#### ROMANIAN AGENCY FOR QUALITY ASSURANCE IN HIGHER EDUCATION



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Annex No. 3

# The External Evaluation Report of a Doctoral Study Domain

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### I. Introduction<sup>1</sup>

This report summarizes the main concluding remarks about the assessment performed for the Doctoral Study Domain of Pharmacy in the University of Medicine and Pharmacy (UMF) in Craiova. This assessment has been part of a process of the periodic external Evaluation of Doctoral Study Domains carried out by the Agency for Quality Assurance in Higher Education (ARACIS). I have participated as a external and international evaluator, from the University of Malaga (southern Spain), according to the Methodology approved by the ORDER 3651 of 12.04.2021 of the Minister of Education for evaluation of doctoral studies.

The doctoral studies at University of Medicine and Pharmacy from Craiova are currently structured in three domains: Medicine, Pharmacy and Dental Medicine. The Experts Committee of my domain (Pharmacy) was also composed by Professor Monica Hancianu, from the University of Medicine and Pharmacy of Iasi (Romania) and by the PhD student Ioana-Eliza Stanciu, from the University Ovidius, situated in Constanța (the Southest of Romania). Professor Hancianu, head of the Council for Doctoral Studies in her university, has acted as the coordinator of this Committee.

The evaluation has taken place remotely for all the Expert Committees between 5<sup>th</sup> and 9<sup>th</sup> of July of 2021, in addition to a visit on site of the coordinators for each Domain during the previous week. Moreover, a wide range of internal evaluation reports and summaries about the Doctoral Studies for each domain has been provided in advance by the University. During the mentioned week, plenty of virtual sessions with PhD students, graduates, employers, Doctoral School and other staff involved in Doctoral studies in UMF Craiova were organized by Vlad Popescu on behalf of ARACIS, and mostly conducted by Professor Radu Oprean, the Evaluation director, in order to answer and clarify several aspects of such documents.

### II. Methods used

The methodology used in my evaluation included:

<sup>&</sup>lt;sup>1</sup> Each time when applicable the information shall be presented gender-wise.



- The analysis of the internal evaluation report of the doctoral study domain under review and its Annexes.
- The analysis of documents, data and information available on the Doctoral School website, in electronic format;
  - Visiting the buildings included in the institution's property (just the coordinator of my panel):
  - Online meeting/discussions with doctoral students in the doctoral study domain of Pharmacy;
  - Online meeting/discussions with the graduates of the doctoral study domain of Pharmacy;
- Online meeting/discussions with employers of the graduates in the doctoral study domain of Pharmacy;
- Online meeting /discussions with the school officials of the Doctoral School in which the doctoral study domain of Pharmacy is operating:
- Online meeting/discussions with the doctoral advisors in the doctoral study domain of Pharmacy;
- •Online 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 online sessions were scheduled from Monday to Friday (from 5th until 9th of July, 2021).

# III. Analysis of ARACIS's performance indicators

### Domain A. INSTITUTIONAL CAPACITY

This section assesses the organizational structures and financial resources, as well as the research infrastructure of the University of Medicine and Pharmacy in Craiova, especially concerning Pharmacy domain, and according different indicators.

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

Standard A.1.1. The institution organizing doctoral studies (IOSUD) has implemented the effective functioning mechanisms provided for in the specific legislation on the organization of doctoral studies.

Performance Indicator 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 students, for the completion of doctoral studies);



- d) the existence of mechanisms for recognizing the status of a Doctoral advisor 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.
- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself
- analysis of the facts, the findings from the assessed institution's documents and the evaluation visit itself

Online material regarding this indicator is provided in Appendix 1.1.1.1. All the internal regulations and rules of the Doctoral School are accesible through the link http://www.umfcv.ro/regulamente-simetodologii. Specifically, the information for the election of the Doctoral School Council (C.S.D.) and management structures of the UMF Craiova doctoral school (http://www.umfcv.ro/files/m/e/Metodologie\_alegeri\_IOSUD\_2016\_site\_UMFCV(1).pdf) from 2016. Anyway, functions of coordination and procedures of election gathered in the mentioned document match very well with those explained in online session by members of C.S.D. (Professors MÎNDRILĂ, DRICU and STREBA). Moreover, the participation of a PhD student of C.S.D., Mr. Daniel Preda, verified and corroborated the quality of the curriculum and good functioning of this school, with frequently meetings (one per week or every two weeks, and whenever necessary). In previous online session with graduates, they were very satisfied with the work of C.S.D., highlighting training activities as well as personal attention.

Regarding completion of doctoral studies, C.S.D. members gave some reasons for abandonment: personal moving, difficulties to balance work and studies, and specially, financial costs. My only recommendation about this indicator is focused on this latter concern, financial difficulties to carry out a doctoral program.

**Recommendations**: According to one of the main reasons of failure in other doctoral domains, financial issues, it would be suitable to encourage more ambitious scholarships grants from the same UMF Craiova or even provide more mechanisms to search and access to international fellowships. Moreover and in a similar way to perform in other European countries (i.e. <a href="http://www.doctorado.us.es/17-tesis-doctoral/425-mencion-doctorado-industrial">http://www.doctorado.us.es/17-tesis-doctoral/425-mencion-doctorado-industrial</a>), some combined doctoral program between UMF Craiova and local private companies, with a special mention, where PhD students are partially paid by the latter, could be an alternate option to the traditional Doctoral program.

The indicator is fulfilled.

Performance Indicator 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.



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

There is no mention in the internal report (Appendix A.1.1.2.) for the specific software used to avoid plagiarisms (the link provided leads to a webpage without any citation to this issue). Anyway, this existence was verified in Appendix\_A.1.2.2 and during the online sessions, so I consider the indicator fulfilled.

**Recommendations:** Some PhD students claimed during online sessiones that the antiplagiarism software used did not work properly, for instance, for chemical formulas formulas; they had to be removed before launching the software to avoid receiving a plagiarism alert. So, I suggest to try new ones.

In addition, equipments of laboratories were not enough in opinion of some PhD students, with the necessity of attendance on weekends and holidays to find their turn. Regarding this issue (enough equipments and infraestructure), a close collaboration could be established with other laboratories within the same University, or even with external sites, if an improvement in this aspect is not affordable by UMF.

The indicator is fulfilled.

Standard A.1.2. The IOSUD has the logistical resources necessary to carry out the doctoral studies' mission.

Performance Indicator A.1.2.1. The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic background.

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

Some screenshots of the program used to track doctoral students enrolled in UMF are shown in Anexa\_A.1.2.1.

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator 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.

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



Appendix A.1.2.2. includes the link to the program antiplagiarism used as well as the screenshot of the webpage.

**Recommendations:** As mentioned in indicator A.1.1.2, some PhD students claimed during online sessiones that this anti-plagiarism software did not properly work. For instance, for chemical formulas; they had to be removed before starting the software to avoid receiving a plagiarism alert. So, I suggest to try new ones.

The indicator is fulfilled.

Standard A.1.3. The IOSUD makes sure that financial resources are used optimally, and the revenues obtained from doctoral studies are supplemented through additional funding besides governmental funding.

Performance Indicator 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.

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

The internal report (Appendix\_A.1.3.1A) exposes the following research projects, few of the them (but at least one) specifically related to the doctoral study domain under evaluation (Pharmacy):

7 research projects under call: "IDEAS" Program - Exploratory Research Projects (PCE) (Programul "IDEI" - Proiecte de cercetare exploratorie, PCE)

10 research projects under call HR-Young team (TE) (Resurse umane-Tinere echipe(TE)

16 research projects performed in consortium (Projecte complexe realizate în consorții CDI, PCCDI)

3 postdoctoral research projects, 2 Horizon 2020/2021 and one of them founded by CE.

Especifically, all the IDEI and TE projects are engaging doctoral students.

Additionally for this critical indicator, Appendix\_A.1.3.1B shows 6 research grants for the doctoral domain of Pharmacy, obtained by the three doctoral thesis advisors.

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator \*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 / human resources development grants is not less than 20%.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself
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During the evaluation period (2016-2020), the percentage of doctoral students active at the time of the evaluation, who receive additional funding sources for at least six months besides government funding is 7.2%, below the required 20%.

**Recommendations**: The internal report shows awareness of this situation and the intention to improve it once current COVID-19 crisis is over, so no recommendations at the moment.

The indicator is not fulfilled.

Performance Indicator \*A.1.3.3.<sup>2</sup> 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.).

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

The average of the last five years is around 5% of the total obtained through doctoral fees and institutional grants. The institution tends to increase the number of doctoral students, young qualified academics, and make a continuous effort to submit projects in future competitions, in order to reach the threshold of 10% in the next 3 years.

**Recommendations**: This critical indicator was not completely fulfilled, reaching only to the 5% of the total amount obtained through doctoral fees and institutional grants. As seen in previous performance indicator, IOSUD was aware of this weakness and would solve it in the next three years, increasing the number of doctoral students, young qualified academics, and by the continuous effort to submit projects in future competitions.

The indicator is partially fulfilled.

# Criterion A.2. Research infrastructure

Standard A.2.1. The IOSUD has a modern research infrastructure to support the conduct of doctoral studies' specific activities.

<sup>&</sup>lt;sup>2</sup> 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.



Performance Indicator 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.

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

Many of the activities specific to doctoral studies take place in the U.M.F. Craiova. According to information provided (Appendixes A.2.1.1 and A.2.1.1AE), infraestructures and facilities are plenty and some of them recently built, with laboratories and research centres working in cutting-edge fields like Human Genomics. During the last 5 years, the internal report especially highlights the purchase of 17 equipments of over 100,000 EURO, with the mention of two-photon laser microscope (the first one in the country) and the simulators for upper and lower digestive endoscopy, bronchoscopy, transthoracic ultrasound or for laparoscopic surgeries.

**Recommendations**: We asked about this point to different PhD students in online sessions and some of them complained about insufficient equipment to work several people at the same time though. This situation lead them to work on weekends and holidays, so I recommend an exhaustive study of this matter in order to clarify if this a punctual circumtances or a generalized condition for doctoral students at this moment.

The indicator is fulfilled.

### Criterion A.3. Quality of Human Resources

Standard A.3.1. At the level of each domain there are sufficient qualified staff to ensure the conduct of doctoral study program.

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.

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

According to Appendix A.3.1.1, all the Pharmacy supervisors met the current qualification standards from CNATDCU required in this performance indicator.

Recommendations: No recommendations.

The indicator is fulfilled.



Performance Indicator \*A.3.1.2. At least 50% of all doctoral advisors have a full-time employment contract for an indefinite period with the IOSUD.

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

During the period assessed (2016-2020), the doctoral supervisors, who guided and evaluated the activity of each doctoral student in the Domain of Pharmacyalready had a full-time employment contract for an indefinite period with the IOSUD.

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator 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 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.

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

The doctoral program carried out within the Doctoral School includes: a) a training program based on advanced university studies; b) an individual scientific research program. The first one is shown in Appendix A.3.1.3. The training path includes mandatory disciplines for all the PhD students, and other ones optional according to every individual scientific research program.

Moreover, training courses, both mandatory and optional ones, are very appreciated by already graduates and PhD students, as they mentioned during the online sessions. Special mention to training to work with animals under supervision of Ethics department.

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator \*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<sup>3</sup> does not exceed 20%.

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

<sup>&</sup>lt;sup>3</sup> 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No.1/2011 with subsequent amendments and additions, with additional extension periods approved as per Article 39, paragraph (3) of the Code of doctoral studies approved by the GD No. 681/2011 with subsequent amendments and additions.



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

The doctoral supervisors in the Domain of Pharmacy are coordinating 9, 7 and 6 doctoral students at the same time, all of them lower than 12 (Appendix A.3.1.4). The existence of only three supervisors within this Domain, makes one of them with 9 students (33.33% of the total) slightly exceeds the threshold of 20%.

**Recommendations:** Although this criterium is fully met in accordance with the standard, the number of doctoral students under supervision for each advisor is excesive in my opinion. As foreign evaluator with a different point of view and working landscape (3 PhD students is the maximum number concomitantly authorized in my faculty), I believe that a lower number of supervised would facilitate the work and improve the management (i.e., search of additional funds, national and international collaborations, etc.). As shown in RAPORT\_ARACIS\_FARMACIE (page 7), there are other teachers authorized to supervise doctorates or scheduled to obtain the certificate of habilitation, so I encourage their incorporation soon.

The indicator is partially fulfilled.

Standard A.3.2. The Doctoral advisors within the domain are carrying out a scientific activity visible at international level.

Performance Indicator 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.

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

All the three supervisors possess at least 5 publications indexed in ISI Web of Science, two of them with international visibility. Moreover, I asked Professor Catalina Pisoschi for the lists of publications and impact factor for each of them, and all the supervisors possess relevant publications in their categories.

**Recommendations:** No recommendations.

The indicator is fulfilled.



Performance Indicator \*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 evaluation, which are required and mandatory for acquiring their enabling certificate, based on their scientific results within the past five years.

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

All the PhD supervisors in the domain of Pharmacy (3 out of the 3) meet at least 25% of the score required by the minimum standards CNATDCU in force at the date of evaluation, necessary and mandatory to obtain the certificate of qualification.

**Recommendations:** No recommendations.

The indicator is fulfilled.

### Domain B. EDUCATIONAL EFFECTIVENESS

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

Standard B.1.1. The institution organizing doctoral studies has the capacity to attract candidates from outside the higher education institution or a number of candidates exceeding the number of seats available.

Performance Indicator \*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 budget put out through contest within the doctoral studies domain is at least 1,2.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself
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In the last 5 years, 12 was the number of places financed from the budget, coming four of them from other university institutions, so the ratio is 0.33. In the last five years, the ratio between the number of candidates and the number of places funded by the stated budget was 2.33, over the threshold of 1.2.

**Recommendations:** Most of PhD students enrolled who came from other higher institutions was seen in 2017. After then, only one more was enrolled. The current situation with the pandemic could explain such figure but it would be interesting to deepen in this cuestion and to work in attracting talent from other institutions.

The indicator is fulfilled.



Standard B.1.2 Candidates admitted to doctoral studies demonstrate academic, research and professional performance.

Performance Indicator \*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.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself
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In my opinion, the procedure for admission to doctoral studies is fairly established, with the supervision of the C.S.D. U.M.F. Craiova, in agreement with the doctoral supervisor. It is drawn as a merit-based competition, with the selection criteria previously announced in the web. Specific tests about the topic of the doctoral study and an interview are also carried out by the candidates.

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator B.1.2.2. The expelling rate, including renouncement / dropping out of doctoral students 3, respectively 4, years after admission<sup>4</sup> does not exceed 30%.

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

During the period assessed, no drop-off was registered after a period of 2 years for the Pharmacy field (Appendix B.1.2.2.).

**Recommendations:** Even though nobody has given up doctoral studies after a period of 2 years in the domain of Pharmacy, some reasons of abandonment in other domains were given during online sessions, mainly related to financial issues. So, I suggest the same as previously exposed in Performance Indicator A.1.1.1, the search of a wider range of fundings at the starting point of the studies.

The indicator is fulfilled.

### Criterion B.2. The content of doctoral programs

Standard B.2.1. The training program based on advanced university studies is appropriate to improve doctoral students' research skills and to strengthen ethical behavior in science.

<sup>&</sup>lt;sup>4</sup> 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No. 1/2011 with subsequent amendments and additions.



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

The training program is well stablished, with the professional and transversal competences very well described, specially regarding disciplines relevant for the training in scientific research of doctoral students (Appendix B.2.1.1 shows the three disciplines relevant to research).

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator 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.

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

Appendix B.2.1.2 shows the three disciplines related to Ethics and Intellectual Property, all of them mandatory in the doctoral program. As also clarified during the online session with Ethics Department, this issue - *Ethics and Intellectual Property*- is a main concern in the doctoral program.

**Recommendations:** No recommendations.

The indicator is fulfilled.

Performance Indicator B.2.1.3. The IOSUD has mechanisms to ensure that the academic training program 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<sup>5</sup>.

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

The disciplines offered, mandatory and optional, are relevant and suitable to the development of a research career in different specialized fields (Molecular Biology, *in vivo* experimentation).

Recommendations: No recommendations.

The indicator is fulfilled.

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<sup>&</sup>lt;sup>5</sup> Or by what the graduate should know, understand and to be able to do, according to the provisions of the Methodology of 17 March 2017 regarding inscription and registration of higher education qualifications in the National Register of Qualifications in Higher Education (RNCIS) approved by the Order No.3475/2017 with subsequent amendments and additions.



Performance Indicator 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.

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

This indicator is fully met, with the submission of a report of the progress and achievements (presentations on scientific conferences, stays in other national and international institutions, etc.) by each doctoral student at least once every 12 months. The Appendix B.2.1.4 includes the link to the required form in the procedure.

**Recommendations**: No recommendations.

The indicator is fulfilled.

Performance Indicator 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.

- description of the facts, the findings from the assessed institution's documents and the evaluation visit itself
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The current ratio (1,38:1) is below the threshold of 3:1.

**Recommendations**: No recommendations.

The indicator is fulfilled.

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

Standard B.3.1. Doctoral students capitalize on the research through presentations at scientific conferences, scientific publications, technological transfer, patents, products and service orders.

Performance Indicator 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.

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



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

One paper at least is provided per doctoral student and some of them are also situated in the first quartile of its JCR category (*Angewandte Chemie-international Edition, Journal of Industrial and Engineering Chemistry, Applied Surface Science*). Thus, at least three contributions shown are relevant in its area.

**Recommendations**: No recommendations.

The indicator is fulfilled.

Performance Indicator \*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.

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

The ratio between the number of relevant presentations (most of them international) and the number of PhD students in Pharmacy who completed their doctoral studies is 1,375 (11 papers presented/8 doctoral students).

**Recommendations**: Despite meeting this indicator, I strongly suggest that it be enhanced. If the economic issue is the obstacle, it can be seached meetings with grants and scholarships which fund part of registration and stay.

The indicator is fulfilled.

Standard B.3.2. The Doctoral School engages a significant number of external scientific specialists in the commissions for public defense of doctoral theses in the analyzed domain.

\*general description of the standard analysis.

Performance Indicator \*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.

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

For the last 5 years, the number of 2 theses of a coordinator per year is not exceeded.

Recommendations: No recommendations.

The indicator is fulfilled.

Performance Indicator \*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.

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

Only 8 thesis with the criteria have been presented in the domain of Pharmacy, so according to the statement of this performance indicator, this doctoral study domain should not be analyzed.

**Recommendations**: No recommendations.

The indicator is fulfilled.

## Domain C. QUALITY MANAGEMENT

\*general description of domain analysis.

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

Standard C.1.1. There are an institutional framework and procedures in place and relevant internal quality assurance policies, applied for monitoring the internal quality assurance.

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

**Recommendations**: No recommendations.

The indicator is fulfilled.

Performance Indicator \*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.

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

UMF Craiova meets this indicator, and the mechanisms (questionnaires and forms) are shown through the links embedded in the appendix C.1.1.2. Moreover, during online sessions, PhD students and graduates showed a high level of satisfaction with the doctoral study program and school.

**Recommendations**: However, it would have been interesting some report of the results got during the period assessed (number of consultations, rate of satisfaction after an inquiry, etc.) in order to make me a better idea of the real implementation and performance of this indicator. I strongly suggest the adoption of the statistical data to show the performance of this indicator.

The indicator is fulfilled.

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

Standard C.2.1. Information of interest to doctoral students, future candidates and public interest information is available for electronic format consultation.

Performance Indicator 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:

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

The website of the organizing institution is flourished with plenty of links to the corresponding procedure. So, it is clear for me that The Doctoral School of U.M.F. Craiova pays special attention to the



dissemination of information of interest to doctoral students, but also to teachers, supervisors, potential candidates.

**Recommendations**: No recommendations.

The indicator is fulfilled.

Standard C.2.2. The IOSUD/The Doctoral School provides doctoral students with access to the resources needed for conducting doctoral studies.

Performance Indicator C.2.2.1. All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of their thesis.

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

PhD students have at their disposal the UMF Craiova Library and free access to the resources offered by it.

**Recommendations**: No recommendations.

The indicator is fulfilled.

Performance Indicator C.2.2.2. Each doctoral student shall have access, upon request, to an electronic system for verifying the degree of similarity with other existing scientific or artistic works.

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

Appendix C.2.2.2 includes the link to the software used to detect plagiarism.

**Recommendations:** As mentioned in indicator A.1.1.2, some PhD students claimed during online sessiones that this anti-plagiarism software did not properly work. For instance, for chemical formulas; they had to be removed before starting the software to avoid receiving a plagiarism alert. So, I suggest to try new ones.

The indicator is fulfilled.

Performance Indicator C.2.2.3. All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral School, according to internal order procedures.

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

Appendix A.2.1.1AE also included all the facilities available for doctoral students, some of them recently built.



**Recommendations**: The PhD students interviewed during some online sessions confirmed this access, but also claimed about the necessity of taking turns in order to use some sites and equipments. **The indicator is fulfilled.** 

### Criterion C.3. Internationalization

Standard C.3.1. There is a strategy in place and it is applied to enhance the internationalization of doctoral studies.

Performance Indicator \*C.3.1.1. IOSUD, for every evaluated domain, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a training course abroad or other mobility forms such as attending international scientific conferences. 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.

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

Unfortunately, there were not any students from the Pharmacy domain benefiting from ERASMUS scholarships abroad during the 2016-2020 period. Nevertheless, 5 out of 8 students (>35%) have attended and presented their research results in any international conference.

**Recommendations**: It is necessary to make a greater effort of internalization. Maybe, holding especific presentation days with students already awarded with Erasmus scholarships (even from other domains) or other kind of grants would be encouraging.

The indicator is partially fulfilled.

Performance Indicator 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.

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

38 national conferences with international participation were organized during the period assessed. In addition, 5 visiting professors were in UMF Craiova during 2016-2020.

**Recommendations**: Within this indicator, the only fact to improve is the number of doctoral theses in the domain of Pharmacy under international co-supervision. This was zero during the period assessed. In my opinion, this fact could indirectly be related to the previous indicator, so an increasing of students in other international centres might make easier the agreements with universities abroad.



#### The indicator is fulfilled.

Performance Indicator 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.).

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

Appendix C.3.1.3. includes some examples of internationalization activities organized by UMF Craiova with foreign participants. As mentioned in the ARACIS report, the best strategy for the internationalization of the doctoral school of the U.M.F. Craiova has been to attract doctoral supervisors from other prestigious universities as well as encourage other professors to visit UMF Craiova during 2016-2020 (Appendix C.3.1.2).

Recommendations: No recommendations.

The indicator is fulfilled.

# IV. SWOT Analysis

## **Strengths:**

- -Well-structured way of working, with a balanced representativity for all the sectors in councils and an efficient feedback system for students and supervisors.
- -Willingness to improve and act by following the rules and high quality standards (they met 32 out of the 35 critical performance indicators assessed).
- -Ethical procedures are always considered and, moreover, some mandatory training courses in the domain of Pharmacy are teaching ethical issues.
- -Great satisfaction with the staff involved in the doctoral school as well as with the education program from PhD students and graduates.
- -Prestige of the doctoral thesis delivered and defended from UMF Craiova. Well-consideration for employers.
- -Synthesis and characterization of new materials, including nanoparticles, for both pharmacological forms and ortophedic diseases are strong topics within this Domain, with publications of high

## Weaknesses:

- -The rate of PhD students per supervisor is below the maximum allowed threshold, but a lower number of supervised students might enhance some outcomes (specially international publications and fundings search).
- -Low rate of internationalization, with no students granted by Erasmus program and other doctoral programs awarding stays abroad.
- -Anti-plagiarism software is not completely efficient in opinion of the PhD students.
- -Some equipments may be deficient for the needs of PhD students enrolled.



### impact factor.

## **Opportunities:**

- -The robustness of the study program in the Domain of Pharmacy and the prestige of the doctoral diploma granted should be advertised in order to attract more PhD candidates and moreover, professors of other institutions.
- -Any internalization chance should be taken advantage of, enhancing exchange of doctoral students or even professor with other institutions.
- -A more favorable economic environment could be set up in close collaboration with private companies, especially interested on pre-clinical studies.
- -The awareness of the weaknesses mostly related to financial difficulties is a good starting point to fix them.
- -Difficult but not impossible, new research topics within the domain of Pharmacy could be considered to open to new researchers, doctoral candidates, fundings opportunities, etc...

## Threats:

- -No obvious threats for the functioning of the institution have been found, apart from those caused by the current pandemic impact.
- -A broader range of journals should be considered; publication in the same journal is often penalized in some calls for R+D projects or contrates.

# V. Overview of judgments awarded and of the recommendations

No.	Type of indicator	Performance	Judgment	Recommendations
	(*, C)	indicator		
1	Domain A. INSTITUTIONAL CAPACITY  A.1. The administrative, managerial institutional structures and the financial resources		Fulfilled	According to one of the main reasons of failure in other doctoral domains, financial issues, it would be suitable to encourage more ambitious scholarships grants from the same UMF Craiova or even provide more mechanisms to search and access to international fellowships. Moreover and in a similar way to perform in other European countries (i.e. http://www.doctorado.us.es/17-tesis-doctoral/425-mencion-doctorado-industrial), some combined doctoral program between UMF Craiova and local private companies, with a special mention, where PhD students are partially paid by the latter, could be an alternate option to the traditional Doctoral program.



2	Domain A. INSTITUTIONAL	A.1.1.2	Fulfilled	There is no mention in the internal
	CAPACITY	73.1.1.2	. unincu	report (Appendix A.1.1.2.) for the specific software used to avoid
	A.1. The administrative, managerial			plagiarisms (the link provided leads
	institutional structures and the			to a webpage without any citation to
	financial resources			this issue). Anyway, this existence
				was verified in Appendix_A.1.2.2
				and during the online sessions, so I consider the indicator fulfilled.
				However, some PhD students
				claimed during online sessiones
				that the anti-plagiarism software
				used did not work properly, for
				instance, for chemical formulas;
				they had to be removed before
				launching the software to avoid
				receiving a plagiarism alert. So, I suggest to try new ones.
				In addition, equipments of
				laboratories were not enough in
				opinion of some PhD students, with
				the necessity of attendance on
				weekends and holidays to find their turn. Regarding this issue (enough
				equipments and infraestructure), a
				close collaboration could be
				established with other laboratories
				within the same University, or even
				with external sites, if an improvement in this aspect is not
				affordable by UMF.
3	Domain A. INSTITUTIONAL CAPACITY	A.1.2.1	Fulfilled	No recommendations.
	A.1. The administrative, managerial			
	institutional structures and the			
	financial resources			
4	Domain A. INSTITUTIONAL CAPACITY	A.1.2.2	Fulfilled	As mentioned in indicator A.1.1.2, some PhD students claimed during
	A.4. The admit to out o			online sessiones that this anti-
	A.1. The administrative, managerial institutional structures and the			plagiarism software did not properly work. For instance, for chemical
	financial resources			formulas; they had to be removed
				before starting the software to avoid
				receiving a plagiarism alert. So, I
				suggest to try new ones.
5	Domain A. INSTITUTIONAL CAPACITY	A.1.3.1	Fulfilled	No recommendations.
	A.1. The administrative, managerial			
	institutional structures and the			
	financial resources			



6	Domain A. INSTITUTIONAL	A.1.3.2	Not	The internal report shows
	CAPACITY	Λ.1.3.Δ	fulfilled	awareness of this situation and the
	3 7.6		Taninou .	intention to improve it once current
	A.1. The administrative, managerial			COVID-19 crisis is over, so no
	institutional structures and the			recommendations at the moment
	financial resources			
7	Domain A. INSTITUTIONAL	A.1.3.3	Partially	This critical indicator was not
	CAPACITY		fulfilled	completely fulfilled, reaching only to
	A 1. The administrative managerial			the 5% of the total amount obtained
	A.1. The administrative, managerial institutional structures and the			through doctoral fees and institutional grants. As seen in
	financial resources			previous performance indicator,
				IOSUD was aware of this weakness
				and would solve it in the next three
				years, increasing the number of
				doctoral students, young qualified
				academics, and by the continuous
				effort to submit projects in future
8	Domain A. INSTITUTIONAL	A.2.1.1	Fulfilled	competitions.  In my opinion, according to
	CAPACITY	, v. Z. 1 . 1	. annou	information provided (Appendixes
				A.2.1.1 and A.2.1.1AE),
	A.2. Research infrastructure			infraestructures are plenty and
				some of them recently built, with
				laboratories and research centres
				working in cutting-edge fields like
				Human Genomics. However, we asked about this point to different
				PhD students in online sessions
				and some of them complained
				about insufficient equipment to
				work several people at the same
				time. This situation lead them to
				work on weekends and holidays, so
				I recommend an exhaustive study
				of this matter in order to clarify if this a punctual circumtances or a
				generalized condition for doctoral
				students at this moment.
9	Domain A. INSTITUTIONAL	A.3.1.1	Fulfilled	No recommendations
	CAPACITY			
	A.3. Quality of Human Resources			
10	Domain A. INSTITUTIONAL	A.3.1.2	Fulfilled	No recommendations
	CAPACITY			
	A.3. Quality of Human Resources		F 1800 :	N
11	Domain A. INSTITUTIONAL	A.3.1.3	Fulfilled	No recommendations (training
	CAPACITY			courses, both mandatory and optional ones, are very appreciated
	A.3. Quality of Human Resources			by already graduates and PhD
	7.1.3. Quality of Hamaii Nesources			students. Special mention to
			<u>I</u>	Judania. Special includin to



				training to work with animals under
				_
12	Domain A. INSTITUTIONAL CAPACITY  A.3. Quality of Human Resources	A.3.1.4	Partially fulfilled	supervision of Ethics department).  Although this criterium is not fully met in accordance with the standard. The number of doctoral students under supervision for each advisor is excesive in my opinion. As foreign evaluator with a different point of view and working landscape (3 PhD students is the maximum number concomitantly authorized in my faculty), I believe that a lower number of supervised would facilitate the work and improve the management (i.e., search of additional funds, national and international collaborations, etc.). As shown in RAPORT_ARACIS_FARMACIE (page 7), there are other teachers authorized to supervise doctorates or scheduled to obtain the certificate of habilitation, so I
				encourage their incorporation soon.
13	Domain A. INSTITUTIONAL CAPACITY  A.3. Quality of Human Resources	A.3.2.1	Fulfilled	No recommendations, since all the three supervisors possess at least 5 publications indexed in ISI Web of Science, two of them with international visibility
14	Domain A. INSTITUTIONAL CAPACITY  A.3. Quality of Human Resources	A.3.2.2	Fulfilled	No recommendations, since all the PhD supervisors in the domain of Pharmacy (3 out of the 3) met at least 25% of the score required by the minimum standards CNATDCU in force at the date of evaluation, necessary and mandatory to obtain the certificate of qualification.
15	Domain B. EDUCATIONAL EFFECTIVENESS  B.1. The number, quality and diversity of candidates enrolled for the admission contest	B.1.1.1	Fulfilled	Most of PhD students enrolled who came from other higher institutions was seen in 2017. After then, only one more was enrolled. The current situation with the pandemic could explain such figure but it would be interesting to deepen in this cuestion and to work in attracting talent from other institutions.
16	Domain B. EDUCATIONAL EFFECTIVENESS  B.1. The number, quality and diversity of candidates enrolled for the admission contest	B.1.2.1	Fulfilled	No recommendations. In my opinion, the procedure for admission to doctoral studies is fairly established, with the supervision of the C.S.D. U.M.F. Craiova, in agreement with the



17	Domain B. EDUCATIONAL	B.1.2.2	Fulfilled	doctoral supervisor. It is drawn as a merit-based competition, with the selection criteria previously announced in the web. Specific tests about the topic of the doctoral study and an interview are also carried out by the candidates.  Even though nobody has given up
	EFFECTIVENESS  B.1. The number, quality and diversity of candidates enrolled for the admission contest			doctoral studies after a period of 2 years in the domain of Pharmacy, some reasons of abandonment in other domains were given during online sessions, mainly related to financial issues. So, I suggest the same as previously exposed in Performance Indicator A.1.1.1, the search of a wider range of fundings at the starting point of the studies.
18	Domain B. EDUCATIONAL EFFECTIVENESS  B.2. The content of doctoral programs	B.2.1.1	Fulfilled	No recommendations. The training program is well stablished, with the professional and transversal competences very well described, specially regarding disciplines relevant for the training in scientific research of doctoral students.
19	Domain B. EDUCATIONAL EFFECTIVENESS  B.2. The content of doctoral programs	B.2.1.2	Fulfilled	No recommendations. As clarified during the online session with Ethics Department, this issue - Ethics and Intellectual Property- is a main concern in the doctoral program.
20	Domain B. EDUCATIONAL EFFECTIVENESS  B.2. The content of doctoral programs	B.2.1.3	Fulfilled	No recommendations. The disciplines offered, mandatory and optional, are relevant and suitable to the development of a research career in different specialized fields (Molecular Biology, in vivo experimentation.
21	Domain B. EDUCATIONAL EFFECTIVENESS  B.2. The content of doctoral programs	B.2.1.4	Fulfilled	No recommendations. This indicator is fully met, with the submission of a report of the progress and achievements (presentations on scientific conferences, stays in other national and international institutions, etc.) by each doctoral student at least once every 12 months.
22	Domain B. EDUCATIONAL EFFECTIVENESS  B.2. The content of doctoral programs	B.2.1.5	Fulfilled	No recommendations. The current ratio (1,38:1) is below the threshold of 3:1.



23	Domain B. EDUCATIONAL EFFECTIVENESS  B.3. The results of doctoral studies and procedures for their evaluation	B.3.1.1	Fulfilled	No recommendations. One paper at least is provided per doctoral student and some of them are also situated in the first quartile of its JCR category (Angewandte Chemie-international Edition, Journal of Industrial and Engineering Chemistry, Applied Surface Science). Thus, at least three contributions shown are relevant in its area.
24	Domain B. EDUCATIONAL EFFECTIVENESS  B.3. The results of doctoral studies and procedures for their evaluation	B.3.1.2	Fulfilled	Despite meeting this indicator, I strongly suggest that it be enhanced. If the economic issue is the obstacle, it can be seached meetings with grants and scholarships which fund part of registration and stay.
25	Domain B. EDUCATIONAL EFFECTIVENESS  B.3. The results of doctoral studies and procedures for their evaluation	B.3.2.1	Fulfilled	No recommendations.
26	Domain B. EDUCATIONAL EFFECTIVENESS  B.3. The results of doctoral studies and procedures for their evaluation	B.3.2.2	Fulfilled	No recommendations.
27	C.1. Existence and periodic implementation of the internal quality assurance system	C.1.1.1	Fulfilled	No recommendations.
28	C.1. Existence and periodic implementation of the internal quality assurance system	C.1.1.2	Fulfilled	UMF Craiova meets this indicator, and the mechanisms (questionnaires and forms) are shown through the links embedded in the appendix C.1.1.2. Moreover, during online sessions, PhD students and graduates showed a high level of satisfaction with the doctoral study program and school. However, it would have been interesting some report of the results got during the period assessed (number of consultations, rate of satisfaction after an inquiry, etc.) in order to make me a better idea of the real implementation and performance of this indicator.
29	Domain C. QUALITY MANAGEMENT	C.2.1.1.	Fulfilled	No recommendations.



	00 T (' ( ) '			T
	C.2. Transparency of information and			
	accessibility of learning resources			
30	Domain C. QUALITY MANAGEMENT	C.2.2.1	Fulfilled	No recommendations.
	C.2. Transparency of information and			
	accessibility of learning resources			
31	Domain C. QUALITY MANAGEMENT  C.2. Transparency of information and accessibility of learning resources	C.2.2.2	Fulfilled	As mentioned in indicator A.1.1.2, some PhD students claimed during online sessiones that this antiplagiarism software did not properly work. For instance, for chemical formulas; they had to be removed before starting the software to avoid
32	Domain C. QUALITY MANAGEMENT	C.2.2.3	Fulfilled	receiving a plagiarism alert. So, I suggest to try new ones.
32	DUIIIdiii C. QUALII Y MANAGEMENT	U.Z.Z.3	ruiilled	The PhD students interviewed during some online sessions
	C.2. Transparency of information and			confirmed this access, but also
	accessibility of learning resources			claimed about the necessity of
				taking turns in order to use some
				sites and equipments.
33	Domain C. QUALITY MANAGEMENT	C.3.1.1	Partially	It is necessary to make a greater
	C.3. Internationalization		fulfilled	effort of internalization. Maybe, holding especific presentation days with students already awarded with Erasmus scholarships scholarships (even from other domains) or other kind of grants would be encouraging.
34	Domain C. QUALITY MANAGEMENT	C.3.1.2	Fulfilled	Within this indicator, the only fact to
	C.3. Internationalization			improve is the number of doctoral theses in the domain of Pharmacy under international co-supervision. This was zero during the period assessed. In my opinion, this fact could indirectly be related to the previous indicator, so an increasing of students in other international centres might make easier the agreements with universities abroad.
35	Domain C. QUALITY MANAGEMENT	C.3.1.3	Fulfilled	No recommendations.
	C.3. Internationalization			

The recommendations contained in the report shall be resumed in the indicators' analysis. Other general recommendations may be made that do not fit within a particular indicator.

VERY IMPORTANT!!! – Each identified weakness must be correlated with at least one recommendation to improve the situation!



# VI. Conclusions and general recommendations

The thoroughly reading and assessment of all the internal reports and the clarification of some inquiries during online sessions has led me to confirm that most of the critical performance indicators are fullfilled, with the exceptions for A.1.3.2, A.3.1.4, and A.1.3.3 and C.3.1.1 (these latter three partially fullfilled), related to the institutional capacity and quality management. In my opinion, financial issues are the root cause of all the indicators not completely fullfilled. I suggest an enhancement of collaborations with other institutions (national and international) and with private companies. Regarding these latter, they could be interested on some research topics whose supervision (and funding) could be shared between university and companies. In addition, I also encourage the institution for their incorporation of other teachers authorized to supervise doctorates as soon as possible, in order to the compliance of performance indicator A.3.1.4.

For the rest of indicators, only some recommendations for some standards are given from my side. Specifically, I encourage the UMF Craiova to improve its international presence and partnerships in Doctoral programs with other universities. In that sense, it would be worth it holding presentation days with members of different institutions (Romanian and other European countries) showing different ways of funding.

The Doctoral School of UMF Craiova for the domain of Pharmacy possesses a solid structure and organization, is quite well-considered by both PhD students and graduates. A doctoral title got from this school has a great prestige and it is highly appreciated by the different employers too. In addition, the quality system at the doctoral study domain level works acceptably, with objective items periodically and thoroughly evaluated (internal and externally). Thus, we have assessed 35 critical indicators, and only one of them is not fullfilled and the other three are partially met (so, 88.6% of critical indicators are met). Moreover, the Doctoral School is aware of such weaknessess and it seems to be on the path of emmending them.

### VII. Annexes

- The detailed schedule of the evaluation visit (Timetable Eval\_IOSUD\_DD\_for UMF CV v6.docx).
- List of publications from the domain of Pharmacy indexed in ISI and BDI and provided by a doctoral supervisor of this domain (Professor Catalina Pisoschi) upon request (Articole doctoranzi 2016-2020 Farmacie.docx).
- List of publications indexed in ISI and BDI with the corresponding impact factors and provided by a
  doctoral supervisor of this domain (Professor Catalina Pisoschi) upon request (Supplement Annex B
  3 1 1 IF Articles PhD Students 2016-2020.xlsx)