

Recommendations: My recommendations are the following:

- produce on the web-site an English version of the most important procedures such as RU-24, Ru-66 and the Doctoral Contract, especially in order to increase the internationalization of the Doctorate.
- 2) draw up procedures to address any critical issues or non-compliant outputs. It is suggested to include in the procedures guidelines to deal with potential critical issuea and appropriate specific corrective actions, defining the iter for the action, the time frame for resolving critical issues, and the funds to carry out corrective actions and procedures for monitoring these actions.

Anyway, the indicator is fulfilled.

Performance Indicator A.1.1.2.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself The Doctoral School of Veterinary Medicine (SDVM) Regulation (RU-65) estabilishes criteria of PhD leaders acceptance. These criteria concern the scientific production of PhD leaders assessed through a qualification process. Another point of attention is the ability to attract funds through research projects. The SDVM Regulation also provides for methods of managing non-compliant outputs such as the procedures for changing a PhD leader or the conditions in which a doctoral program can be interrupted. Methods of fraud prevention in scientific research and plagiarism are also provided as well as the penalties which would bw applied in such cases. The SDVM Regulation and the Doctoral Contract estabilish the obligations of PhD students in terms of presence and duties and all the other rules of conduct. The PhD student sign this contract and are required to respect it under penalty of expulsion from the program.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The meetings with the academic staff and with the PhD students confirmed what is illustrated in the internal report. Both teachers and students put a lot of enthusiasm in conducting the doctorate program. The human side and the scientific quality of their coordinators are particularly appreciated by the students. Students consider compulsory courses in the first year to be very important for their training, especially those concerning professional ethics.

The indicator is fulfilled

Standard A.1.2.

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff, CSUD Directors and members, and academic staff corresponding to the doctoral study domain were taken into consideration.

Performance Indicator A.1.2.1.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself All the activities of the PhD students, both didactic and research or other activities are monitored through a database system which students can access at any time. In this way all data is stored and available.

analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The procedure is recorded and well documented, respecting privacy.

The indicator is fulfilled



Performance Indicator A.1.2.2.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself Since 2019 USA MCN has been using a computer system called "sistemantiplagiat" which checks the percentage of similarity between the different PhD theses. Furthermore, IOSUD provides for an internal control and monitoring procedure of the SDMV.

analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The procedure is weel documented.

The indicator is fulfilled

Standard A.1.3.

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff, CSUD Directors and members, and academic staff corresponding to the doctoral study domain were taken into consideration.

Performance Indicator A.1.3.1

-description of the facts, the findings from the assessed institution's documents and the evaluation visit itself: As clearly emerged from the interviews with the academic staff, the doctoral supervisors coordinate various types of national and international grants and most of which involve PhD students.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The quality of reasearch is high and it is well documented. The indicator is fulfilled

Performance Indicator *A.1.3.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself In March 2021, 55 PhD students were founded through research projects coordinated by PhD supervisors or from USAVMCN scholarship

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself

The percentage is higher than 20%. *The indicator is fulfilled.*

Performance Indicator *A.1.3.3.1 (

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself Each PhD student receives 2000 Lei (Euro 405,00) a year to participate in national and international congresses or to cover the costs of publishing scientific papers. 50% of the tuition paid by Phd students without a scholarship can be used for the training program and for the purchase of materials useful for the research project

¹ The indicators marked with an asterisk (*) hold a special status, referring exclusively to the evaluation of doctoral studies domains, as per Article 12 from the annex No.1 of the Order of the minister of education No. 3651/12.04.2021 approving the Methodology for evaluating university doctoral studies and the system of criteria, standards and performance indicators used in the evaluation. In case they are not met, the Agency extends a period of maximum 3 years to IOSUD to correct the respective deficiencies.



-analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The procedures were well described during the meeting with PhD leaders and with the Responsibles of laboratory research. The students were quite satisfied with these form of financing. The indicator is fulfilled

Criterion A.2. Research infrastructure

I state that I have not personally visited the facilities as I have made the visit online. I received a series of images from the IOSUD Director. Therefore my description and my analysis is based on the analysis of the internal reports and of the list reported to the Annex 8-List of Institute center laboratories of research and above all on the declarations of the Research Labs Responsibles and PhD students oipinion.

Standard A.2.1.

Performance Indicator A.2.1.1.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself PhD students have 53 laboratories available for their research. In addition PhD students benefit from the partecipation to Intenship Program, having the opportunity to gain also clinical experience in emergency medicine and intensive care.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The quality of the laboratories is high and usage and organization is well planned. The shifts are scheduled so that there is no overlapping of students. An attention to this aspect has been increased since the COVID-19 pandemic. During the lock-down period the researches were stopped for about 2 months and then resumed with the strict observance of specific rules. Several laboratories work in collaboration, in particular for the development of doctoral theses which are often carried out in *co-tutela*. The quality of research performed in these labs is high and some publications resulted from the doctoral theses. Safety and security are held in high regard. The rules are in accordance with current legislation and in addition each laboratory has its own specific rules related to the activity that takes place. Students are informed about safety at the beginning of the doctorate curriculum and thereafter through periodic information meetings. All the procedures are well documented.

The indicator is fulfilled

Criterion A.3. Quality of Human Resources

The analysis was conducted by reading the internal report and the Annexes included. The *curriculum vitae* of the main PhD supervisors and their scientific output of the last 5 years have been examined. During the visit, the opinions of the persons in charge of the research centers and laboratories within the doctoral study domain, the PhD supervisors and especially the students were taken into consideration.

Standard A.3.1.

Performance Indicator A.3.1.1. Minimum three doctoral thesis advisors within that doctoral domain, and at least 50% of them (but no less than three) meet the minimum standards of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNATDCU) in force at the time when the evaluation is carried out, which standards are required and mandatory for obtaining the enabling certification.

Performance Indicator *A.3.1.2



- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself In the Veterinary Medicine doctoral domain there are 19 active doctoral leaders who meet the standard criteria for scientific habilitation and are titleholders of USAVMC.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The analysis of the individual files of the 19 active PhD leaders clearly demonstrates that the scientific quality is high and well above the minimum levels required for scientific qualification. Many of the supervisors have published papers in scientific journals with a high impact factor. They have also developed patents for inventions and have won national and international awards. This is very important for the research-based training of the students who receive very positive examples and are always stimulated to do their work rigorously based on quality and on scientific principles.

The indicators are fulfilled

Performance Indicator A.3.1.3.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself. The study subjects of the education program are all taught by teachers with scientific habilitation. Non-specific veterinary topics such as Ethics are taught by appropriate teachers.
 analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself. It was not reported how teachers can implement the quality of teaching beyond scientific

competences.

Recommendations: Workshops, seminars, online and blended courses could allow teachers to update themselves on methodologies and tools capable of activating processes for continuous improvement of teaching and on the development of specific didactic-organizational skills.

The indicator is fulfilled

Performance Indicator *A.3.1.4.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself In March 2021 (time of reporting) 6 doctoral supervisors (28,5%) coordinated more than 8 PhD students.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The percentage of doctoral supervisors coordinating more than 8 PhD students but less than 12, is higher than 20%.

Recommendations: in my opinion this is a very minimal critical issue. It is suggested to increase the number od doctoral supervisors.

Anyway, in my opinion The indicator is fulfilled.

Standard A.3.2.

Performance Indicator A.3.2.1.

- description and analyisis of the facts, the findings from the assessed institution's documents and the evaluation visit itself As stated in point A.3.1.2., the analysis of the individual files of the 19 active PhD leaders clearly demonstrates that the scientific quality is high and well above the minimum levels required for scientific qualification. Many of them do have publications in scientific journals with a high impact factor. They have also developed patents for inventions and won national and international awards.

The indicator is fulfilled



Performance Indicator *A.3.2.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself 76% of PhD leaders are very active in the scientific community and have publications in scientific journals with a high impact factor.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The analysis of Annex A.3.2.2.2.a and A.3.2.2.b confirmed the high quality of PhD leaders scientific profile.

The indicator is fulfilled

Domain B. EDUCATIONAL EFFECTIVENESS

Criterion B.1. The number, quality and diversity of candidates enrolled for the admission contest

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff, CSUD Directors and members, and academic staff corresponding to the doctoral study domain were taken into consideration.

Standard B.1.1.

Performance Indicator *B.1.1.1.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself. The number of registered PhD students has been constantly increasing from 2015/16 academic year. The number of candidates enrolled is higher than the number of places financied by the state budget, so that the surplus students admitted are paying tuition. In 2019/20 academic year 2 graduated candidates are coming from the Faculty of Medicine and Pharmacy, Faculty of Biology and Geology of Cluj Napioca University. No students come from abroad, which is a negative point; internationalisation is highly recommended.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself A Doctoral School wishing to achieve an international qualification must necessarily implement its attractiveness in the international field. Both CSUD and DSVM must necessarily implement changes aimed at improving the internationalization of the Doctorate.

Recommendations: English language part of the website should be implemented. The main organizational procedures (RU66, RU24) and above all the doctoral contract should be translated and published on the website. Advertising for the PhD curriculum should be increased and extended to social media.

The indicator is however fulfilled

Standard B.1.2

Performance Indicator *B.1.2.1.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself. The admission criteria are 50% average grade of bachelor's studes and 50% average grade for the 6 years of study. The minimum average is 8,00. Students with average 7,00 are admitted by paying the tuition fee. The tuition is quite expensive but no student has complained about this. All candidates must hold a certificate of English language and B2 is the minium level required.



Knowledge of Rumenian languge for international students is not required. All candidates must hold a autodeclaration that they hadn't any discpilnary misconduct during the yaers of study. The candidates have to take an interview by two or more teachers with expertise in the field and to propose a research project.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The procedure (RU45) are published on website and are clear. Both PhD leaders and PhD students are satisfied with the admission criteria.

The indicator is fulfilled

Performance Indicator B.1.2.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself 18 Phd students abandoned their doctoral studies in thre last five years. The expelling percentage decreased progressively from 2015/16 (20%) to 2018/2019 (6,66%). No student dropped out in 2109/20.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself the rate of expulsions or withdrawals has never exceeded 30% and decreased over the years, demonstrating an increase in the quality of the doctorate curriculum.

The indicator is fulfilled

Criterion B.2. The content of doctoral programs

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff, CSUD Directors and members, academic staff corresponding to the doctoral study domain, the PhD student and the employers were taken into consideration *Standard B.2.1.*

During the first semester of the first year the PhD students attend 7 compulsory courses and partecipate in seminars and pratical work. The comupulsory courses are considered very useful by the students for their future doctoral job (in example Methodology of development of doctoral thesis or Methodology of a scientific works, oral presentation and posters, Design and management of research grants). In the second semester the students partecipate in optional courses offered by IOSUD-USAVMCN. In addition to the individual learning program, the students develop professional competencies and soft skills.

Performance Indicator B.2.1.1. The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to stud, in-depth the research methodology and/or the statistical data processing.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself Between the 7 compulsory topics "Principles of methodologies of veterinary medical research". This topic provides a good theoretical knowledge of research methodology which is deepened with practical training. The course provides also knowledge of statistics. All the courses, except that of Ethics and Academic Integrity, are supported by the doctoral supervisors from the SDVM.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The PhD students and graduate doctoral students are very satisfied with all topics. They believe that the knowledge and skills provided to them are adequate. During the periods spent in other laboratories or foreign facilities, their preparation proved to be up to the level of the host structures. Also the employers are satisfied with the doctoral graduade's scientific quality and their soft skills.



Recommendations: even if the satisfaction levels of students, doctoral graduates and employers are high, the quality of the doctorate could be improved with advanced courses for teachers focusing on to new teaching methods.

Anyway, the indicator is fulfilled

Performance Indicator B.2.1.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself Beetween the first year mandatory courses, PhD students attend to a discipline of Ethics and Academic Integrity; during the 2nd semster of the first year PhD student partecipate in a course regading the legal aspect of ethics composed of theoretical lessons and seminars.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The part of the training dedicated to ethics is satisfactory. Furthermore, the ethics committee of USAMVC is careful to supervise all activities, especially those concerning clinical research on animals and the use of tissue samples taken during surgery or necropsies.

From meeting with employers it appears that graduate doctorate students are well aware of the ethical rules and constantly apply them.

The indicator is fulfilled

Performance Indicator B.2.1.3.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself In addition to disciplinary knowledge in the various fields of veterinary medicine, PhD students acquire skills to communicate and work independently and in a team. They are able to use computer software, have competence in statistics and they know how to conduct research experiments and interpret the results.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The PhD students are satisfied with their preparation and say that they are well acquainted with the laboratory methods they use. During their stages abroad they had no problem working in different laboratories or research centers. Employers are also very satisfied with graduate doctoral students who work in their companies. They especially appreciate the soft skills that graduates possess and only recommend to more strongly embrace the concept of "volunteer job".

The indicator is fulfilled

Performance Indicator B.2.1.4.

Performance Indicator B.2.1.5.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself During the 4 years of doctoral studies, PhD students are assisted by a guidance committee composed by teachers of USAMCN and also professors working in the Faculties. Each student is assisted by three members of these committees who counsel him/her through regular meetings. The ratio teaching staff /PhD student is 2,51.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The acitivty of the Guidance Committee is in synergy with the PhD supervisor and constitutes an added value for the student's welfare.

The indicators are fulfilled.



Criterion B.3. The results of doctoral studies and procedures for their evaluation.

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of academic staff corresponding to the doctoral study domain were taken into consideration.

Standard B.3.1.

Phd students use part of the scholarship and above all part of funds from research projects to participate in national and international conferences. Many publications of Phd supervisors derive from doctoral theses.

Performance Indicator B.3.1.1.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself. The external evaluator has chosen the following 5 publications contained in Annex B.3.1.1. of these, numbers 3 and 4 deal with interesting and current topics in the field of parasitology and parasitic diseases and are published in journals with a high impact factor. Issue 2 investigates an oncologic pathway for ovine lung adenocarcinoma.

- 1. VASIU, I;DABROWSKI, R;MARTINEZ-SUBIELA, ;CERON, JJ;WDOWIAK, A;POP, RA;BRUDASCA, FG;PASTOR, J;TVARIJONAVICIUTE, 2017, A, Milk C-reactive protein in canine mastitis, VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, 186, 41-44, DOI: 10.1016/j.vetimm.2017.02.005.IF-1.62
- TOMA CORINA, R. POPA, L. CIOBANU, B. SEVASTRE, V. BÂLTEANU, C. CĂTOI, M. TAULESCU, 2020. The IL-6-STAT3 Signalling Pathway: A Potential Role in Pathogenesis of Ovine Pulmonary Adenocarcinoma. Journal of Comparative Pathology, 174:150 4.
- KALMÁR Z., COZMA V.,SPRONG H., JAHFARI S., D'AMICO G., MĂRCUŢAN D.I., IONICĂ A.M., MAGDAŞ C., MODRÝ D.,MIHALCA A.D., 2015, Transstadial transmission of Borrelia turcica in Hyalomma aegyptium ticks. PLoS One. 2015 Feb 19;10(2):e0115520. IF = 3.53
- MĂRCUŢAN I.D., SÁNDOR A.D., MIHALCA A.D., GHERMAN C.M., KALMÁR Z., D'AMICO G., DUMITRACHE M.O., ANDCOZMAV., 2014, Prevalence of Anaplasma phagocytophilum in ticks collected from migratory birds in Danube Delta, Romania. Parasit&Vectors. 2014; 7(Suppl 1): P16. IF = 3.43
- 5. KALMÁR Z., MIHALCA A.D., DUMITRACHE M.O., GHERMAN C.M., MAGDAŞ C., MIRCEAN V., OLTEAN M., DOMŞA C.,MATEI I.A., MĂRCUŢAND.I., SÁNDOR A.D., D'AMICO G., PAŞTIU A., GYÖRKE A., GAVREA R., MAROSI B., IONICĂ A., BURKHARDT E., TORIAY H., COZMA V., 2013, Geographical distribution and prevalence of Borrelia burgdorferi genospecies in questing Ixodes ricinus from Romania: a countrywide study. Ticks Tick Borne Dis. 2013 Sep;4 (5):403-8 IF = 2.71

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself Most of the publications listed in the annex B.3.1.1 are published in national journals and some without impact factor.

Recommendations: For the purposes of a greater international relevance of the doctorate PhD students should be encouraged to publish in international scientific journals *Anyway, the indicator is fulfilled*

Performance Indicator *B.3.1.2.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself As resulted from the Annex B.3.1.2 the ratio between congress presentations in the last 5 years and doctoral theses and doctoral student graduated in the same period of time is >1.
 analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself As resulted from the Assessed institution is documents and the evaluation visit itself As resulted from the Assessed institution is documents and the evaluation

visit itself As resulted from the Annex B.3.1.2 most of presentation, including posters presentation, were performed in National Meeting.



Recommendations: For the purposes of a greater international recognition of the doctoral studies, the partecipation of PhD students in international meetings shoul be organised and/or increased. **Anyway, the indicator is fulfilled**

Standard B.3.2.

The internal report and the Annexes B.3.2.1 and B.3.2.2. were taken into consideration.

Performance Indicator *B.3.2.1.

Performance Indicator *B.3.2.2.

- description and analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself From what is reported in the annexes, the indicators are respected. The indicators are fulfilled

Domain C. QUALITY MANAGEMENT

In USAMVCN is present a Department for Quality Assurance, Information and Image (DAC). Since 2015, DAC has implemeted a the Integrated Quality Management System Manuals according to the current legistation. IN 2018 this system was certified according to ISO EN 9001:2015. Actually the Manual includes 8 system procedures and 125 operational guidelines. A Commission for Quality Assessment and Assurance (CEAC) coordiinates the correct application of all procedures and activities and formulates proposals to improve the quality. At the level of Docotoral Studies, the QA Commission (CEACSD) has provided a specific procedure (PO-125) on evaluation and internal monitoring of all activities. PO-125 does not provide procedures to address any critical issues (which currently do not exist) with specific corrective actions. In a quality-based system, this aspect should be taken into consideration.

Criterion C.1. Existence and periodic implementation of the internal quality assurance system

The Internal Evaluation Report, the P0-125 and the meeting with academic staff, IOSUD and CSUD members, Ethic Committee were taken into consideration.

Standard C.1.1.

Performance Indicator C.1.1.1.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself All the procedures are described in PO-125.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself During the meetings with CSUD Director and Members, with PhD leaders and the academic staff, the QA topic was addressed and discussed several times. All procedures have been well described and it became clear that they are being applied. The management of the pandemic, which can be considered a non-compliant out put, was also well managed, ensuring that PhD students could carry out their thesis work with little delay compared to expected time frame.

The indicator is fulfilled

Performance Indicator *C.1.1.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself At the end of the first year, the students draw up a questionnaire of satisfaction, which is being taken strongly into consideration by the DSVM. In addition, PhD Students provide their opinions to Phd leaders and to the Guidance Committee



- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The quality assurance manual produced by CEACSD is beeing implemented since 2015 and currently numerous procedures are continously and correctly complied with. The overall level of satisfaction of the PhD students regarding the doctoral study program is seen as a confirmation for the QA improvement.

The indicator is fulfilled

Criterion C.2. Transparency of information and accessibility of learning resources

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff, CSUD Directors and members, academic staff and PhD students corresponding to the doctoral study domain were taken into consideration.

Standard C.2.1.

Performance Indicator C.2.1.1.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself All information and data are published on the USAMVCN webpage and the Doctoral School's webpage. The Information and Istitutional Trasparency Centre gives access to the all the information of public interest.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation *visit itself* Most of the informations are written only in Romanian language.

Recommendations: I advice to implement the translation into English of the SDVM web-sit, especially the most relevant pocedures.

The indicator is however fulfilled.

Standard C.2.2.

Performance Indicator C.2.2.1.

Performance Indicator C.2.2.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself All the PhD students have free access to information by Internet for 24h/d. In USAMVCN an Informantion Center provides the mechanism for the implementation of ICT facilities to increase the efficiency in the research job and in writing docotoral theses. PhD students in Veterinary Medicine have direct access also to database Triage, Emergency and Intensive Care Service in the Emergency Hospital of the Faculty of Veterinary Medicine. In addition, PhD students have free access to the electronic system "sistemantiplagiat" (www.antiplagiat.ro) for veryfing any degree of similarity with existing scientific publications.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself the constant possibility of accessing databases is a resource of primary importance for those who write a scientific work, as it constitutes a fast source of world-wide information. This is certainly an added value to the work of PhD students.

The indicators are fulfilled

Performance Indicator C.2.2.3.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself PhD students have access to laboratories according to the Regulation of the



Institute of Life Sciences (ISV). In addition PhD students in Veterinary Medicine have also access to the structures of the Emergency Hospital of Faculty of Veterinary Medicine.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The PhD Students, graduate doctorates and Laboratory Responsibles confirmed the access possibility during the meetings. The PhD students affirm that quality of the laboratories is high and the organization is well planned.

The indicator is fulfilled

Criterion C.3. Internationalization

The analysis was conducted by reading the internal report and the Annexes included. During the visit, the opinions of IOSUD academic Staff, CSUD Directors and members, academic staff and PhD students corresponding to the doctoral study domain were taken into consideration.

Standard C.3.1.

As reported in the Internal Report, IOSUD and IUSMVCN are part of EUA working group for doctorates and partecipate in the Erasmus+ and AUF programs. During the last years, the internationalization has been improved by partecipation in international working groups, profiling itself as organisator of a thematic international workshop on Doctoral Education Future, and of summer school for PhD students and post-doctoral fellows.

Performance Indicator *C.3.1.1.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself USAMVCN has signed an international agreement with 38 Universities abroad and encourages the mobility of PhD students and teachers. 8 PhD (25%) students benefited of Erasmus Internship. 48 PhD students parteciptaed in training courses, conference and other types research internship (EFSA, COST).

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The efforts to implement internationalization are many and are appreciable. Judging the number of participations in international congresses by PhD students during the period 2015/2020 (annex B.3.1.2) this is still scarce, even though all intervisted students had spent a period abroad to work on their thesis.

Recommendations: considering the enthusiasm of the students, it is strongly recommended to implement mobility abroad as much as possible, also by requesting more funds from the Ministry and encouraging participating in a greater number of international projects.

Performance Indicator C.3.1.2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself As reported in the Internal Report and in the annex C.3.1.2 15 teachers from EU countries were invited to give lectures to PhD students. 5 of 71 (7,1%) theses were written in English. The financial support comes from the Institutions and from research projects.

- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The efforts to implement internationalization are many and are appreciable. However a stronger implementation of this feature is necessary.

Recommendations: it is strongly recommended to implement internazionalization as much as possible, also by requesting more funds.



The indicator is however fulfilled

Performance Indicator C.3.1.3.

description of the facts, the findings from the assessed institution's documents and the evaluation visit itself USAMVCN partecipated in several international exhibitions to promote the Doctoral School training program.

-analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself The efforts to implement internationalisation are many and are appreciable. However a stronger implementation of this feature is necessary.

Recommendations: it is strongly recommended to implement internazionalisation as much as possible. *The indicator is however fulfilled*

IV. SWOT Analysis

| Strengths: | <u>Weaknesses:</u> |
|--|---|
| - The doctoral studies evaluated have numerous | The doctoral studies do not have strong |
| strengths. The first of these is represented by the | weaknesses such as to constitute deficiencies. |
| PhD students, who are enthusiastic and really | However, a weakness is present due to the |
| content to have been enrolled in this training, | internationalization of the doctorate program |
| and by the graduate doctorates who currently | which is still too limited even though strategies |
| work in public and private companies with | and procedures have been put in place to |
| satisfaction from the employers. The second | improve. |
| strong point is the organization of the doctoral | |
| studies which is carried out in observation of | |
| quality assurance systems. The 4-year training | |
| curriculum, unique in the Doctorate in Veterinary | |
| Medicine, allows a good theoretical and practical | |
| preparation and the acquisition of soft skills | |
| important for research work and for writing the | |
| doctoral thesis. The research infrastructures are | |
| of a high quality, modern and well organized. | |
| The scientific quality of the academic staff is high | |
| and the human side is also highly appreciated by | |
| the students. | |
| | |
| Opportunities: | <u>Threats:</u> |
| The opportunities are given by a favorable | - The still limited internationalization is the |
| environment in which the various representatives | consequence of a quite scarce information of the |
| of the system work in harmony for a single | doctoral studies program in the European |
| purpose: that of providing a quality product. In | Faculties of Veterinary Medicine. This could be |
| this case, the product is the PhD student who | due: a) to a still limited participation of PhD |
| becomes a professional suitable for the demands | students in the European congresses of the |
| of the job merkat and appreciated for his/her | various specializations of veterinary medicine |



| • | |
|--|--|
| scientific, ethical and deontological qualities. The | and to a still limited presence of scientific |
| success of the training program represents an | publications in international journals by PhD |
| opportunity for the academic staff of the | students. b) to a low publicity of the doctoral |
| Doctoral School and for USAMCN who shall | studies program on social media and on the |
| have the opportunity to have access to more | USAMVCN website where most of the quality |
| substantial funding. This would allow a | procedures including the doctoral contract are |
| continuous improvement of the infrastructures, of | published in Romanian language. An increasing |
| the quality of the research and of the scientific | of funding is needed for the implementation of |
| productions. | these strategies and the lack could represent an |
| The improvement of internationalization | external threat. Last two years, COVID 19 |
| represents another important opportunity: to | pandemy has represented the strongest threat |
| enroll PhD students from other EU and non- | as it has limited or completely prevented the |
| European countries. This would increase the | possibility of movement within and outside |
| visibility of the training program, an increase in | Europe. However, the strategies and efforts by |
| the quality of research and the prestige of PhD | IOSUD, CSUD and the entire academic staff to |
| supervisors and the University of Agricultural | improve internationalization of the PhD program |
| Sciences and Veterinary Medicine of Cluj | are highly appreciated. Quality certification is |
| Napioca. | undoubtedly an important step to this goal. |
| | |
| | |
| 1 | |

V. Overview of judgments awarded and of the recommendations

| No. | Type of indicator (PI, PI *, CPI) | Performance indicator | Judgment | Recommendations |
|-----|--|--|-------------------------|---|
| 1. | PI | A.1.1.1. The existence of specific regulations and their application at the level of the Doctoral School of the respective university doctoral study domain: a) the internal regulations of the Doctoral School; b) the Methodology for conducting elections for the position of director of the Council of doctoral school (CSD), as well as elections by the students of their representative in CSD and the evidence of their conduct; c) the Methodologies for organizing and conducting doctoral studies (for the admission of doctoral studies); d) the existence of mechanisms for recognizing the status of a Doctoral advisor | Indicator is fullfilled | produce on the web-site an English version of the most important procedures such as RU-24, Ru-66 and the Doctoral Contract, especially in order to increase the internationalization of the Doctorate. draw up procedures to address any critical issues or non-compliant outputs. It is suggested to include in the procedures guidelines to deal with potential critical issuea and appropriate specific corrective actions, defining the iter for the action, the time frame for resolving critical issues, and the |



| No. | Type of | Performance indicator | Judgment | Recommendations |
|-----|---------------------------------|--|-------------------------|--|
| | indicator (PI, PI *, CPI) | | | |
| | | and the equivalence of the doctoral degree obtained abroad; e) functional management structures (Council of the doctoral school), giving as well proof of the regularity of meetings; f) the contract for doctoral studies; g) internal procedures for the analysis and approval of proposals regarding the training for doctoral study programs based on advanced academic studies. | | funds to carry out corrective actions and procedures for monitoring these actions. |
| 2. | PI | A.1.1.2. The doctoral school' Regulation includes mandatory criteria, procedures and standards binding on the aspects specified in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions. | Indicator is fullfilled | |
| 3. | PI | A.1.2.1. The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic background. | Indicator is fullfilled | |
| 4. | PI | A.1.2.2. The existence and use of an appropriate software program and evidence of its use to verify the percentage of similarity in all doctoral theses. | Indicator is fullfilled | |
| 5. | IP | A.1.3.1. Existence of at least one research or institutional / human resources development grant under implementation at the time of submission of the internal evaluation file, per doctoral study domain under evaluation, or existence of at least 2 research or institutional development / human resources grant for the doctoral study domain, obtained by doctoral thesis advisors operating in the evaluated domain within the past 5 years. The grants address relevant themes for the respective domain and, as a rule, are engaging doctoral students. | Indicator is fullfilled | |
| 6. | PI * | A.1.3.2. The percentage of doctoral students active at the time of the evaluation, who for at least six months receive additional funding sources besides government funding, through scholarships awarded by individual persons or by legal entities, or who are financially supported through research or institutional / | Indicator is fullfilled | |



| No. | Type of indicator | Performance indicator | Judgment | Recommendations |
|-----|----------------------|--|-------------------------|---|
| | (PI, PI *, CPI) | | | |
| | | human resources development grants is not less than 20%. | | |
| 7. | PI * | A.1.3.3. At least 10% of the total amount of doctoral grants obtained by the university through institutional contracts and of tuition fees collected from the doctoral students enrolled in the paid tuition system is used to reimburse professional training expenses of doctoral students (attending conferences, summer schools, training, programs abroad, publication of specialty papers or other specific forms of dissemination etc.). | Indicator is fullfilled | |
| 8. | CPI | A.2.1.1. The venues and the material equipment available to the doctoral school enable the research activities in the evaluated domain to be carried out, in line with the assumed mission and objectives (computers, specific software, equipment, laboratory equipment, library, access to international databases etc.). The research infrastructure and the provision of research services are presented to the public through a specific platform. The research infrastructure described above, which was purchased and developed within the past 5 years will be presented distinctly | Indicator is fullfilled | |
| 9. | CPI | A.3.1.1. Minimum three doctoral thesis advisors within that doctoral domain, and at least 50% of them (but no less than three) meet the minimum standards of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNATDCU) in force at the time when the evaluation is carried out, which standards are required and mandatory for obtaining the enabling certification. | Indicator is fullfilled | |
| 10. | PI * | A.3.1.2. At least 50% of all doctoral advisors have a full-time employment contract for an indefinite period with the IOSUD. | Indicator is fullfilled | |
| 11. | PI | A.3.1.3. The study subjects in the education program based on advanced higher education studies pertaining to the doctoral domain are taught by teaching staff or researchers who are doctoral thesis advisors / certified doctoral | Indicator is fullfilled | Workshops, seminars, online and blended courses could allow teachers to update themselves on methodologies and tools capable of activating processes for continuous improvement of |



| No. | Type of | Performance indicator | Judgment | Recommendations |
|-----|---------------------------------|---|-------------------------|---|
| | indicator (PI, PI *, CPI) | | | |
| | | thesis advisors, professors / CS I or lecturer / CS II, with proved expertise in the field of the study subjects they teach, or other specialists in the field who meet the standards established by the institution in relation with the aforementioned teaching and research functions, as provided by the law. | | teaching and on the development of specific didactic- organizational skills. |
| 12. | PI * | A.3.1.4. The percentage of doctoral thesis advisors who concomitantly coordinate more than 8 doctoral students, but no more than 12, who are themselves studying in doctoral programs does not exceed 20%. | Indicator is fullfilled | It is suggested to increase the numebr od doctoral supervisors. |
| 13. | CPI | A.3.2.1. At least 50% of the doctoral thesis advisors in the evaluated domain have at least 5 Web of Science- or ERIH-indexed publications in magazines of impact, or other achievements of relevant significance for that domain, including international-level contributions that indicate progress in scientific research - development - innovation for the evaluated domain. The aforementioned doctoral thesis advisors enjoy international awareness within the past five years, consisting of: membership on scientific boards of international publications and conferences; membership on boards of international professional associations; guests in conferences or expert groups working abroad, or membership on doctoral defense commissions at universities abroad or co- leading with universities abroad. For Arts and Sports and Physical Education Sciences, doctoral thesis advisors shall prove their international visibility within the past five years by their membership on the boards of professional associations, membership in organizing committees of arts events and international competitions, membership on juries or umpire teams in artistic events or international competitions. | Indicator is fullfilled | |
| 14. | PI * | A.3.2.2. At least 50% of the doctoral thesis advisors in a specific doctoral study domain continue to be active in their scientific field, and acquire at least 25% of the score requested by the minimal CNATDCU standards in force at the time of the | Indicator is fullfilled | |



| No. | Type of | Performance indicator | Judgment | Recommendations |
|------|---------------------------------|--|-------------------------|--|
| 110. | indicator (PI, PI *, CPI) | | oudginent | Recommendations |
| | | evaluation, which are required and mandatory for acquiring their enabling certificate, based on their scientific results within the past five years | | |
| 15. | PI * | B.1.1.1. The ratio between the number of graduates of masters' programs of other higher education institutions, national or foreign, who have enrolled for the doctoral admission contest within the past five years and the number of seats funded by the state budget, put out through contest within the doctoral domain is at least 0.2 or the ratio between the number of candidates within the past five years and the number of seats funded by the state state budget, put out through contest within the doctoral domain is at least 0.2 or the ratio between the number of candidates within the past five years and the number of seats funded by the state budget put out through contest within the doctoral studies domain is at least 1,2. | Indicator is fullfilled | English language part of the website should be implemented. The main organizational procedures (RU66, RU24) and above all the doctoral contract should be translated and published on the website. Advertising for the PhD curriculum should be increased and extended to social media. |
| 16. | PI * | B.1.2.1. Admission to doctoral study programs is based on selection criteria including: previous academic, research and professional performance, their interest for scientific or arts/sports research, publications in the domain and a proposal for a research subject. Interviewing the candidate is compulsory, as part of the admission procedure. | Indicator is fullfilled | |
| 17. | PI | B.1.2.2. The expelling rate, including renouncement / dropping out of doctoral students 3, respectively 4, years after admission does not exceed 30%. | Indicator is fullfilled | |
| 18. | PI | B.2.1.1. The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing. | Indicator is fullfilled | The quality of the doctorate could be improved with advanced courses for teachers dedicated to new teaching methods. |
| 19. | PI | B.2.1.2. At least one discipline is dedicated to Ethics and Intellectual Property in scientific research or there are well-defined topics on these subjects within a discipline taught in the doctoral program. | Indicator is fullfilled | |
| 20. | PI | B.2.1.3. The IOSUD has mechanisms to ensure that the academic training program | Indicator is fullfilled | |



| No. | Type of indicator (PI, PI *, CPI) | Performance indicator | Judgment | Recommendations |
|-----|--|--|-------------------------|--|
| | | based on advanced university studies addresses "the learning outcomes", specifying the knowledge, skills, responsibility and autonomy that doctoral students should acquire after completing each discipline or through the research activities. | | |
| 21. | PI | B.2.1.4. All along the duration of the doctoral training, doctoral students in the domain receive counselling/guidance from functional guidance commissions, which is reflected in written guidance and feedback or regular meeting. | Indicator is fullfilled | |
| 22. | СРІ | B.2.1.5 . For a doctoral study domain, the ratio between the number of doctoral students and the number of teaching staff/researchers providing doctoral guidance must not exceed 3:1. | Indicator is fullfilled | |
| 23. | CPI | B.3.1.1. For the evaluated domain, the evaluation commission will be provided with at least one paper or some other relevant contribution per doctoral student who has obtained a doctor's title within the past 5 years. From this list, the members of the evaluation commission shall randomly select 5 such papers / relevant contributions per doctoral study domain for review. At least 3 selected papers must contain significant original contributions in the respective domain | Indicator is fullfilled | For the purposes of a greater international relevance of the doctorate PhD students should be encouraged to publish in international scientific journals |
| 24. | PI * | B.3.1.2. The ratio between the number of presentations of doctoral students who completed their doctoral studies within the evaluated period (past 5 years), including posters, exhibitions made at prestigious international events (organized in the country or abroad) and the number of doctoral students who have completed their doctoral studies within the evaluated period (past 5 years) is at least 1. | Indicator is fullfilled | For the purposes of a greater international relevance of the doctoral studies, the partecipation to international meeting shoul be improved. |
| 25. | PI * | B.3.2.1. The number of doctoral theses allocated to one specialist coming from a higher education institution, other than the evaluated IOSUD should not exceed two (2) in a year for the theses coordinated by the same doctoral thesis advisor. | Indicator is fullfilled | |



| No. | Type of indicator (PI, PI *, CPI) | Performance indicator | Judgment | Recommendations |
|-----|--|--|-------------------------|-----------------|
| 26. | PI * | B.3.2.2. The ratio between the doctoral theses allocated to one scientific specialist coming from a higher education institution, other than the institution where the defense on the doctoral thesis is organized, and the number of doctoral theses presented in the same doctoral study domain in the doctoral school should not exceed 0.3, considering the past five years. Only those doctoral study domains in which minimum ten doctoral theses have been presented within the past five years should be analyzed. | Indicator is fullfilled | |
| 27. | PI | C.1.1.1. The Doctoral school in the respective university study domain shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the IOSUD, the following assessed criteria being mandatory: a) the scientific work of Doctoral advisors; b) the infrastructure and logistics necessary to carry out the research activity; c) the procedures and subsequent rules based on which doctoral studies are organized; d) the scientific activity of doctoral students; e) the training program based on advanced academic studies of doctoral students; f) social and academic services (including for participation at different events, publishing papers etc.) and counselling made available to doctoral students. | Indicator is fullfilled | |
| 28. | PI * | C.1.1.2. Mechanisms are implemented during the stage of the doctoral study program to enable feedback from doctoral students allowing to identify their needs, as well as their overall level of satisfaction with the doctoral study program in order to ensure continuous improvement of the academic and administrative processes. Following the analysis of the results, there is evidence that an action plan was drafted and implemented. | Indicator is fullfilled | |
| 29. | СРІ | C.2.1.1. The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection, information such as: | Indicator is fullfilled | |



| No. | Type of | Performance indicator | Judgment | Recommendations |
|-----|-------------------------|--|-------------------------|---|
| | indicator (PI, PI *, | | | |
| | CPI) | | | |
| | | a) the Doctoral School regulation; | | |
| | | b) the admission regulation;c) the doctoral studies contract; | | |
| | | d) the study completion regulation including | | |
| | | the procedure for the public presentation of | | |
| | | the thesis; | | |
| | | e) the content of training program based on advanced academic studies; | | |
| | | f) the academic and scientific profile, thematic | | |
| | | areas/research themes of the Doctoral | | |
| | | advisors within the domain, as well as their | | |
| | | institutional contact data; | | |
| | | g) the list of doctoral students within the domain with necessary information (year of | | |
| | | registration; advisor); | | |
| | | h) information on the standards for developing | | |
| | | the doctoral thesis; | | |
| | | i) links to the doctoral theses' summaries to be publicly presented and the date, time, place | | |
| | | where they will be presented; this information | | |
| | | will be communicated at least twenty days | | |
| | | before the presentation. | | |
| 30. | PI | C.2.2.1. All doctoral students have free access | Indicator is fullfilled | |
| | | to one platform providing academic databases | | |
| | | relevant to the doctoral studies domain of their thesis. | | |
| | | | | |
| 31. | PI | C.2.2.2. Each doctoral student shall have | Indicator is fullfilled | |
| | | access, upon request, to an electronic system for verifying the degree of similarity with other | | |
| | | existing scientific or artistic works. | | |
| 20 | וח | | Indianter in fullfilled | |
| 32. | PI | C.2.2.3. All doctoral students have access to scientific research laboratories or other | Indicator is fullfilled | |
| | | facilities depending on the specific | | |
| | | domain/domains within the Doctoral School, | | |
| | | according to internal order procedures. | | it is strongly recommended to |
| 33. | PI * | C.3.1.1. IOSUD, for every evaluated domain, | Indicator is fullfilled | it is strongly recommended to implement mobility abroad as |
| | | has concluded mobility agreements with | | much as possible, also by |
| | | universities abroad, with research institutes, | | requesting more funds from the |
| | | with companies working in the field of study, aimed at the mobility of doctoral students and | | ministry and participating in a |
| | | aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements | | greater number of international projects. |
| | | for the doctoral studies). At least 35% of the | | p. 0j00t0. |
| | | doctoral students have completed a training | | |
| | | course abroad or other mobility forms such as | | |
| | | attending international scientific conferences. | | |



| No. | Type of indicator (PI, PI *, CPI) | Performance indicator | Judgment | Recommendations |
|-----|--|---|-------------------------|---|
| | | IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating at mobility periods abroad, up to at least 20%, which is the target at the level of the European Higher Education Area. | | |
| 34. | PI | C.3.1.2. In the evaluated doctoral study domain, support is granted, including financial support, to the organization of doctoral studies in international co-tutelage or invitation of leading experts to deliver courses/lectures for doctoral students. | Indicator is fullfilled | it is strongly recommended to implement internazionalization as much as possible, also by requesting more funds. |
| 35. | PI | C.3.1.3. The internationalization of activities carried out during the doctoral studies is supported by IOSUD through concrete measures (e.g., by participating in educational fairs to attract international doctoral students; by including international experts in guidance committees or doctoral committees etc.). | Indicator is fullfilled | it is strongly recommended to implement internazionalization as much as possible |

VI. Conclusions and general recommendations

The evaluation of post-graduate Doctoral studies (PhD) in Veterinary Medicine at the University of Agricultural Science and Veterinary Medicine (USAVM) Cluj Napioca was realized from 1 to 5 November 2021 in hybrid modality: through on-line meetings performed on Zoom platform from 1 to 3 November 2021. Face-to-face working meetings restricted to romanian on-site visitors, evaluating the educational and research infrastructures were performed on the 4th of November. The evaluation took in account the period 2015-2020. The Expert member Committee was composed of Prof. Romeo Cristina from the Faculty of Veterinary Medicine of Timisoara (Rumenia) as Coordinator, Dr.Sergiu Aulei from Timisoara as Doctorate graduate in UAMVCN and Prof. Brunella Restucci from the Department of Veterinary Medicine and Animal Production of Naples (Italy), as international evaluator.

The Doctoral School of Veterinary Medicine (DSVM) is an intra-institutional structure of USAVM Cluj-Napioca and functions as an independent entity. The doctoral studies in Veterinary Medicine are well organized and are in full compliance with current legislation.

The mission and strategic objectives of the program are well defined and applied. The goal of transmitting to PhD students not only indepth knowledge in their field of specialisation but also in the various other fields of Veterinary Medicine to form cross-discipline competences, and, not in the least, the concept of ethics and academic and professional integrity is an integral part of formation and was particularly appreciated during the evaluation.

The institutional capacity is high and guarantees excellent system management. IOSUD and CSUD work in good harmony and the overall quality is of high standards.



Funding is adequate. USMVCN has its own budget based on revenue and expenditure, which comes from the Ministry of National Education but additional funds come from national and international research projects of which 4 PhD supervisors are coordinators. Funds are used to support the teaching process, for material expenses related to research activity carried out by PhD strudents and for the professional training expenses.

Each phase of the PhD program is governed by well-defined procedures, all aimed at ensuring compliance with quality standards. PhD supervisors are assessed annually with scientific quality criteria. This quality standards are enhanced also by the fact that all PhD supervisors are in possession of the scientific qualification.

IOSUD and CSUD should provide for enhancement of teaching quality by an increased use of new teaching methods (for example, new specific software for supplementary teaching theoretical lessons). The quality of PhD students is constantly evaluated to ensure a continuous and progressive improvement, from the admission criteria to the final defense of the thesis. PhD students sign a doctoral contract in which all duties and obligations are clearly indicated, including the obligation to publish as first author, at least one article concerning the subject of the doctoral thesis in an international scientific journal with Impact Factor. PhD students have free access to the laboratories and centers of research. They also benefit from access to the Emergency Hospital of the Faculty of Veterinary Medicine. They have free access to bibliographic databases for their researches.

The PhD students welfare is well organized and held in high regard. In addition to the support by their supervisors, the Guidance Committee (3 members) assists PhD students through regularly scheduled meetings. The doctoral study and training program, which lasts 4 years, includes a first year of theoretical lessons with 7 compulsory courses that teach PhD students important cross disciplinary competences which is highly appreciated by them. PhD students therefore feel very satisfied with the entire organization and the very close interaction and professional relationship with their PhD supervisors. Therefore, these joint efforts yield in good overall results, which are continously improving over the years. The number of students who apply for participation in the program is, in fact, always higher than the number of places covered by the budget. Several PhD students have had international experience through internships abroad and / or participation in international conferences.

The research infrastructures are numerous, of a high standard, modern and well organized thanks to clear and strict rules and procedures.

Quality assurance is highly regarded: In USAMVCN is instituted a Department for Quality Assurance, Information and Image (DAC). Since 2015, DAC has implemented an Integrated Quality Management System with a Manual for procedures and guidelines, according to the current legislation. In 2018 this system was certified according to ISO EN 9001: 2015. Actually, the Manual includes 8 system procedures and 125 operational guidelines. A Commission for Quality Assessment and Assurance (CEAC) coordinates the implementation of all procedures and activities and formulate proposals to further improve quality. The procedures are published on the USAMVCN and SDVM websites. They are written in Romanian language and the English part of the site does not report them at all, which is seen as a flaw.

Professional Ethics and Academic Integrity are considered of primary importance by the University. In USAMVCN a Code of Ethics contributes to the maintenance of academic integrity and assuring an academic environment based on cooperation and fair competition. Ethics and Academic Integrity is one of the disciplines taught in the first year of the PhD program. In addition, students can use a computer



system called "sistemantiplagiat" which checks the percentage of similarity between the different PhD theses.

Internationalization is held in high regard and is currently the main objective of the doctorate program. CSUD members and all academic staff have been making numerous efforts to implement this aspect which is a rather minor deficiency, compared to the all other strong points that have been taken into consideration during this evaluation.

Therefore this evaluator does not find any critical issue and notes the absence of any major deficiency or weakness of this doctoral program; nevertheless please find the following recommendations:

- 1) Implement the internationalization of the doctoral studies program ; it is strongly suggested to
 - a) publish all information on the program on the English-language website;
 - b) to implement advertising on international social networks in order to attract foreign students;
 - c) to encourage PhD students to write and discuss doctoral theses in English;
 - d) to increase collaborations with foreign institutions.
- 2) Publish procedures and guidelines , at least the most important ones, in English.

3) Establish procedures for the management and correction of any critical issues that may occur, providing for and nominating the person responsible for any corrective action, for generating and applying for funds and for timing and verification of indicators.

4) Include among the procedures also a system for monitoring and improving the quality of teaching of PhD supervisors and not only the quality of research.

Last but not least, please accept my compliments for the overall quality of the program, in general, and, indeed, for the enthusiasm shown by the PhD students and the entire academic staff.

VII. Annexes

The following types of documents shall be attached:

• Annex 1: The detailed schedule of the evaluation visit



DETAILED SCHEDULE OF THE EVALUATION VISIT

1 NOVEMBER 2021

9.00-10.00

Online preliminary meeting for the preparation and harmonization of evaluation steps, in hybrid mode, of doctoral study domains and IOSUD

10.00-10.45

Online meeting with representatives of the institution and of the Council for Academic Doctoral Studies (CSUD)

11.00-12.00

Online meeting with the contact person for the doctoral study domain under review and the team who drafted the internal evaluation report

12.15-13.15

Online meeting with the director of CSUD / directors of doctoral schools and the team who drafted the internal evaluation report

14.30-15.30

Online meeting with the academic staff corresponding to the doctoral study domain

15.45-16.45

Online meeting with $\ensuremath{\text{IOSUD}}$ academic staff

17.00-18.00

Online meeting with the members of the Ethics Commission

2 NOVEMBER 2021

9.00-10.00

Online meeting with Doctoral University Studies Council (CSUD) members

10.15-11.15

Online meeting with the Directors/ persons in charge of the research centers/laboratories within the doctoral study domain

11.30-12.30

Online meeting with the Directors/ persons in charge of the research centers/laboratories within IOSUD

13.30-14.30

Online meeting with graduates for the respective doctoral study domain

14.45-15.45

Online meeting with IOSUD graduates

16.00-17.00

Online meeting with employers of Doctoral graduates in the domain

17.15-18.15

Online meeting with employers of doctoral graduates

3 NOVEMBER 2021

9.00-9.50

Online meeting with the Commission for Quality Evaluation and Assurance (CEAC) members / Quality Assurance Department

10.00-10.50



Online meeting with PhD students of Veterinary Medicine

11.00-11.50

Online meeting with PhD students of USAMVCN

12.00-12.45

Online meeting with Doctoral Schools Council (CSD members)

12.45.18.00 Continuation of the doctoral study domain and IOSUD evaluation activities. Independent evaluation activities. (during this time frame, the IOSUD/DSUD Coordinator also envisages the communication with the panel members regarding the conduct of the IOSUD/DSUD evaluation)

4 NOVEMBER 2021

9.00-10.00

Face to face technical meeting to identify specific issues that need to be clarified, if necessary, during the on-site visit

10.30-18.00

Face-to-face working meetings, visiting the educational and research infrastructures

I state that I have not personally visited the educational and research infrastructures and I have not partecipated to the face to face meetings as I have made the visit online.

5 NOVEMBER 2021

9.00-11.30 Completion of the evaluation documents 11.45-12.45

Online meeting for conclusions

13.00-14.00

Meeting with representatives of the institution under review to discuss on the conclusions of the evaluation process and the main recomandations