

EVALUATION AND ACCREDITATION DOCUMENTS

Ph.D. Clinical Pharmacy

Africa Centre of Excellence in Phytomedicine
Research and Development (ACEPRD)
University of Jos

Nigeria

September 2019

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EVALUATION REPORT

Ph.D. Clinical Pharmacy

Africa Centre of Excellence in Phytomedicine
Research and Development (ACEPRD)
University of Jos
Nigeria

JUNE - 2019

The University of Jos has mandated Hcéres to perform its Clinical Pharmacy doctoral program evaluation. The evaluation is based on the "External Evaluation Standards for doctorates out of France", adopted by the Hcéres Board on March 26, 2018. These standards are available on the Hcéres website (hceres.fr).

For the Hcéres¹ :

Michel Cosnard, President

On behalf of the experts committee² :

Dominique Laurain-Mattar, President of the committee

In accordance with the decree n°2014-1365, November 14th, 2014,

¹ Le président du Hcéres/The president of Hcéres "contresigne les rapports d'évaluation établis par les comités d'experts et signés par leur président." (Article 8, alinéa 5) – « countersigns the assessment reports made by the experts' committees and signed by their president » (article8, alinéa 5)

² The evaluation reports "sont signés par le président du comité". (Article 11, alinéa 2) – « are signed by the president of the committee » (article11, alinea 2)

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I. NATIONAL CONTEXT AND INSTITUTION IDENTITY SHEET

GENERAL CONTEXT AND HIGHER EDUCATION

University of Jos was established in 1979, it is one of the existing 170 Universities in Nigeria. The Africa Centre of Excellence in Phytomedicine Research and Development (ACEPRD) was established in 2014 through a World Bank alliance between the regional governments of West Africa, to harness the untapped potentials of collaboration among African researchers with the focus of creating a sustainable agenda for health innovation in Nigeria and Africa. ACEPRD is one of the 10 Centers of Excellence in Nigeria to contribute to health care development in Africa as a way of exploiting its biodiversity. From 2015-2017 a total of 446 students have been enrolled into the Masters and PhD programmes, drawn from the West African Region namely Togo, Ghana, Burkina Faso, Benin and Nigeria.

INSTITUTION

1. University/institution: University of Jos, Africa Centre of Excellence in Phytomedicine Research & Development (ACEPRD)
2. Component, faculty or department concerned: Faculty of Pharmaceutical Sciences, Department of Clinical Pharmacy and Pharmacy Practice
3. Programme's title: PhD in Clinical Pharmacy
4. Training/speciality: Clinical Pharmacy
5. Year of creation and context: 2014 through a World Bank alliance between the regional governments of West Africa
6. Site(s) where the programme is taught (Town and campus): Faculty of Pharmaceutical Sciences with the support of the Africa Centre of Excellence in Phytomedicine Research & Development (ACEPRD), University of Jos. In addition, laboratory facilities are at the ACEPRD and also at the Faculty.
7. Programme director:
 - a. Surname, first name: Aguyi John Chinyere
 - b. Profession and grade: Professor
 - c. Main subject taught: Pharmacology and Genetic Engineering

METHODS AND RESULTS OF THE PREVIOUS ACCREDITATION(S)

8. Methodology and agency
The PhD programme has been evaluated and accredited by the National Universities Commission in Nigeria in 2017.
9. Results: Approval.

HUMAN AND MATERIAL RESOURCES DEDICATED TO THE PROGRAMME

10. Human resources
The teaching staff of the PhD in Clinical Pharmacy includes 4 Professors, 1 Senior Lecturer, and 10 Lecturers and is in good accordance with the needs for training, research and mentoring internships.
11. Material resources
Recent equipment to perform sophisticated analyses have been acquired:
 - Genetic analysis system: Beckman Coulter Genome Lab GeXP;
 - High performance separation-Es Module with OptiMS Technology: Beckman Coulter's CESI 8000 Plus;
 - Pharmaceutical analysis system: Beckman Coulter PA 800 Plus;
 - Gas Chromatography-Mass Spectrophotometer: Scion 456-GC;

- Multi EA 4000: Analytkjena Elemental Analyser;
- Thermal Cycler: Jenway UV Spectrophotometer, PCR;
- Beckman Coulter- Allegra X15 Cold Centrifuge;
- Production of distilled and de-ionized water: Milli-Q Lab Water System;
- Electrophoresis equipment;
- Dissecting Microscope Triton Research Fluorescence Microscope.

STUDENT POPULATION: EVOLUTION AND TYPOLOGY OVER THE LAST 4 YEARS

MPhil/PhD in Clinical Pharmacy

S/No	YEAR	TOTAL/YEAR	FEMALES	MALES	INTERNATIONAL STUDENTS	NATIONAL STUDENTS	TOTAL
1	2015/2016	3	2	10	1	11	12
2	2016/2017	4					
3	2017/2018	1					
4	2018/2019	4					

II. EVALUATION PROCEDURE

COMPOSITION OF THE EXPERTS PANEL

Dominique LAURAIN-MATTAR, Professor, University of Lorraine, committee leader
 Valérie SCHINI-KERTH, Professor, Strasbourg University
 Frédéric RELAX, Professor, Paris-Est University
 Mathilde COLAS, Student graduated from University of Technology of Troyes.
 Hcéres was represented by Pierre COURTELLEMONT, science advisor.

ON-SITE VISIT DESCRIPTION

- Date of the visit: June the 10th, 2019.
- Organization of the visit: the visit was made the 10th of June, on the NUC site, during one day. On-site meetings with the management team, academic staff, closed meetings by videoconferencing with partners, alumni and students.
- Cooperation of study programme and institution to be accredited: perfect cooperation by all stakeholders, with the support of NUC team.
- People met (on NUC site):

John C. Aguiyi, director ACEPRD
 Ndid C. Ngwuluka, Head of Department Pharmaceutics
 Ikoni Ogaji, Dean, Faculty of Pharmaceutical Sciences
 Dayom D. Wetkos, Head of Department, Clinical Pharmacology
 Dafam D. Gwatau, Head of Department, Pharmacognosy
 Ezekiel O. Afolabi, PG coordinator, Head of Bioinformatics
 Patrick O. Olorunfemi, Head of Department Pharmaceutical Microbiology
 Goni Dogo, ACEPRD laboratory
 Mark Kparamak, Project Administrator
 Taiwo E. Alemika, Deputy Centre Leader
 Patricia O. Odumosu, Head, Department of Pharmaceutical & Medicinal Chemistry

18 students (Arinze Umera (PhD Biochemistry), Akinsanmi Augustina Oduje (PhD Biochemistry), Chioma Eze (PhD Applied Microbiology), Amaka Ubani (MSc Bioinformatics and genomics), Francis Akpadja Kodjo* (MSc Pharmaceutical Microbiology), Adama Denou** (PhD Pharmacognosy), Rafiatou Ousmane* (MSc Biotechnology), Sariem Comfort (PhD Clinical Pharmacy), Daouda Labarou*** (PhD Bioinformatics and genomics), Agwom Francis (PhD Pharmaceutical Chemistry), Tougoma Atehezi* (PhD Physiology), Atchrimi Komi Sagnan* (PhD Physiology), Morenikeji Oluwatoyin (MSc Bioinformatics

and genomics), Lapang Dominic (MSc Bioinformatics and genomics), Rwiann Victor (MSc Bioinformatics and genomics), Hamza Abdulrahman (MSc Bioinformatics and genomics), Samuel Isaac (MSc Bioinformatics and genomics), Ammanuel Dabwer Ben (MSc Biotechnology))

* From Togo, ** from Mali, *** from Niger. Other: Nigerians.

Partners and alumni by videoconferencing.

III. PRESENTATION OF THE STUDY PROGRAMME

1 – PRESENTATION OF THE STUDY PROGRAMME

- The institution delivering the programme is The University of Jos, Nigeria and the Africa Centre of Excellence in Phytomedicine Research and Development (ACEPRD).
- The PhD programme offers training in Clinical Pharmacy with the acquisition of advanced knowledge and skills needed to practise pharmacy competently. It involves theoretical, analytical and/or experimental investigations with the view to furthering knowledge and becoming specialists in various areas of clinical pharmacy, which will contribute to knowledge in research, entrepreneurship and the practice of pharmacy.
- The specific features include: English for Special Purposes (ESP) for regional students from Francophone countries, E-learning development with subscription to Science Direct and NgREN, Internships for students in industries to forge academia-industry partnerships.
- The program is developed within the Department of Clinical Pharmacy and Pharmacy Practice for teaching. Students will develop their research in the laboratory facilities at the ACEPRD or associated partners, which is situated at the University of Jos, and also at the Faculty of Pharmaceutical Sciences. No sub-specialization is indicated for the PhD in Clinical Pharmacy. Students enrolled must possess a Master Degree in Clinical Pharmacy with a cumulative score average of at least 60% in the course taken. The mode of study for PhD in Clinical Pharmacy is either full time or part-time over a minimum of 36 and 48 months, and a maximum of 60 and 72 months, respectively.
- PhD in Clinical Pharmacy is integrated within the local, regional and national university landscape via national and international academic partners contributing to the teaching and to workshops, via industrial partners contributing to teaching and providing internships for students, and also by attracting international students.
- its main objectives are: to provide the requisite knowledge and skills needed for advanced clinical practice through the acquisition of right attitude and development of higher cognitive skills that enhance professional competence, to develop self-directed study of relevant subject material to enable critical and analytical skills that will enable the student to design and undertake original research in pharmacy practice i.e., to systematically plan and implement a research project, and to enable students to be intentional and reflective in the transfer of knowledge and practice of clinical pharmacy.

2 - PRESENTATION OF THE PROGRAMME'S SELF-EVALUATION APPROACH

The Committee that worked for & prepared the Accreditation report to HCERES comprised of the following:

1. Prof. Taiwo E. Alemika - Deputy Centre Leader (Chairman)
2. Prof. Ikoni J. Ogaji - Dean, Faculty of Pharmaceutical Sciences
3. Dr. Patrick O. Olorunfemi - Head, Department of Pharmaceutical Microbiology & Biotechnology
4. Dr. Ndidi C. Ngwuluka - Head, Department of Pharmaceutics
5. Dr. Wetkos D. Dayom - Head, Department of Clinical Pharmacy & Pharmacy Practice
6. Dr. Dalen G. Dafam - Head, Department of Pharmacognosy & Herbal Medicine
7. Dr. Patricia O. Odumosu - Head, Department of Pharmaceutical & Medicinal Chemistry
8. Prof. Ezekiel O. Afolabi - Department of Pharmaceutical & Medicinal Chemistry
9. Mr. Mark Kpamak - ACEPRD Admin Officer (Secretary)

IV. EVALUATION REPORT

AREA 1 – THE POSITIONING OF THE DOCTORATE

The PhD in Clinical Pharmacy at ACEPRD is positioned within local, national and international range of study programmes in order to provide graduates of MSc in Clinical Pharmacy with upper level knowledge and skills to become specialists in various areas of Clinical Pharmacy and also to be proficient in research, entrepreneurship and the practice of Pharmacy. The Programme objectives of the doctorate is to enable students to acquaint integrative capacity and reasoning to enhance professional competence, critical and analytical skills to propose and undertake innovative research in the field of Clinical Pharmacy, and also the different aspects of pedagogy to contribute to the transmission of knowledge and practice in Clinical Pharmacy. Doctorates interact with the socio-economic environment in particular during their 1-month internship program at an industry related environment after the first 6 months under the supervision of a supervisor. The programme involves collaborations with universities within the country and international universities. Guest lecturers from partner universities are involved in the training of the students. The PhD in Clinical Pharmacy programme objective contributes to capacity building in the institution. The programme started in 2015 with low number of students (12 PhD students from 2015 to 2018) joining the program. Participation of PhD students to a national or international congress during their PhD would provide further links with the scientific, industrial and/or hospital communities for subsequent post-doctorate training and/or job opportunities.

Area 1-1: The doctorate's distinct features and objectives are clearly defined

The PhD in Clinical Pharmacy of the Africa Centre of Excellence in Phytomedicine Research & Development in University of Jos, Nigeria, provides students with advanced knowledge and skills needed to practice pharmacy competently and to become specialists in various areas of clinical pharmacy. The objectives include the opportunity for training to acquire of right attitude and development of higher cognitive skills that enhance professional competence, to acquire critical and analytical skills that will enable the student design and undertake original research in pharmacy practice and implement a research project, and enable students to be intentional and reflective in the transfer of knowledge and practice of clinical pharmacy. Objectives with regard to knowledge and skills to be acquired are clearly stated. The doctorate's target audience is clearly defined and the name of the study programme is clear with regard to its objectives and content. ACEPRD has an information booklet (Students' Handbook) that contains the objectives and content of the programme, and policies are communicated to all students.

Area 1-2: The positioning of the doctorate is consistent with its environment

The doctorate contributes to capacity building in the institution. The PhD students participate in tutorials and training including short workshops and mentoring of MSc students. PhD graduates can be recruited at Universities to contribute to the training and teaching staff. During the development of their original research in any chosen area of clinical pharmacy practice, PhD students will work together with the Department of Clinical Pharmacy and Pharmacy Practice under the guidance of at least one supervisor. Doctorates interact with the socio-economic environment in particular during their 1-month internship program at an industry related environment after the first 6 months under the supervision of a supervisor. The programme involves collaboration with universities within the country and international universities. Guest lecturers from partner universities are involved in the training of the students. International Advisory Board includes academics from Salford University, Manchester, Université de Lyon, France, Sheffield Hallam University, UK, Université de Lomé, Université de Abomey-Calavi, Benin Republic Université de Sciences et Techniques of Bamako, Mali, Université du Burkina Faso, Ouagadougou, Salford University, UK. Partnerships are well identified, including active national (National Veterinary Research Institute, National Agency for Food and Drug Administration and Control), regional and international academic and Industrial/Sectoral partners involved in education and research. National and international socio-economic partners include Council for Advancement and Support of Education (CASE), USA, World Bank, USA, Association of African Universities, (AAU), Ghana. The doctorate has access to the research laboratories and the equipment as well as support of experts at the Department of Clinical Pharmacy and the ACEPRD, to 24-h computer access in all facilities, and also to the facilities of the academic and industrial partners. The modality of self-evaluation of the doctorate is not provided.

AREA 2 – ORGANIZATION AND MANAGEMENT OF THE DOCTORATE

The PhD programme in Clinical Pharmacy is managed by a clearly defined teaching team with appropriate number of members and of education level, and able to cover the different areas of Clinical Pharmacy, and supported by an administrative team. In addition, academic partners both national and international ones, and partners from industries contribute to teaching through workshops and short courses, also by mentoring internships. The management of the training is based on clearly defined rules that are brought to the attention of the students. Students have access to the different equipment and facilities of the Center, a computer laboratory, and get support from laboratory manager. The criteria for the recruitment of PhD candidates are established, explicitly stated and transparent. Financial support is provided for National and Regional students to allow them to conduct their doctorate under the best conditions. The governance of the doctorate and internal quality assurance mechanisms can be improved to help the doctorate to develop.

Area 2-1: Effective organization and management is in place for the doctorate

The PhD in Clinical Pharmacy's organizational structure is based on a teaching team including 15 members covering the different domains of specialization in Clinical Pharmacy. The teaching staff includes 4 Professors and Lecturers with 8 members having a PhD level. An administrative team is also supporting the programme. In addition, several partners from academia and pharmaceutical industries contribute to teaching and training through workshops, seminars and by mentoring a 1-month internship in an industry related environment. The role and responsibilities of each teaching team member are clearly defined and understood by all stakeholders. Detailed information regarding the modality of governance of the doctorate and the involvement of doctoral student representatives is not provided. The management of the PhD programme and its different elements is clearly defined. The Students' handbook provides detailed information regarding the programme, the management, and the rules of the PhD programme in Clinical Pharmacy. PhD students are invited to participate to workshops and short courses in the area of Clinical Pharmacy. Procedure for regular self-evaluation of the doctorate is not provided.

Area 2-2: There is an explicit policy for recruiting and funding doctoral students, which is adapted to the PhD program

The rules for recruitment of PhD students are clearly defined. Candidates submit a written proposal to the Department for review and assignment of a supervisor(s), and also the justified project budget approved by the primary supervisor. Both National and Regional PhD students are supported for tuition, transportation, living expenses, accommodation and Laboratory consumables for 3 years. At least 2 journal publications in Elsevier – Indexed journals are expected from each PhD student by the end of the program. In case an extension period after the 3-year period is required to finalize the PhD training, mechanism to support the student to complete their doctorate under the best conditions should be indicated. Special services for students with particular needs such as students with disabilities are not indicated.

AREA 3 – SUPERVISION AND TRAINING FOR DOCTORAL STUDENTS

The doctoral student is developing his research project under the supervision of more than one supervisor from the appropriate department. The PhD student and supervisor meet on regular basis to discuss research progress and to solve any problem. A document regarding thesis rules signed by the PhD student and the supervisor(s) to define precisely the obligations of each party is not established. The co-supervisor and members of the department also provide scientific input for the thesis project during the presentation of the results at a seminar. A mid-thesis evaluation of the advancement of the research project by an evaluation committee is recommended to identify any difficulty or problem, and to propose solutions for the development of the research project so that the doctoral student will be able to achieve the PhD defence within the 3-year period. The doctorate offers diverse teaching including disciplinary and scientific training and also professional training as appropriate. Students are invited to take part in supplementary scientific and/or professional events to gain additional expertise and training. The rules for thesis defence are clearly stated and provided to doctoral students.

Area 3-1: The doctorate applies a strict doctoral student supervision and follow-up policy

The PhD project of each student is supervised by more than one supervisor from the appropriate departments. The primary supervisor and the student meet on regular basis and as necessary to discuss the progression of the research project and the student gets further input from the co-supervisor. Other members of the department can also provide input when the PhD candidate is presenting the findings during a seminar. Rules governing the relationship between the supervisor and student are not mentioned. The expected outcome of the 3-year PhD research period involves at least 2 publications in Elsevier – Indexed journals. Students will also get training regarding Information Communication Techniques including pedagogy and entrepreneurship for preparation of employment. Inclusion of an evaluation committee evaluating the progress of the research at mid-thesis period and involving an internal and an external member of the department would provide valuable recommendations for thesis development. Measures to combat fraud are applied and those for false declaration are provided.

Area 3-2: The doctorate offers diverse teaching and organizes supplementary events

The PhD training offers different modalities of disciplinary and scientific training including lectures, seminar, critical scientific reading and writing, and an internship in a professional environment suited to their profile and career plans. During the development of the internship and the thesis project, doctoral students have access to professional training in the research and industry fields. Socio-economic partners contribute to training during workshops, short lectures and during the Information Communication and Technology courses. Methods for accessing and validating the teaching are clearly defined and known by users. PhD students are invited to participate in workshops and short courses to gain additional knowledge and expertise. Methods for access, validation and evaluation in supplementary scientific and/or professional events are not detailed. The participation of each PhD student to a national and/or international conference would provide further training, motivation and network building for future post-doctoral training and/or job opportunities.

Area 3-3: The doctorate is based on explicit rules for thesis duration and defence

The doctorate provides clear objectives with regard to the duration of theses and re-enrolment of doctoral students each year for both full time and part-time mode of study. Students will be assessed based on the regulations governing examinations and assessments of the school of Postgraduate studies. The criteria for authorizing thesis defence include writing of a thesis embodying the result of their original research in any chosen area of clinical pharmacy including a critical review of existing knowledge that leads to novel findings in Clinical Pharmacy or Pharmacy Practice research and contributes significantly to knowledge. The organization rules for thesis defence including composition of the examination board and role of its members, convening notice, manuscript submission are not provided.

AREA 4 – INTEGRATION OF DOCTORS INTO THE JOB MARKET

The doctorate In Clinical Pharmacy is a relatively young curriculum, which started in 2015. Therefore, analysis of the outcome regarding the integration of doctors into the job market is too early with the first 3 PhD students who graduated in 2018. The PhD curriculum in Clinical Pharmacy offers a very large potential of job opportunities in the different areas of Clinical Pharmacy and Practice in Hospitals, the pharmaceutical industry, Universities and government Health Agencies. Graduates can also pursue for post-doctoral training to become specialists in the field of research, entrepreneurship and the practice of Pharmacy. Modalities for effective monitoring and evaluation of the integration of doctors into the job markets, and the use of such collected data to promote the doctorate among local, national and international partners, and to develop the doctorate remain to be established. The establishment of an alumni directory or network of former doctoral students is strongly suggested to contribute to mentor doctoral students and provide opportunities of internships and job.

Area 4-1: The doctorate includes mechanisms to promote the integration of doctors into the job market

The doctorate implements systems to promote the doctorate among local, national and international partners such as the 1-month internship program at an industry related environment after the first 6 months of enrolment into the PhD programme, by attending workshops and short courses, and also based on privileged

partnerships of ACEPRD with several university partners and industry partners for teaching and for short term stays of doctoral students to perform additional research investigations. No information is provided whether doctoral students are informed regarding the requirements and conditions for accessing all potential positions. Throughout the doctorate, the evaluation of discipline-specific and transferable skills follows the rules of the School of Postgraduate studies.

Area 4-2: The doctorate has effective monitoring of the integration of doctors into the job market

The PhD in Clinical Pharmacy is a relatively young training curriculum, which started in 2015. Therefore, it is too early to evaluate the integration of graduates into the job market. The modalities regarding the effective monitoring system of cohorts of doctors and the development of an alumni directory or network of former students is not provided.

Area 4-3: The data collected is analysed, communicated and used

Due to the start of the doctorate in Clinical Pharmacy in 2015, data collected regarding integration of doctors into the job market are not yet available. Modalities regarding analysis of such collected data and their communication to doctorate applicants/doctoral students/doctors and stakeholders, their use to develop the doctorate and to strengthen promotion of the doctorate to local, national and international partners are not provided.

V. CONCLUSION

The PhD programme offers training in Clinical Pharmacy and Pharmacy Practice. The programme started in 2015 and only a few students have graduated. The PhD in Clinical Pharmacy at ACEPRD has a qualified teaching staff with appropriate number of teachers to cover the courses of the different disciplines. The programme involves also professionals from pharmaceutical industries and hospitals through the contribution to teaching, mentoring and internships, and an adequate strong involvement of research elements including seminars and the development of innovative research, and thesis defence in Clinical Pharmacy. The curriculum provides students the opportunity to acquire advanced knowledge and skills needed to practice pharmacy competently in the different areas of Clinical Pharmacy at the hospital, pharmacy, pharmaceutical industry, University and government health related Agencies.

Outcomes in terms of job opportunities are excellent in the different areas of Clinical Pharmacy through a network of professional partners. Industry partners are identified (i.e. Pauco Pharmaceuticals, Gauze Pharmaceuticals, Juhel Pharmaceuticals, ECWA Pharmaceuticals, Gwalgwalada Specialist Hospital, Plateau Specialist Hospital, Jos University Teaching Hospital), and they interact with students in terms of internships and job opportunities. The PhD is positioned with local, national and international range of study programmes to provide PhD students with upper level of knowledge and skills for Clinical Pharmacy and Practice, for entrepreneurship and also for pursuing a career in innovative research in the pharmaceutical industry and University. ACEPRD has an information booklet (Students' Handbook) that contains the objectives and content of the programme, and policies are communicated to all students. The management of the training is based on clearly defined rules that are brought to the attention of the students. Students have access to the equipment and facilities of the ACEPRD, 24-h internet access, and they get support from staff for their research. The criteria for the recruitment of PhD candidates are established and explicitly stated. Financial support is provided for National and Regional students to allow them to conduct their doctorate under the best conditions. The governance of the doctorate and internal quality assurance mechanisms can be improved to help the doctorate to develop.

PAST ACHIEVEMENTS

Clinical Pharmacy is a corner stone discipline in the health system with regards to contributing to take care of patients and contributing to different health related areas including diagnostics, therapeutics, pharmacokinetics, pharmaceutical care planning, and also more professional ones such as pharmacy management, entrepreneurship and research. The evolution of the knowledge regarding diseases, identification of new targets, the development of innovative drugs and drug formulations, and the continuous evolution of recommendations of treatment plans requires continuous development of the training in Clinical Pharmacy to acquire the appropriate expertise and skills.

TODAY'S CHALLENGES

Today's challenges for ACEPRD are numerous and important for the future: 1) Provide upper level training of specialists in the different areas of Clinical Pharmacy requiring a multidisciplinary teaching staff with appropriate numbers of teachers and education level, and also appropriate research and university hospital partners, 2) Being able to adapt the curriculum to the fast evolution of the scientific knowledge regarding pathologies, innovative drugs, biomaterials, diagnostics and therapeutics treatments, 3) Develop the curriculum in close collaboration with professional partners both from the industry and hospitals, 4) Provide opportunities for doctoral students for international experience and network, 5) Provide a stimulating and competitive research environment for doctoral students with financial support to develop their PhD research in good conditions.

OUTLOOK TO THE FUTURE

Clinical Pharmacy is a cornerstone discipline in the healthcare system. Advanced education in Clinical Pharmacy is further warranted for the healthcare system and in particular due to the aging of the society requiring special health-related needs, the appearance of pathologies affecting East and West Africa, the continuous needs for developing clinical pharmacy and practice, the development of health related government agencies, the development of innovative pharmaceutical industries with regards to classic and traditional medicine, and also for upper level education in Clinical Pharmacy.

STRENGTHS

- Excellent job opportunities in hospitals, pharmaceutical industries, Universities, and government agencies
- Involvement of several local industrial and hospital partners, and also of a few national and international partners for internships and contribution to teaching
- Appropriate teaching staff number and composition, and teaching and research facilities for such a multidisciplinary curriculum.

WEAKNESSES

- Low number of doctoral students in particular female and foreign students for this young curriculum
- Limited involvement of associate or guest lecturers or researchers to support strong links between teaching and research
- Limited partnerships with foreign education institutions
- Limited national and international exposure of students to start build a network enabling internship and job opportunities
- Limited comprehensive information on graduate outcomes that contributes to the attractiveness of the programme
- Updated alumni of graduates remains to be developed to facilitate networking for mentoring, internship and job opportunities
- Poor evaluation and monitoring of the curriculum for further development.

RECOMMENDATIONS

- Continue to increase the attractiveness of the curriculum for national and international students
- Support further internationalization of the curriculum with involvement of leading international experts to teaching and a short-term international training period for students
- Improve teaching and research networks with regional, national and international partner Universities
- Provide manpower to track the outcome of the curriculum for improved attractiveness, mentoring and network building.

VI. COMMENTS OF THE INSTITUTION

UJ/ACEPRD/O102/03
Prof. François PERNOT
Directeur/Director
Département Europe et International
Europe and International Department
francois.pernot@hceres.fr

August 25, 2019

Dear Sir

COMMENTS OF THE INSTITUTION

The Africa Centre of Excellence in Phytomedicine Research and Development (ACEPRD), Faculty of Pharmaceutical Sciences, University of Jos has submitted 9 postgraduate programmes. The HCERES has considered the programmes for evaluation and consequent accreditation, with the report made available to the Centre for comments.

The team of the ACEPRD/Faculty that considered the report and made comments available are:

- | | |
|-----------------------------|--------------------------------------|
| 1. Prof. John C. Aguiyi | Director/Centre Leader |
| 2. Prof. Ikoni Ogaji | Dean, Faculty of Pharmacy Sciences |
| 3. Prof. Taiwo E. Alemika | Deputy Director, ACEPRD |
| 4. Prof. Patrick Olorunfemi | Head, Biotechnology and Microbiology |
| 5. Dr. Wetkos Dayom | Head, Clinical Pharmacy and Practice |
| 6. Dr. Dalen Dafam | Head, Pharmacognosy |
| 7. Dr. Patricia Odumosu | Head, Bioinformatics and Genomics |
| 8. Mr. Mark Kparamak | Project Administrator |

Members of the team considered the report of each of the postgraduate programmes and made its comments as follows:

1. PhD CLINICAL PHARMACY AND PHARMACY PRACTICE

Page 3. Student Population

The Department presents an updated number for the admitted students.

S/No	Year	Total/Year	Female	Male	International	National	Total
1	2015/2016	3	2	13	1	14	15
2	2016/2017	4					
3	2017/2018	4					
3	2018/2019	4					

Note: The total number is cumulative for years 2015-2019

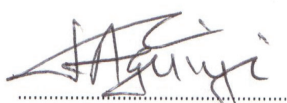
Page 4. PhD Sub-specialization areas include:

1. Therapeutics
2. Pharmaco-epidemiology
3. Drug utilization
4. Pharmaco-economics
5. Cognitive and Psychotherapy
6. Public Health
7. Ethno-therapeutics

Page 9. Weaknesses

1. The first enrolment targeted staff and preceptors to develop manpower to deliver on the programme.
2. There is active involvement of preceptors/lecturers outside the department to deliver on programme mandate.
3. The Department is discussing with academic advisory board members and their institutions to attract guest lecturers from such foreign institutions.
4. As stated, the first enrolees are already employed in the University and are about rounding up the programme to play active role in teaching and research in the Department.
5. Curriculum is undergoing routine checks and adjustments to meet expected standard. There is a statutory periodic review of the curriculum.

Thank you.



Prof. John C. Aguiyi
Director/Centre Leader, ACEPRD
For: Team, ACEPRD

NB: URL TO LABORATORIES

http://aceprd.unijos.edu.ng/viewing_image/322fc987-4e53-455a-9063-2de163ab2ee7/
<http://aceprd.unijos.edu.ng/playing-video-d6aea9cb-613a-4b36-889b-bb29a145bd69/>

ACCREDITATION DECISION

Ph.D. Clinical Pharmacy

Africa Centre of Excellence in Phytomedicine
Research and Development (ACEPRD),
University of Jos, Nigeria

September 2019

SCOPE OF THE ACCREDITATION GRANTED BY HCÉRES

Hcéres has built its evaluation process based on a set of objectives that Higher Education Institution must pursue to ensure recognised quality within France and Europe. These objectives are divided up into six fields among which are the accreditation criteria.

As for the « External Evaluation Standards », the accreditation criteria have been specifically designed for foreign HEI. The accreditation criteria were adopted by the Board on June 2016 and are available on the Hcéres website (hceres.fr).

The accreditation committee, meeting his accreditation decision, has wholly taken into account the final evaluation report of the HEI. This accreditation decision is the result of a collegial and reasoned process.

The accreditation decision issued by Hcéres shall not grant any rights whatsoever, whether in France or abroad. The decision to accredit an institution confers an accreditation label and does not infer recognition in France of the qualifications issued by the accredited institution. The Hcéres accreditation process therefore has no impact on the qualifications recognition process in France.

ANALYSIS OF THE ACCREDITATION CRITERIA

AREA 1: THE POSITIONING OF THE DOCTORATE

Accreditation criterion

The positioning, the content and the objectives of the doctorate are clearly defined. Its interactions with the stakeholders (lead institution(s), foreign partners, socio-economic environment) are formally set out and effective. Its links with the research units and the institution's scientific policy are effective.

Criterion assessment

The PhD in Clinical Pharmacy at ACEPRD is positioned within local, national and international range of study programmes in order to provide graduates of MSc in Clinical Pharmacy with upper level knowledge and skills to become specialists in various areas of Clinical Pharmacy and also to be proficient in research, entrepreneurship and the practice of Pharmacy. The Programme objectives of the doctorate is to enable students to acquaint integrative capacity and reasoning to enhance professional competence, critical and analytical skills to propose and undertake innovative research in the field of Clinical Pharmacy, and also the different aspects of pedagogy to contribute to the transmission of knowledge and practice in Clinical Pharmacy. Doctorates interact with the socio-economic environment in particular during their 1-month internship program at an industry related environment after the first 6 months under the supervision of a supervisor. The programme involves collaborations with universities within the country and international universities. Guest lecturers from partner universities are involved in the training of the students. The PhD in Clinical Pharmacy programme objective contributes to capacity building in the institution. The programme started in 2015 with low number of students (12 PhD students from 2015 to 2018) joining the program. Participation of PhD students to a national or international congress during their PhD would provide further links with the scientific, industrial and/or hospital communities for subsequent post-doctorate training and/or job opportunities.

AREA 2: ORGANIZATION AND MANAGEMENT OF THE DOCTORATE

Accreditation criterion

The doctorate's organisation and management are clearly defined and rely on material and human resources adapted to the requirements of programmes at ISCED level 8. Internal quality assurance mechanisms are in place and effectively used in order to improve continuously the doctorate. The doctoral students recruiting is formally set out, their funding is fair and sustainable.

Criterion assessment

The PhD programme in Clinical Pharmacy is managed by a clearly defined teaching team with appropriate number of members and of education level, and able to cover the different areas of Clinical Pharmacy, and supported by an administrative team. In addition, academic partners both national and international ones, and partners from industries contribute to teaching through workshops and short courses, also by mentoring internships. The management of the training is based on clearly defined rules that are brought to the attention of the students. Students have access to the different equipment and facilities of the Center, a computer laboratory, and get support from laboratory manager. The criteria for the recruitment of PhD candidates are established, explicitly stated and transparent. Financial support is provided for National and Regional students to allow them to conduct their doctorate under the best conditions. The governance of the doctorate and internal quality assurance mechanisms can be improved to help the doctorate to develop.

AREA 3: SUPERVISION AND TRAINING FOR DOCTORAL STUDENTS

Accreditation criterion

A strict policy of supervising and follow-up of doctoral students is set. Doctoral students have access to various teaching and professional trainings and take part in scientific/professional actions. Explicit rules are defined concerning the thesis duration and defence. Measures to combat fraud, plagiarism and corruption are applied within the doctorate.

Criterion assessment

The doctoral student is developing his research project under the supervision of more than one supervisor from the appropriate department. The PhD student and supervisor meet on regular basis to discuss research progress and to solve any problem. A document regarding thesis rules signed by the PhD student and the supervisor(s) to define precisely the obligations of each party is not established. The co-supervisor and members of the department also provide scientific input for the thesis project during the presentation of the results at a seminar. A mid-thesis evaluation of the advancement of the research project by an evaluation committee is recommended to identify any difficulty or problem, and to propose solutions for the development of the research project so that the doctoral student will be able to achieve the PhD defense within the 3-year period. The doctorate offers diverse teaching including disciplinary and scientific training and also professional training as appropriate. Students are invited to take part in supplementary scientific and/or professional events to gain additional expertise and training. The rules for thesis defense are clearly stated and provided to doctoral students.

AREA 4: INTEGRATION OF DOCTORS INTO THE JOB MARKET

Accreditation criterion

The doctorate implements systems to promote the doctorate and the integration of doctors into the job market. The integration monitoring and analysis are effective and used to perform the continuous improvement of the doctorate.

Criterion assessment

The doctorate In Clinical Pharmacy is a relatively young curriculum, which started in 2015. Therefore, analysis of the outcome regarding the integration of doctors into the job market is too early with the first 3 PhD students who graduated in 2018. The PhD curriculum in Clinical Pharmacy offers a very large potential of job opportunities in the different areas of Clinical Pharmacy and Practice in Hospitals, the pharmaceutical industry, Universities and government Health Agencies. Graduates can also pursue for post-doctoral training to become specialists in the field of research, entrepreneurship and the practice of Pharmacy. Modalities for effective monitoring and evaluation of the integration of doctors into the job markets, and the use of such collected data to promote the doctorate among local, national and international partners, and to develop the doctorate remain to be established. The establishment of an alumni directory or network of former doctoral students is strongly suggested to contribute to mentor doctoral students and provide opportunities of internships and job.

ACCREDITATION DECISION

Considering the accreditation criteria analysis detailed above, the accreditation commission takes the following decision:

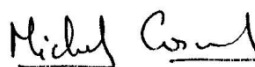
“Five-year unreserved accreditation decision”

and draws attention to the various recommendations made by the committee of experts in its evaluation report:

- Continue to increase the attractiveness of the curriculum for national and international students.
- Support further internationalization of the curriculum with involvement of leading international experts to teaching and a short-term international training period for students.
- Improve teaching and research networks with regional, national and international partner Universities.
- Provide human resources to track the outcome of the curriculum for improved attractiveness, mentoring and network building.

SIGNATURE

For HCERES and on behalf of



Michel COSNARD,

President

Date: Paris, September 4th, 2019

Les rapports d'évaluation du Hcéres
sont consultables en ligne : www.hceres.fr

Évaluation des coordinations territoriales
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Évaluation de la recherche
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2 rue Albert Einstein
75013 Paris, France
T. 33 (0)1 55 55 60 10

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