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**Key words: Clinical Pharmacology, Pharmacovigilance, Pharmacokinetic Pharmacodynamic modelling, Clinical trials management, Biostatistic**

## SKILLS

1 Therapeutic knowledge to provide input into project design, proposal development and bid preparation (in different areas: oncology, CNS, respiratory and anti-infectives) ;

2 Design, Management and Development of clinical research project and associated services ;

3 High knowledge of Pharmacovigilance & Pharmacoepidemiology, Health public and drugs ;

4 Clinical Pharmacology Scientist (Pharmacovigilance & Pharmacoepidemiology, Pharmacogenetics & Pharmacogenomics, Clinical Trials Specialist, Clinical Research Coordination, Therapeutic Drug Monitoring) ;

5 Good level knowledge in Biostatistic (Clinical Trials Statistic and Methodology, Applied Regression analysis, Advanced Biostatistic, Meta-analysis, Bayesian statistic, quantitative epidemiology ;

6 Working of Statistical software (SPSS, SAS, S-plus, Epi-Info) ;

7 Conducting and interpreting PK/PD data analysis, bioequivalence and bioavailability evaluation, population and Bayesian analysis, *in vitro-in vivo* correlation and/or general PK/Statistical analysis ;

8 Population PK modeling and simulation ;

9 Working of PK modeling software (NONMEM, ADAPTII, Kinetica®, Winbugs, S plus, SAS, Simcyp).

## CAREER HISTORY

Responsible of Pharmacovigilance department (implementation)
10/2007-now
Ministry of Health –Benin

Management and direction for all Pharmacovigilance (PV) projects;

Building of effective PV project team

Writing and design of post-marketing pharmacovigilance and pharmacoepidemiology projects and activities;

Implementation of computer applications including database management and pharmacovigilance related computing systems;

Implementation of networking environment

Provide training to Health professional (for spontaneous reporting)
Provide training for members of Pharmacovigilance department (Ministy of Health): Data collection (PSUR and spontaneous reporting), Case validation, Imputability methods, Confidence intervals in pharmacovigilance,

Comparing safety of drugs, Risks and its assessment

Concommitantly I am Assistant Professor of Pharmacovigilance & Pharmacoepidemiology (Faculty of Medicine-Cotonou –UAC/FSS- BENIN) since 2004.

Consultant in General Internal medicine at part-time 10/2007-now

**Leader of Protocol redaction**, **Principal investigator** and management of clinical trial in HIV 03/2008-now

(Phase III-multicenter study)-underway

My task consisted to lead protocol development, write protocol and consent forms in accordance with current SOPs and GCP (includes synopses, organization of meetings related to protocol development, writing protocol amendments and informed consent updates), provide scientific input to Case Report Form design
Selection of clinical investigation centers,
Provide medical/science review of study data. Review data listings for scientific and medical validity
Provide scientific input into the scope of work and selection of specialized laboratory to be used in the study
Attend and provide science support for investigator and consultant meetings and monitors workshops
Management of studies and provide scientific input/advice to operation colleagues for training of study site staff
Assist in the safety review and conduct serious adverse event (SAE) and assist in the preparation of SAE narratives

Protocol redaction of clinical trial Phase III- VK against sickle cell anemia
08/2008-now
Implementation underway.

Concommitantly I am Assistant Professor of Clinical Pharmacology (Faculty of Medicine-Parakou – UNIPAR –BENIN & UAC ) since 2004

Senior Scientist 08/2006 – 08/2007
Simcyp Limited –Sheffield –United Kingdom

The object of my specific project consisted to build mechanistic, physiologically-based pharmacokinetic (PBPK) models using *in vitro – in vivo* extrapolation in order to establish the pharmacokinetic characteristics of a drug in a **virtual population**. Using information on the demographics of obesity patients and the associated modifications in physiology and enzymology, the obese population library was inserted within the Simcyp simulator. This allows pharmacokinetic behaviour to be predicted in representative virtual patient populations, rather than an 'average' healthy male subject. For example, the effects of obesity (BMI 30-40 $kg/m^2$) and morbid obesity (BMI > 40 $kg/m^2$) on pharmacokinetic behaviour can also be simulated.

Globally, I work for the development and validation of tools related to in *vitro-in vivo* correlation: Prediction of drug behaviour in the virtual healthy subjects or in special population (Obesity, Liver failure, Renal impairement), Prediction of the first dose in man, Design of drug-drug interactions studies

Postdoctoral position in Clinical Pharmacology Unit- UCL 08/2005 - 08/ 2006

During this period, I work like Clinical Research Scientist for different projects underway in the unit: Reinforcement of my clinical research monitoring experience, understanding of GCP and the relevant regulations

Researcher in Clinical Pharmacology Unit & Assistant in Internal Medicine Clinical Research Project Coordinator. Cliniques Universitaires Saint – Luc (UCL/Bruxelles)
10/2001-2005

The goal of my thesis was to study the role of some *CYPs* and *ABCB1* genes on the Pkarmacokinetic and Pharmacodynamic of losartan and phenytoin. Consequently different clinical trials are performed. I was responsible for planning, coordinating and developing these clinical trials (ethics committee submission, file preparation and tracking procedures, site management, adverse event reporting, data collection, data analysis, final report and redaction of articles)
I was trained in different aspects of clinical pharmacology (Pharmacometrics, Biostatistc, Pharmamacovigilance etc...). In addition, I act like Investigator or clinical research coordinator for different clinical trials (Phase I or II) which are performed in the unit.
During my PhD thesis, the content of my medical practice is : Examination of volunteers, Follow of volunteers to detect ADRs, Out-patient sessions in gastro-enterology (all actvities done under the supervision of Pr Yves Horsmans, Head of Clinical Pharmacology Unit and Internal Medicine Department, UCL, Saint-Luc, University, Hospital) and training in General Internal Medicine practice at part-time.

Assistant Professor of Pharmacovigilance & Pharmacoepidemiology
(Faculty of Medicine-Cotonou –UAC/FSS- BENIN) since

2004

Assistant Professor of Clinical Pharmacology
(Faculty of Medicine-Parakou –UNIPAR -BENIN)
since 2004

Research Fellow, Cellular and Molecular Pharmacology Laboratory (UCL- Bruxelles)
01/1999-2001

Internship (CNHU, Cotonou, Benin & CHU, Limoges, France)
1996-1998

## EDUCATION

**Certificate in "Advanced Immunology, Vaccinology and Biotechnology applied to infectious diseases", WHO/TDR/training Course and Université de Lausanne/Switzerland.**
09-10/2008

**Detailed Overview of this Training:**

One module is specifically devoted to the development of new vaccines and the testing of their efficacy. Training and simulations were done one these fields: Study Products, Study design and study Operations

Training on GCP, ICH regulations and ethics aspects of clinical trials was provided by WHO experts.

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Studied, via attenence of set taught modules and teaching hours (45 days in total from 10.Sep. 2008 to 24.October 2008), for the **Certificate in "Advanced course on Immunology, Vaccinology and Biotechnology applied to infectious diseases"** organized by WHO at the Immunology Research and Training Centre, and University of Lausanne (Switzerland). Successfully passed the final exams, This training consisted of 45 teaching days (eight hours per day) structured into five sessions. In addition, many hours distance learning were required namely in th vaccine development proccess..

The topics of each of the five sessions were as follows:

1-Molecular Aspects of the immune response and effector functions against pathogenic microorganisms

2-Measure of the immune response to infectious agents

3-Bacterial/Parasitic and viral infections

4-Principles of vaccinology (Concept of different vaccines, Vaccine delivrery systems and adjuvants, Child immune responses and adverse effects in vaccinology, quality control of vaccines, vaccine production, Phases I-II-III, Ethics, Good Clinical Practice)

5-Biotechnology

**PhD in Clinical Pharmacology & Biostatistic-Epidemiology**
2001-2005
Université Catholique de Louvain, UCL, Brussels, Belgium

Thesis title: « Study of CYP2C9, CYP2C19 and MDR1 polymorphisms among Black Africans using losartan and phenytoin »

Master 2: Expertise and Engineering in health information systems underway

**Postgraduate university degree (DU) in statistic and Pharmacokinetic/Pharmacodynamic**

**modeling**
Université Paris V. Faculté de Pharmacie
2001-2002

**Postgraduate university degree (DU) in Neuropsychopharmacology**
Faculté de Médecine Pitié-Salpêtrière- Université Paris 6
2000-2001

**M. Phil (DEA) in Pharmaceutical Sciences (Orientation: Pharmacology)**
**(Diploma with distinction)**
Université Catholique de Louvain Bruxelles/Belgique
1999-2000

Thesis title: « Effect of hydrochlorothiazide on gentamicin induced-nephrotoxicity and apoptosis in renal cortex »

**Medical Doctor thesis. M. D. degree obtained with first class honours and**
1997-1998
**Congratulations of Jury**

Thesis title: « Epidemiological observations on the first case of human paragonimiasis and potential intermediate hosts of Paragonimus sp. in Benin »

**Internship (CNHU Cotonou, Benin & CHU Limoges, France)**
1996-1998

Medical Study- (Université du Bénin and Université de Limoges- France)
1990-1998

Secondary School diploma (Baccalauréat série C Mention Bien)
1989-1990

## COURSES & WORKSHOPS

Training Course "Keeping the lights green-your risk management roadmap" Verona, 26 and 27 March 2009 organised by International Society of Pharmacovigilance (ISOP)

Pharmacokinetic UK meeting 2006 (http://www.pkuk.org.uk) 15-17/11/2006

Training: Hands-on Workshops on Concepts & Applications of Population-based In Vitro – In Vivo Extrapolation of ADME Properties at Sheffield organized by simcyp Lted 21-27 September 2006

Training : "Summer school of Public Health and Epidemiology– Faculty of Medicine- Paris Sud
Use of mixed models and GEE in analysis of correlated data;
Survival analysis with SAS software". 27-08/07/2005

Training in Applied Ethnopharmacology – Medicinal Plants & Traditional Pharmacopeias (Metz-France). 13-18/09/2004

XIII Population Approach Group in Europe (PAGE), Uppsala, Sweden. 17-18/06/2004

Annual Congress of French Society of Pharmacology

( Strasbourg – France). 24-28/04/2004

Congress of the « Société française de Biochimie et Biologie Moléculaire » ( Lyon – France). 04-05/11/2003

Therapeutic Drug Monitoring course (organized by EACPT), Istanbul, Turkey. 28/06/2003

Pharmacogenetics Course (organized by EACPT), Istanbul, Turkey. 24/06/2003

6th Congress of the European Association for Clinical Pharmacology and Therapeutics (EACPT), Istanbul, Turkey. 23-28/06/2003

Parametric and nonparametric population PK and PD modeling- Applications in Therapeutic Drug Monitoring. Valencia, Spain. 10-12/03/2003

XI Population Approach Group in Europe (PAGE). Paris, France 06-07/06/2002

Symposium : Drug interaction in clinical practice- Health and Economic Consequences – (Brussels – Belgium) 17/11/2000

14 th annual congress of French Society of Pharmacology (Rouen - France) 10-12/04/2000

French and Belgium Days of Pharmacochemistry ( Liège –Belgique) 05/1999

## MAIN PUBLICATIONS

1- Aka NA, Allabi AC, Rondelaud D, Massougbodji A, Dreyfuss G, Dumas M. Observations épidémiologiques sur le premier cas de paragonimose humaine et les hôtes intermédiaires potentiels de Paragonimus sp. Au Bénin. *Bull Soc Path Exo* 1999; **92**: 191-194.

2- Allabi AC, Gala JL, Desager JP, Heusterspreute M, Horsmans Y. Genetic polymorphisms of CYP2C9 and CYP2C19 in the Beninese and Belgian populations. *Br J Clin Pharmacol* 2003; **56**: 653-657.

3- Allabi AC, Gala JL, Horsmans Y, Babaoglu MO, Bozkurt A, Heusterpreuste M, *et al*. Functional Impact of CYP2C9*5, *6, *8 and *11 in vivo among Black Africans. *Clin Pharmcol Ther* 2004; **76**:113-118

4- Allabi AC, Horsmans Y, Issaoui B, Gala JL. Single nucleotide polymorphisms of ABCB1 (MDR1) gene and distinct haplotype profile in West Black African Population. *Eur J Clin Pharmacol* 2005; **61**:97-102.

5- Allabi AC, Gala JL, Horsmans Y. CYP2C9, CYP2C19 and ABCB1 (MDR1) genetic polymorphisms and phenytoin metabolism in a Black Beninese. *Pharmacogenet Genomics* 2005; **15**:779-786.

6- Allabi AC, Rostami-Hodjegan A. Clinical Trial Simulation of the Effect of CYP2C9 Polymorphism

on the Antihypertensive Response to Losartan. (In preparation).

7- Allabi AC, Horsmans Y. What Pharmacovigilance system for developing countries. (Manuscript of guidelines submitted to Ministry of Public Health of Benin).

8- CYP2C9, VKOCR, Factors II and Factors VII genotypes and acenocoumarol pharmacodynamic among Black Africans (manuscript underway).

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See also http://www.cypalleles.ki.se/cyp2c9.htm (to find the relevance of my publications)

## PROFESSIONAL ORGANIZATION

Member, French Society of Pharmacology

Member, French Society of Ethnopharmacology

Member, International Society of Medicinal Plants and Ethnopharmacology

Member, Groupe de Métabolisme et Pharmacocinétique

Member, Société Française de Statistique (Section Santé et Biopharmacie)

## LEADERSHIP POSITIONS AND AWARDS

AWARD: nominated (by International Union of Basic and Clinical Pharmacology: IUPHAR, basis on publications and background) for the Young Investigator Award 2004 – World Congress of Clinical Pharmacology and Therapeutics (Australia-Brisbane, 2004).

## MISCELLANEOUS

Practice Taekwondo and Football.

English, French, German (elementary level)