

## EVALUATION AND ACCREDITATION DOCUMENTS

Ph.D. Pharmaceutical Microbiology

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

Nigeria

**September 2019**

**CONTENTS**

EVALUATION REPORT .....3 - 12

COMMENTS OF THE INSTITUTION ..... 13 -14

ACCREDITATION DECISION ..... 15 - Following

## EVALUATION REPORT

### **Ph.D. Pharmaceutical Microbiology**

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

**JUNE - 2019**

The University of Jos has mandated the Hcéres to perform the evaluation of its Pharmaceutical Microbiology doctoral program evaluation. The evaluation is based on the "External Evaluation Standards" of foreign study programmes, adopted by the Hcéres Board on October 4<sup>th</sup>, 2016. These standards are available on the Hcéres website (hceres.fr).

**For the Hcéres<sup>1</sup> :**

Michel Cosnard, President

**On behalf of the experts committee<sup>2</sup> :**

Dominique Laurain-Mattar , President of the committee

In accordance with the decree n°2014-1365, November 14<sup>th</sup>, 2014,

<sup>1</sup> 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" (article 8, alinea 5). □

<sup>2</sup> The evaluation reports "sont signés par le président du comité". (Article 11, alinéa 2) — "are signed by the president of the committee" (article 11, alinea 2).

# CONTENTS

I. national context and institution identity sheet .....	6
General context and Higher education .....	6
Institution .....	6
METHODS AND RESULTS OF THE PREVIOUS ACCREDITATION(S) .....	6
HUMAN AND MATERIAL RESOURCES DEDICATED TO THE PROGRAMME .....	6
STUDENT POPULATION: EVOLUTION AND TYPOLOGY OVER THE LAST 4 YEARS .....	7
II. On-site visit description .....	7
Composition of the experts panel .....	7
On-site visit description .....	7
III. PRESENTATION OF THE STUDY PROGRAMME .....	8
1 – PRESENTATION OF THE STUDY PROGRAMME.....	8
2 - Presentation of the programme's self-evaluation approach.....	8
IV. EVALUATION REPORT .....	9
AREA 1 – THE POSITIONING OF THE DOCTORATE .....	9
Area 1-1: The doctorate's distinct features and objectives are clearly defined .....	9
Area 1-2: The positioning of the doctorate is consistent with its environment .....	9
AREA 2 – ORGANIZATION AND MANAGEMENT OF THE DOCTORATE.....	9
Area 2-1: Effective organization and management is in place for the doctorate.....	9
Area 2-2: There is an explicit policy for recruiting and funding doctoral students, which is adapted to the PhD program .....	10
AREA 3 – SUPERVISION AND TRAINING FOR DOCTORAL STUDENTS .....	10
Area 3-1: The doctorate applies a strict doctoral student supervision and follow-up policy .....	10
Area 3-2: The doctorate offers diverse teaching and organizes supplementary events .....	10
Area 3-3: The doctorate is based on explicit rules for thesis duration and defence .....	10
AREA 4 – INTEGRATION OF DOCTORS INTO THE JOB MARKET .....	11
Area 4-1: The doctorate includes mechanisms to promote the integration of doctors into the job market.....	11
Area 4-2: The doctorate has effective monitoring of the integration of doctors into the job market .....	11
Area 4-3: The data collected is analysed, communicated and used .....	11
V. conclusion .....	11
StrENGTHS.....	12
WeakNESSES .....	12
VI. COMMENTS OF THE INSTITUTION.....	13

# 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 Centres 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 Pharmaceutical Microbiology and Biotechnology
3. Programme's title: PhD in Pharmaceutical Microbiology
4. Training/specialty: Pharmaceutical Microbiology
5. Year of creation and context: 2014
6. Site(s) where the programme is taught (Town and campus): Africa Centre of Excellence in Phytomedicine Research & Development (ACEPRD), University of Jos
7. Programme director:
  - a. Surname, first name: Aguiyi, 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 Programme has been evaluated and accredited by the National Universities Commission in 2017.
9. Results: Positive.

## HUMAN AND MATERIAL RESOURCES DEDICATED TO THE PROGRAMME

10. Human resources  
The human resources including the number and the level of teachers, and representatives if the different disciplines are in good accordance with the needs for training, research and mentoring internships.  
Clinical Pharmacy: 4 Professors, 1 Senior Lecturer, 10 Lecturers  
Biotechnology: 11 Professors, 2 Senior Lecturers, 1 Lecturer II, 4 Readers  
Bioinformatics and genomics: 9 Professors, 3 Senior Lecturers, 1 Reader  
Pharmaceutical microbiology: 6 Professors, 3 Senior Lecturers, 1 Reader  
Pharmacognosy: 8 Professors, 1 Senior Lecturer, 2 Lecturers, 2 Readers

11. Material resources  
Recent equipments 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: Analytikjena 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 Pharmaceutical Microbiology

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

Numerical inconsistencies in MPhil/PhD international students in Pharmaceutical Microbiology can be found between the figures in this table and those presented during the on-site visit. The other table did not show any foreign student for this training.

## II. ON-SITE VISIT DESCRIPTION

### 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 10<sup>th</sup>, 2019.
- Organization of the visit: the visit was made the 10<sup>th</sup> 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  
 Ndidi 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 Kpamak, 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 the subject area of Pharmaceutical Microbiology. This is essential for attaining higher level of expertise in specialized areas within the broader discipline of Pharmaceutical Microbiology and also to meet the manpower needs of academia and research institutions, drug industry and drug quality control. The programme is structured to provide a range of courses and challenges in Pharmaceutical Microbiology leading to degrees of PhD in Pharmaceutical Microbiology.
- The specific features include: Enrollment of students (including regional) for various postgraduate programmes, English for Special Purposes (ESP) for regional students from Francophone countries, E-learning development with subscription to Science Direct and NgREN, and Internships for students in industries to forge academia-industry partnerships.
- Students enrolled must possess a first degree in Pharmacy, Microbiology or closely related discipline. Candidates who are not Pharmacists may be required to take some undergraduate Pharmacy courses as deemed necessary. The PhD degree is opened to candidates with MSc or M. Phil. Degree in Pharmaceutical Microbiology from an approved institution with at least a CSA of 60% or its equivalent.

#### 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 Pharmaceutical Microbiology at ACEPRD is positioned within local, national, regional and international range of study programmes in order to provide clearly identified target student audience with high quality knowledge and skills required to carry out applied research in Pharmaceutical Microbiology. The PhD in Pharmaceutical Microbiology programme contributes for attaining higher level of expertise in specialized areas within the broader discipline of Pharmaceutical Microbiology and also to meet the manpower needs of academia and research institutions, drug industry and drug quality control. The programme is young with low number of students (2 PhD students from 2015 to 2018) joining the program. Addition of specific partners for a few specialized areas would strengthen the programme.

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

The PhD in Pharmaceutical Microbiology of the Africa Centre of Excellence in Phytomedicine Research & Development in University of Jos, Nigeria, provides students with knowledge and skills required to produce graduates knowledgeable in theory and practice in Pharmaceutical Microbiology.

The programme is structured to provide a range of courses and challenges in Pharmaceutical Microbiology. The aim is to produce experts in specialized areas within the broader discipline of Pharmaceutical Microbiology and also to meet the manpower needs of academia and research institutions, drug industry and drug quality control. Objectives with regard to knowledge and skills to be acquired have to be developed. ACEPRD has an information booklet and policies (Students' Handbook) are communicated to all students and contains the content of the programme.

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

The doctorate contributes to capacity building in the institution. The doctoral students participate in tutorials and training, including short courses and hands-on activities.

The study programme is positioned with regard to the business world in which graduates will be employed. 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 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 complete lists of academic staff and technical staff involved in education and research, are provided.

### AREA 2 – ORGANIZATION AND MANAGEMENT OF THE DOCTORATE

The doctorate's organisational structure is based on a structured, identified and defined teaching and administrative team. Governance of the doctorate has to be identified and to involve doctoral student representatives. The doctorate has material and human resources. Student recruitment methods are clearly defined, transparent. The recruitment of PhD students in Pharmaceutical Microbiology is low until now. Doctoral students recruited have the appropriate conditions for preparing their doctorate. 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 doctorate's organisational structure is based on structured teaching and administrative team. The role and responsibilities of faculty members are well defined. Appropriate organograms, roles and responsibilities of academic staff with the roles and responsibilities of faculty, administrative staff in ACEPRD Code. No

information about management is provided. The least qualified academic staff is senior Lecturer. Others are Professors with relevant knowledge in the courses allocated to them. Academic experts from national and regional partners are also engaged in lecturing. Duration of programme is defined with a minimum of 36 months and a maximum of 60 months. Candidates registered for the PhD degree will attend and participate in workshops on research techniques and methodology in the field of specialization offered in the Department and approved by the supervisor. All PhD students enrolled in the Center's PhD programs will undertake a 1-month internship at an industry related environment after the first 6 months, and their PhD thesis research in the different Departments of the Centre. However, the detailed information regarding all PhD students is not provided. For example, the total number of PhD students in Pharmaceutical Microbiology is 2 but the thesis research title is not provided.

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

While there is no funding policy for doctorate degree, ACEPRD provides funds for regional PhD students (a return ticket is provided and support for tuition, transportation, living expense, accommodation and laboratory consumables) and also for students enrolled in internships within Nigeria (transportation allowances and partial living expenses). The student recruitment methods are clearly defined.

Doctoral students recruited are provided with opportunities to remain at the forefront through participation in research projects, conferences, seminars, international forums and access to the latest international literature.

## AREA 3 – SUPERVISION AND TRAINING FOR DOCTORAL STUDENTS

The PhD in Pharmaceutical Microbiology includes a set of teaching units that are consistent with the objectives and permits gradual specialization. Student progress is monitored by two supervisors that ensures that appropriate conditions are in place. Doctoral students have access to scientific teaching and professional training. The teaching proposed is based on the expertise of research units and socio-economic partners associated with the doctorate. The doctorate has set clear and suitable objectives with regard to the duration of theses considering the profiles of doctoral students and any special conditions.

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

Rules are set for supervising and follow-up of doctoral students, including more than one supervisor for each student. One from the student's department and the other from any other department or faculty in the university but with relevant interest in the PhD research topic. Project title approval is determined by a committee. Major corrections on thesis should be appropriately handled by the internal examiner and the department in conjunction with the supervisors. The University also has an ethical review panel that oversees all research works done within the context of the programme.

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

Doctoral students have access to scientific teaching and professional training, including seminars and workshops on research techniques and methodology in the field of specialization offered in the Department and approved by the supervisor. Methods for accessing and validating this teaching are defined and known by users. Students have to present seminars, and have to attend lectures as well as guest lectures organised by the centre and the university.

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

The doctorate has set appropriate objectives with regard to the duration of PhD with a part-time or full time programme of a minimum of three years (full time) and a maximum of five years (part time). Students present seminars on the thesis on internal level, at the faculty level. These are clearly stated in the students' handbook. Information such as organisation rules for thesis defence (composition of the examination board and role of its members, convening notice, manuscript submission, etc.) are not provided.

## AREA 4 – INTEGRATION OF DOCTORS INTO THE JOB MARKET

Doctorate integration in the job market is excellent and mainly coming from interaction with the parthners that provide students job opportunities. Success rate in access to further studies and job market are very good.

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

Doctorate integration in the job market is mainly coming from interaction with the partners. Internship trainings, conferences and outreach programs are providing opportunities and students are expected to take an active part in finding job opportunities.

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

The programme is recent and only a few students graduated so far. Effective monitoring systems are not yet in place. However success rate in access to further studies and job market are high, all the PhD students found a job.

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

The programme is still young, and data collection has not started yet.

## V. CONCLUSION

The PhD programme offers training in Pharmaceutical Microbiology. The programme is recent and only a few students graduated so far. The PhD in Pharmaceutical Microbiology at ACEPRD possess an adequate number of qualified staff, appropriate communication regarding learning and job outcomes. The training programme is positioned in order to provide students with high quality knowledge and skills required to carry out applied research in Pharmaceutical Microbiology also to meet the manpower needs of academia and research institutions, drug industry and drug quality control.

Outcomes in terms of job opportunities and further studies are outstanding through an network of partners. Industry partners are identified (ie Pauco Pharmaceuticals, Gauze Pharmaceuticals, Juhel Pharmaceuticals, ECWA Pharmaceuticals, Gwalgwalada Specialist Hospital, Plateau Specialist Hospital, Jos University Teaching Hospital), they interact with students on matters relating to employment opportunities. The PhD in Pharmaceutical Microbiology at ACEPRD is positioned within local, national and regional range of study programmes in order to provide clearly identified target student audience with high quality knowledge and skills required to carry out applied research in Pharmaceutical Microbiology. ACEPRD has an information booklet and policies (Students' Handbook) are communicated to all students and contain the objectives and content of the programme.

The doctorate's organisational structure is based on a structured, identified and defined teaching and administrative team. Appropriate internal quality assurance mechanisms have to be in place. While there is no funding policy for doctorate degree, ACEPRD provides funds for regional PhD students and also for students enrolled in internships within Nigeria. Student recruitment methods are clearly defined and transparent. The doctorate programme includes a set of teaching units that are consistent with the objectives and permits gradual specialization. Doctoral students have access to scientific teaching and professional training based on the expertise of research units and socio-economic partners associated with the doctorate. Doctorate integration in the job market is mainly coming from interaction with the partners that provide students job opportunities. Success rate in access to further studies and job market are outstanding. The overall assessment of the PhD in Pharmaceutical Microbiology needs further details.

## PAST ACHIEVEMENTS

Considering that Phytomedicine research holds the key to the discovery of new medicines, ACEPRD embarked on creating a comprehensive regional and national repository that will serve as a research tool for

the academia and industry in drug development by providing access to scientific information on lead compounds from microorganisms, fungi and plants.

A Product Registration has been made: Scabi-plus antimicrobial soap and lotion. More species have been added in the Medicinal Plant Garden. These include *Vernonia amygdalina*, *Mucuna pruriens*, *Ocimum gratissimum*, *Momordica charantia*, *Cymbopogon citratus*, *Oreganum vulgare*, *Ricinus communis*, *Persea americana*. A Business Plan was developed for anti-snake venom vaccine and Scabi-Plus products.

## TODAY'S CHALLENGES

Today's challenges are numerous for ACEPRD. Notably, to stimulate indigenous research and innovation in Pharmaceutical Microbiology to drive policies and programs in the region. The necessity to mobilize local, regional and international support for improving research in Microbiology to meet the manpower needs of academia and research institutions, drug industry and drug quality control.

## OUTLOOK TO THE FUTURE

For the future, ACEPRD aims to develop commercial aspect on anti-snake venom vaccine, anti-fertility drugs, mushroom and *Artemisia annua* cultivation. Also ACEPRD aims to develop commercial aspect of products such as Scabi-plus Soap® (Project 6,000 tablets per year), Scabi-plus Lotion®. Others products are in the pipeline: Phyto-supplemented bottled water; Anti-hypertensive tea; Phyto-pesticides; Phyto-slim-fit drug; Anti-conceptive drug; Erectile dysfunction drugs; Eye bright (for eye problems). Projected revenue generation in 4 years = \$1.5 – 2 millions.

## STRENGTHS

- Job opportunities in hospitals, pharmaceutical industries, and Universities
- Appropriate industrial and hospital partners proposing internships and contributing to teaching
- Well-structured training programme, with an adequate number of qualified staff
- National, regional and international academic partnerships, with industry and organizations relevant to Pharmaceutical Microbiology
- Excellent job outcome opportunities
- Appropriate teaching staff number and composition, and teaching and research facilities for such a multidisciplinary curriculum.

## WEAKNESSES

- Lack of information on the management of the doctorate
- Communication strategies for the program and its curriculum are not presented
- Low visibility of the program within the West and Central African region
- Low number of regional students enrolled in PhD of Pharmaceutical Microbiology due to limited scholarships to support students' enrolment
- No information about laboratory for research
- No information about an International Advisory Board including academics from leading Universities from Europe and US
- No communication strategies for the program and its curriculum.

## RECOMMENDATIONS

- Improve your training programs and research
- Keep up your business plan to support sustainability
- Implement a PhD funding policy
- Increase remuneration for academic resources partners
- Encourage post-doctoral training for the best PhD student to promote research excellence
- Increase the number of external collaborators to cover all areas of training.

## VI. COMMENTS OF THE INSTITUTION

UJ/ACEPRD/O102/03

August 25, 2019

Prof. François PERNOT

Directeur/Director

Département Europe et International

Europe and International Department

[francois.pernot@hceres.fr](mailto:francois.pernot@hceres.fr)

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 Kparmak         | Project Administrator                |

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

### PHD MICROBIOLOGY

The team observed that there has not been any foreign student on the programme yet. The figure presented by the agency should be amended.

Area 3.3. The explicit rule on theses and defence, agency said it is not provided. The team draws the attention of the agency to page 43 of the general university postgraduate prospectus (see pdf file 'PG PROSPECTUS').

Under Conclusion, the team invites the agency to page 237 of the general postgraduate prospectus for details on the overall assessment of the PhD in Pharmaceutical Microbiology for further details as required by the agency.

The postgraduate guideline on pages 39-44 Provides for the management of doctorate degrees in the University of Jos.

The programme has laboratories in the Department as well as the ACEPRD Laboratories.

As mentioned earlier, the team will work to implement the advice on International Advisory Board for the doctorate programme as well as other programmes.

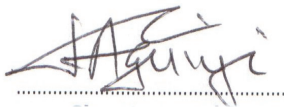
Other pieces of advice by the agency involving, communication strategies, increased number of regional students from West and Central Africa is noted for consideration/implementation.

The team also acknowledged the recommendation of funding for the programme. It will work towards sustainability plans for fund raising through grants, industry partnership for financial support.

The remuneration of teaching staff is a clear factor that if implemented, will add value to the programme. Therefore, the team will work to achieve this through discussions and exploring other avenues of fund raising.

The issue of post-doc raised by the agency is a matter of national concern. However, it is envisaged that this advice will be exploited for an inclusion of the post-doc practice as a national policy.

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

## ACCREDITATION DECISION

### **Ph.D. Pharmaceutical Microbiology**

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

**JUNE 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](http://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 Pharmaceutical Microbiology at ACEPRD is positioned within local, national, regional and international range of study programmes in order to provide clearly identified target student audience with high quality knowledge and skills required to carry out applied research in Pharmaceutical Microbiology. The PhD in Pharmaceutical Microbiology programme contributes for attaining higher level of expertise in specialized areas within the broader discipline of Pharmaceutical Microbiology and also to meet the manpower needs of academia and research institutions, drug industry and drug quality control. The programme is young with low number of students (2 PhD students from 2015 to 2018) joining the program. Addition of specific partners for a few specialized areas would strengthen the programme.

### 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 doctorate's organizational structure is based on a structured, identified and defined teaching and administrative team. Governance of the doctorate has to be identified and to involve doctoral student representatives. The doctorate has material and human resources. Student recruitment methods are clearly defined, transparent. The recruitment of PhD students in Pharmaceutical Microbiology is low until now. Doctoral students recruited have the appropriate conditions for preparing their doctorate. 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 PhD in Pharmaceutical Microbiology includes a set of teaching units that are consistent with the objectives and permits gradual specialization. Student progress is monitored by two supervisors that ensures that appropriate conditions are in place. Doctoral students have access to scientific teaching and professional training. The teaching proposed is based on the expertise of research units and socio-economic partners associated with the doctorate. The doctorate has set clear and suitable objectives with regard to the duration of theses considering the profiles of doctoral students and any special conditions.

### 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**

Doctorate integration in the job market appears to be excellent and mainly coming from interaction with the partners that provide students job opportunities. Success rate in access to further studies and job market are very good. Poor evaluation and monitoring of the curriculum for further development.

## ACCREDITATION DECISION

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

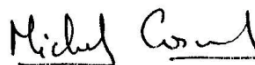
### **“Five-year unreserved accreditation decision”**

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

- Improve your training programs and research.
- Keep up your business plan to support sustainability.
- Implement a PhD funding policy.
- Increase remuneration for academic resources partners.
- Encourage post-doctoral training for the best PhD student to promote research excellence.
- Increase the number of external collaborators to cover all areas of training.

### **SIGNATURE**

For HCERES and on behalf of



Michel COSNARD,

President

Date: Paris, September 4<sup>th</sup>, 2019

Les rapports d'évaluation du Hcéres  
sont consultables en ligne : [www.hceres.fr](http://www.hceres.fr)

**Évaluation des coordinations territoriales**  
**Évaluation des établissements**  
**Évaluation de la recherche**  
**Évaluation des écoles doctorales**  
**Évaluation des formations**  
**Évaluation et accréditation internationales**



2 rue Albert Einstein  
75013 Paris, France  
T. 33 (0)1 55 55 60 10

[hceres.fr](http://hceres.fr)

[@Hceres\\_](https://twitter.com/Hceres_)

[Hcéres](https://www.youtube.com/Hceres)