

NAME Amed OUATTARA	POSITION TITLE Research at Department of Epidemiology of Parasitics Diseases / Malaria Research and Training Center
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EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Faculté de medecine de pharmacie et d'odontostomatologie Hôpital Pitié Salpêtrière of Paris	Doctorat en Pharmacie	1998	Pharmacie
Université de Tulane (New Orleans, USA)	Certificat	1999-2000	Parasitologie moléculaire
Cours d'été de l'université de John Hopkins	Certificat	2000	Techniques Moléculaires
Institut national de la santé (NIH/LVPD)	Paillasse	2001	Principes d'Epidémiologie
Université de Maryland	Paillasse	2001	Séquençage des gènes
Institut national de la santé (NIH/LVPD)	Paillasse	2002	Séquençage des gènes
Cours d'été de l'université de John Hopkins	Certificat	2002	Biologie moléculaire et génétique
ISFRA	Msc	2003	Parasitologie/Entomologie

Activités de recherche et expérience professionnelles

1996 – 1998: Residency at Malaria Research in training Center

Doctorate thesis in Pharmacy: Malaria and *Plasmodium falciparum* stains diversity in Bancoumana, Mali

1998 – 2000: Researcher at the Malaria Research and Training Center

2002 – present: Laboratory leader in molecular biology at the Malaria Vaccine Unit/MRTC.

Selected publications

1- **Ouattara A**, Mu J, Takala-Harrison S, Saye R, Sagara I, Dicko A, Niangaly A, Duan J, Ellis RD, Miller LH, Su XZ, Plowe CV, Doumbo OK. Lack of allele-specific efficacy of a bivalent AMA1 malaria vaccine. *Malar J.* 2010 Jun 21;9(1):175

2- Dolo A, Diallo M, Saye R, Konaré A, **Ouattara A**, Poudiougou B, Kouyaté B, Minta D, Doumbo OK. Obstacles to laboratory diagnosis of malaria in Mali: perspectives. *Med Trop.* 2010. 70(2):158-62.

3- Takala SL, Coulibaly D, Thera MA, Batchelor A, Cummings MP, Escalente AA, **Ouattara A**, Traoré K, Niangaly A, Djimdé A, Doumbo OK, Plowe CV. Extreme polymorphism in a vaccine antigen and risk of clinical malaria. Implication for vaccine development. Accepted in *Science Translational.* 14 October 2009.

- 4- Junhui Duan, Jianbing Mu, Mahamadou Ali Thera, Deirdre Joy, Sergei L. Kosakovsky Pond, David Diemert, Carole Long, Hong Zhou, Kazutoyo Miura, **Amed Ouattara**, Amagana Dolo, Ogobara Doumbo, Xin-zhuan Su, Louis Miller. Population structure of the genes encoding the polymorphic Plasmodium falciparum apical membrane antigen 1: implications for vaccine design. *Prot Natl Acad Sci*. 2008. Jun 3105 (22):7857-62.
- 5- Takala SL, Coulibaly D, Thera MA, Dicko A, Smith DL, Guindo AB, Kone AK, Traore K, **Ouattara A**, Djimde A, Sehdev PS, Lyke KE, Diallo DA, Doumbo OK, Plowe CV. Dynamics of polymorphism in a malaria vaccine antigen at a vaccine-testing site in Mali. *PLoS Med*. 2007. 4(3): e93.
- 6- Gaudart J, Poudiougou B, Dicko A, Ranque S, Toure O, Sagara I, Diallo M, Diawara S, **Ouattara A**, Diakite M, Doumbo OK. Space-time clustering of childhood malaria at the household level: a dynamic cohort in a Mali village. *BMC Public Health*. 2006 Nov 21; 6:286.
- 7- Sagara I, Dicko A, Djimde A, Guindo O, Kone M, Tolo Y, Thera MA, Sogoba M, Fofana M, **Ouattara A**, Sissoko M, Jansen HF, Doumbo OK. A randomized trial of artesunate-sulfamethoxypyrazine-pyrimethamine versus artemether-lumefantrine for the treatment of uncomplicated Plasmodium falciparum malaria in Mali. *Am J Trop Med Hyg*. 2006. Oct. 75(4):630-6.
- 8- Natural malaria infection in Anopheles gambiae is regulated by a single genomic control region. Riehle MM, Markianos K, Niare O, Xu J, Li J, Toure AM, Podiougou B, Oduol F, Diawara S, Diallo M, Coulibaly B, **Ouattara A**, Kruglyak L, Traore SF, Vernick KD. *Science*. 2006 Apr 28;312(5773):577-9.
9. Molecular diagnosis of resistance to antimalarial drugs during epidemics and in war zones. Djimde A, Dolo A, **Ouattara A**, Diakité S, Plowe CV, Doumbo OK. *Journal of Infectious Diseases*. 2004. 190: 853-855.
10. Cissé O A, **Ouattara A**, Thellier M, Accoceberry I, Biligui S, Minta D, Doumbo O, M. A Thera, Desportes I L, Datry A, Danis M. Evaluation of an Immunofluorescent-Antibody test using monoclonal antibodies directed against *Enterocytozoon bienersi* and *Encephalitozoon intestinalis* for diagnosis of intestinal microsporidiosis in Bamako (Mali). *Jour of Clin Microbio*. 2002. 40 (5): 1715-1718.
- 11 **Ouattara A**, I DIARRA., Minta D., Thera MA., Maiga YM., Traoré AH., Cissé BM, Doumbo OK. Evaluations des tests diagnostiques de la microsporidiose intestinale à l'HGT et à l'HNPG de Bamako, Mali. *Mali Médical*. 2002. 17 (3-4) : 41-45.
12. Intérêts des nouvelles techniques de diagnostic rapide du paludisme au Mali. Dolo A., Konaré A., **Ouattara A**., Thera MA., Poudiougou B., Maiga B., Diallo M., Doumbo OK. *Mali Médical*. 2002. 17 (3-4) : 27-31.
13. **Ouattara A**: Diversité allotypique et morbidité palustre à Plasmodium falciparum à Bancoumana. Pharmacy thesis, 1998, Bamako, Mali.

Résumé

1- **Amed Ouattara**, Shannon Takala-Harrison, Drissa Coulibaly, Mahamadou Aly Thera, Matthew B. Laurens M, Amadou Niangaly, Renion Saye, Sheetij Dutta, Gray D. Heppner, Lorraine Soisson, Carter L. Diggs, Johan Vekemans, Joe Cohen, Leach Amanda, Tina Dube, Ogobara K Doumbo, Christopher V. Plowe. Allele-specific efficacy of a monovalent AMA1 vaccine. *Genomic Epidemiology of Malaria*. 9-12 June 2010. Hinxton, Cambridge

- 2- **Amed Ouattara**, Shannon Takala, Drissa Coulibaly, Niangaly Amadou, Renion Saye, Mahamadou A. Thera, Christopher V. Plowe, Ogobara K. Doumbo. Allele-specific efficacy of an AMA-1-based malaria subunit vaccine. Abstract 566, 58th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Washington, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Nov 2009).
- 3- Takala S, **Ouattara A**, Coulibaly D, Thera MA, Dicko A, Guindo AB, Kone AK, Traore K, Djimde A, Lyke KE, Diallo DA, Doumbo OK, Plowe CV. Dynamics of polymorphism in *Plasmodium falciparum* apical membrane antigen-1 over 3 years at a vaccine-testing site in Mali. Abstract 14, 56th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Philadelphia, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Nov 2007).
- 4- Eboumbou C, Achidi E, Ekobo SA, Kremsner P, Issifou S, Doumbo OK, **Ouattara A**, Rogier C. Genetic identification of *Plasmodium falciparum* parasite virulence markers. *EDCTP 4th Annual Conference. October 2007*
5. Plowe CV, Thera MA, Takala SL, **Ouattara A**, Eddington N, Coulibaly D, Diallo DA, Dicko A, Djimde A, Guindo A, Kone, A, Cissoko Y, Traore K, Kirsten L, Doumbo OK. Dynamics of *Plasmodium falciparum* Apical membran antigen –1 sequence variation over three years at a malaria vaccine testing site in Bandiagara, Mali. Abstract 842, 55th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Washington, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Dec 2005).
6. Toure A, Niare O, Poudiougou B, Coulibaly B, **Ouattara A**, Sacko A, Diawara SI, Yaro AS, Diallo M, Toure S, Traore SF, Vernick KD, Doumbo OK. Consecutive 2 years survey of transmission-blocking vaccine activity in natural gametocytes carriers living in a malaria endemic village of Mali, west Africa. Abstract 913, 55th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Washington, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Dec 2005).
7. Takala SL, Smith DL, Coulibaly D, Thera MA, **Ouattara A**, Stine C, Doumbo OK, Plowe CV. A high-throughput method for genotyping the 19KDA region of *Plasmodium falciparum* merozoite surface protein 1 (MSP1) using alleles frequency determinant and haplotype estimation. Abstract 556, 55th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Washington, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Dec 2005).
8. Takala SL, Coulibaly D, Thera MA, Dicko A, Smith DL, Guindo A, Kone AK, **Ouattara A**, Djimde A, Shedev P, Kristen L, Diallo DA, Plowe CV, Doumbo OK. Prevalence of merozoite surface protein 1 (MSP1) 19 KDA haplotype at a malaria vaccine testing site in Bandiagara, Mali. Abstract 398, 55th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Washington, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Dec 2005).
9. Riehle MM, Niare O, Markianos K, Li J, Xu J, Toure AM, Poudiougou B, Diallo M, Coulibaly B, **Ouattara A**, Traore SF, Vernick K. Genetic identification and screening of candidate *Anopheles gambiae* genes controlling natural *P. falciparum* resistance. Abstract 138, 55th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Washington, USA. *Am. J. Trop. Med. Hyg.* (Suppl., Dec 2005).
10. **Ouattara A.**, Saye R., Doumbo S., Beaguovi AH., Diallo M., Kayentao K., Diarra I., Ba M and Doumbo O. OptiMAL-IT dipstick as diagnostic tool for malaria identification and disease treatment efficacy in an endemic country. Abstract , 54th Ann. Meet *Am. Soc. Trop. Med. Hyg.* Florida, USA. *Am. J. Trop. Med. Hyg* (Nov 2004).

11. Ouattara A., Diarra I., Naladji I., Keita M., Arama C., Diawara S., Poudiougou B., Koita O., Doumbo O., Krogstad DJ.

Long term variation in Plasmodium falciparum MSP1 alleles distribution in an endemic village of Mali (Bancoumana).

Abstract 184, 52th Ann. Meet Am. Soc. Trop. Med. Hyg. Denver, USA. Am. J. Trop. Med. Hyg. (Suppl., Nov 2002).

12. Doumbia S, Gowda C, Ramachandra SN, Doumbo OK, Poudiougou B, **Ouattara A**, Diakité M, Diawara S, Dolo A, James M, Johnson ES, Krogstad DJ.

Natural antibodies to Plasmodium falciparum Glycosylphosphatidyl-inositol (GPI) in an area with seasonal malaria transmission.

51st annual meeting of Am. J. Trop. Med. Hyg., vol 67, Abstract 79, Nov 2002.

13. Ouattara A, Koita O, Doumbo O, Diallo M, Diakita M, Poudiougou B, Diawara S, Thera MA, Traore O, Dolo A, Touré O, Krogstad DJ.

Molecular markers as epidemiology tools in malaria-endemic area of Mali.

Abstract 10, 49th Ann. Meet Am. Soc. Trop. Med. Hyg., Houston, Texas, Am. J. Trop. Med. Hyg. (Suppl., March 2000).

14. Ouattara A, Minta D, Desportes I, Traoré HA, Datry A, Maïga I, Pichard E, Danis M, Doumbo OK.

Application of molecular methods as Diagnostic tool and characterization of the epidemiology of microsporidiosis infection in Mali.

Abstract 297, 49th Ann. Meet Am. Soc. Trop. Med. Hyg., Houston, Texas, Am. J. Trop. Med. Hyg. (Suppl., March 2000).

15. Ouattarara A, Djimdé A, Martino L, Konaré A, Dolo A, Thera M, Cortese JC, Plowe CV, Doumbo OK.

Application of molecular markers in the management of an epidemic of malaria in the northern Mali.

Abstract 10, 49th Ann. Meet Am. Soc. Trop. Med. Hyg., Houston, Texas, Am. J. Trop. Med. Hyg. (Suppl., March 2000).

16. Doumbo OK, Kassambara L, Rowe JA, Konaré A, Traoré O, Koita O, **Ouattara A**, Konaré M, Keita MM, Tounkara A, Sidibé T, and Krogstad DJ.

Is *Plasmodium falciparum* rosetting associated with severity of malaria in Mali? . Abstract 10, 48th Ann. Meet Am. Soc. Trop. Med. Hyg., Washington DC, Am. J. Trop. Med. Hyg. (Suppl., September , 1999).

17. Koita O., Doumbo O, **Ouattara A**, Traoré SF, Sangaré D, Bagayoko M, Beier JC, Keita MM, Sidibé T, Touré YT, Krogstad DJ. Genetic recombination in *Plasmodium falciparum* under conditions of natural transmission, an association with increased virulence. Abstract 10, 48th Ann. Meet Am. Soc. Trop. Med. Hyg., Washington DC, Am. J. Trop. Med. Hyg. (Suppl., September , 1999).

18. Doumbo O., **Ouattara A.**, Poudiougou B., Koita O., Sagara I., Diallo M., Diawara S., Tall LK, Diakité M., Dolo A., and Krogstad DJ. Polyclonal *Plasmodium falciparum* infection and clinical malaria among children 0-9 years of age in Bancoumana, Mali. Abstract 123, 47th Ann. Meet Am. Soc. Trop. Med. Hyg., San Juan, Puerto Rico, Am. J. Trop. Med. Hyg. (Suppl., September , 1998).

19. Koita O., **Ouattara A**, Gerone JL., Doumbo O., and Krogstad DJ. Hybrid *Plasmodium falciparum* MSP-1 gene identified in Malaria field studies. Abstract 18, 47th Ann. Meet Am. Soc. Trop. Med. Hyg., San Juan, Puerto Rico, Am. J. Trop. Med. Hyg. (Suppl., September , 1998).

120. Koita O., Gerone JL, **Ouattara A.**, Poudiougou B., Diakité M., Diallo M., Doumbo O., Krogstad DJ. Natural history studies of *Plasmodium falciparum* infection in Mali. 46th Ann. Meet Am. Soc. Trop. Med. Hyg., Orlando, Fl, Am. J. Trop. Med. Hyg. (Suppl., December 7-11, 1997).

21. Traoré I., Koita O., Doumbo O., Kassambara L., **Ouattara A.**, Diakité M., Sagara I., Diallo M., Doumbo S. Niaré and Krogstad DJ. 1997. Field studies of the ParaSight FTM test in a malaria-endemic area: sensitivity analyses and deletion of the hrp-2 gene in wild type *Plasmodium falciparum* in Mali. 46th Ann. Meet Am. Soc. Trop. Med. Hyg., Orlando, Fl, Am. J. Trop. Med. Hyg. (Suppl, December 7-11, 1997).

22. Koita O., **Ouattara A.**, Sangaré D., Diallo M., Bagayoko M., Sogoba N., Kassambara L., Traoré SF., Niaré O., Doumbo O., Touré YT., Beier JC. and Krogstad DJ. 1997. Evidence for genetical recombination during the meiotic reduction division in experimentally infected, F1 progeny of *Anopheles gambiae*. 46th Ann. Meet Am. Soc. Trop. Med. Hyg., Orlando, Fl, Am. J. Trop. Med. Hyg. (Suppl, December 7-11. 1997)

23. Koita O., Gerone JL., **Ouattara A.** Poudiougou B. Doumbo O., Krogstad DJ. 1996. Persistent, asymptomatic and recurrent *Plasmodium falciparum* infections in a newborn child. Abstract 540, 45th Ann. Meet. Am Soc. Trop. Med. Hyg. Baltimore, MD; Am. J. Trop. Med. Hyg; 55 (Suppl):277.