#### **CURRICULUM VITAE**



# **Contact information**

Dr. Nguyen, Trong The Intensive care unit for Infectious Diseases Institute of Clinical Infectious Diseases Research Group Leader, VG-CARE 108 Military Central Hospital No.1 Tran Hung Dao Str, Hai Ba Trung District

Ha Noi, Vietnam

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#### **Personal Details**

Full name: Nguyen Trong The September 30th, 1983 Date of Birth:

Ninh Binh Place of Birth: Gender: Male

Nationality: Vietnamese

Marital status: Married, 2 children

Vietnamese (Mother Tongue), English Languages:

### **Education and Qualifications**

Institute of Tropical Medicine, University of Tübingen, Germany 01/2016-12/2019

PhD in Experimental Medicine

09/2007-12/2007 Vietnam Military Medical University, Hanoi, Vietnam

Military Medical Officer

09/2001-08/2007 Hanoi Medical University, Hanoi, Vietnam

**General Doctor** 

# **Working Experience**

07/2023 - to date ICU for Infectious Diseases - Institute of Clinical Infectious Diseases - 108 Military

> Central Hospital, Hanoi, Vietnam. Head of Department, Scientist

01/2020-06/2023 Vietnamese-German Center for Medical Research 108 Military Central Hospital,

> Hanoi, Vietnam. Vice Director

03/2016-12/2019 Institute of Tropical Medicine, University of Tübingen, Germany.

Internship, Microbiology and Parasitology laboratory and Clinical Trial Platform

06/2015-02/2016 Centre de Recherches Médicales de Lambaréné (CERMEL), Albert Schweitzer

Hospital, Lambaréné, Gabon.

Physician, Investigator, Microscopist

01/2008-06/2015 Institute of Clinical Infectious Diseases, 108 Military Central Hospital, Hanoi,

Vietnam.

Physician, Scientist

### **Research Orientation**

- Molecular diagnosis, treatment and epidemiology of malaria, drug-resistant pathogen

- Clinical trials on antimicrobial drugs and vaccines

#### **Skills**

- Patient care and advanced life support
- Treatment of sepsis, septic shock
- Management of antimicrobial resistance
- Malaria slides reading (qualified and certified by CERMEL)
- Human DNA and RNA extraction
- Conventional PCR and Real time PCR
- Clinical trial conduct according to Good Clinical Practice
- Digital competence: Microsoft Office, R-based statistics

#### **Knowledge and Experience in studying Malaria and conducting Clinical Trials**

Despite the tremendous progress in the fight against malaria over the past decade, the disease remains one of the most important maladies. It was responsible for about 219 million cases and more than 435 000 deaths in 2017 worldwide.

Due to the improved access to malaria interventions between 2001 and 2013, a large decline in the overall mortality rate of about 47% has been achieved. However, over the last years, the decline in malaria burden has stalled. In addition, the question "when can we eradicate malaria?" might have controversial answer. This is because we do not have yet any strong eradicating tools like vaccine. Consequently, while waiting for an efficacious vaccine against malaria, new drugs or chemoprophylaxis that help dealing with resistant parasites are in urgent need.

Being interested in understanding how a novel drug has been developed and tested, I have joined some clinical trials on new drugs against malaria (listed below) as investigator and some other studies in Lambaréné – Gabon and Tübingen – Germany on developing and validating some molecular tools for a rapid but accurate detection of Plasmodium parasites during my PhD time. This work has helped me gain a lot of knowledge of the disease and experience in conducting clinical trials in a resource-limited settings like Sub-Saharan Africa and Southeast Asia.

### **Patient Care in ICU**

After almost 20 years of experience in intensive care of patients with severe infections, I know that the battle between humans and antimicrobial resistance (AR) will never end. Doctors are pinning their hopes on either novel antimicrobial agents with new mechanisms of action, vaccines or alternative treatments (e.g. bacteriophages), emphasizing the importance of the concept of "one health" that encompasses the human, animal and environmental domains. The 108 Military Central Hospital and the Vietnamese-German Center for Medical Research (VG-CARE) are able to organize clinical trials on new antimicrobial agents, vaccines and new therapies; we also have experience in the application of therapeutic drug monitoring in patient care.

#### Clinical trials involved as investigator:

- 1. A Phase IIa Proof of Concept Study to Explore the Efficacy, Tolerability and Safety of Fosmidomycin Sodium When Administered With Piperaquine Tetraphosphate to Adults and Older Children With Acute Uncomplicated Plasmodium Falciparum Malaria. Sanofi (finished 2015; Principal Investigator: G. Mombo-Ngoma; NCT02198807) joined as investigator, microscopist, physician
- 2. A Randomized, Double-blind, Phase IIb Study to Investigate the Efficacy, Safety, Tolerability and Pharmacokinetics of a Single Dose Regimen of Ferroquine (FQ) With Artefenomel (OZ439) in Adults and Children With Uncomplicated Plasmodium Falciparum Malaria. (finished 09/2019; NCT02497612) joined as investigator, microscopist, physician
- 3. A Randomised, Double-blind, Phase IIb Study to Investigate the Efficacy, Safety, Tolerability and Pharmacokinetics of a Single Dose Regimen of Artefenomel (OZ439) in Loose Combination With Piperaquine Phosphate in Adults and Children With Uncomplicated Plasmodium Falciparum Malaria. (finished; NCT02083380) joined as investigator, microscopist, physician
- 4. Safety and protective efficacy of a simplified Plasmodium falciparum sporozoite Chemoprophylaxis Vaccine (PfSPZ-CVac) regimen in healthy malaria-naïve adults in Germany (Ongoing; EudraCT-Nr: 2018-004523-36) joined as molecular lab technician

# **International Publications**

- 1. Recker M, Fleischmann WA, Nghia TH, Truong NV, Nam LV, Duc Anh D, Song LH, **The NT**, Anh CX, Hoang NV, My Truong N, Toan NL, Kremsner PG, Velavan TP. Markers of prolonged hospitalisation in severe dengue. PLoS Negl Trop Dis. 2024 Jan 30;18(1):e0011922. doi: 10.1371/journal.pntd.0011922. PMID: 38289968; PMCID: PMC10857710.
- Cao LC, Martin V, Linh LTK, Giang TT, Chau NTM, Anh TNP, Nghia VX, The NT, My TN, Sy BT, Toan NL, Song LH, Bock CT, Velavan TP. High Hepatitis E Virus (HEV) Seroprevalence and No Evidence of HEV Viraemia in Vietnamese Blood Donors. Viruses. 2023 Oct 11;15(10):2075. doi: 10.3390/v15102075. PMID: 37896852; PMCID: PMC10611202.
- 3. Gabor JJ, Anh CX, Sy BT, Hoan PQ, Quyen DT, **The NT**, Kuk S, Kremsner PG, Meyer CG, Song LH, Velavan TP. Aetiologies and clinical presentation of central nervous system infections in Vietnamese patients: a prospective study. Sci Rep. 2022 Oct 27;12(1):18065. doi: 10.1038/s41598-022-23007-0. PMID: 36302889; PMCID: PMC9613671.
- 4. Tung TT, Schmid J, Nghia VX, Cao LC, Linh LTK, Rungsung I, Sy BT, My TN, The NT, Hoan NX, Meyer CG, Wedemeyer H, Kremsner PG, Toan NL, Song LH, Bock CT, Velavan TP. Low Risk of Occult Hepatitis B Infection among Vietnamese Blood Donors. Pathogens. 2022 Dec 13;11(12):1524. doi: 10.3390/pathogens11121524. PMID: 36558858; PMCID: PMC9786887.
- 5. Pallerla SR, Van Dong D, Linh LTK, Van Son T, Quyen DT, Hoan PQ, Trung NT, **The NT**, Rüter J, Boutin S, Nurjadi D, Sy BT, Kremsner PG, Meyer CG, Song LH, Velavan TP. Diagnosis of pathogens causing bacterial meningitis using Nanopore sequencing in a resource-limited setting. Ann Clin Microbiol Antimicrob. 2022 Sep 5;21(1):39. doi: 10.1186/s12941-022-00530-6. PMID: 36064402; PMCID: PMC9443622.
- 6. Van CP, **Nguyen TT**, Bui ST, Nguyen TV, Tran HTT, Pham DT, Trieu LP, Nguyen MD. Invasive Meningococcal Disease Remains a Health Threat in Vietnam People's Army. Infect Drug Resist. 2021 Dec 8;14:5261-5269. doi: 10.2147/IDR.S339110. PMID: 34916810; PMCID: PMC8667609.
- 7. Sulyok Z, Fendel R, Eder B, Lorenz FR, Kc N, Karnahl M, Lalremruata A, **Nguyen TT**, Held J, Adjadi FAC, Klockenbring T, Flügge J, Woldearegai TG, Lamsfus Calle C, Ibáñez J, Rodi M, Egger-Adam D, Kreidenweiss A, Köhler C, Esen M, Sulyok M, Manoj A, Richie TL, Sim BKL, Hoffman SL, Mordmüller B, Kremsner PG. Heterologous protection against malaria by a simple chemoattenuated PfSPZ vaccine regimen in a

- randomized trial. Nat Commun. 2021 May 4;12(1):2518. doi: 10.1038/s41467-021-22740-w. PMID: 33947856; PMCID: PMC8097064.
- 8. Lalremruata A, **Nguyen TT**, McCall MBB, Mombo-Ngoma G, Agnandji ST, Adegnika AA, Lell B, Ramharter M, Hoffman SL, Kremsner PG, Mordmüller B. Recombinase Polymerase Amplification and Lateral Flow Assay for Ultrasensitive Detection of Low-Density Plasmodium falciparum Infection from Controlled Human Malaria Infection Studies and Naturally Acquired Infections. J Clin Microbiol. 2020 Apr 23;58(5):e01879-19. doi: 10.1128/JCM.01879-19. PMID: 32102854; PMCID: PMC7180247.
- 9. Adegbite BR, Edoa JR, Honkpehedji YJ, Zinsou FJ, Dejon-Agobe JC, Mbong-Ngwese M, Lotola-Mougueni F, Koehne E, Lalremruata A, Kreidenweiss A, Nguyen TT, Kun J, Agnandji ST, Lell B, Safiou AR, Obone Atome FA, Mombo-Ngoma G, Ramharter M, Velavan TP, Mordmüller B, Kremsner PG, Adegnika AA. Monitoring of efficacy, tolerability and safety of artemether-lumefantrine and artesunate-amodiaquine for the treatment of uncomplicated Plasmodium falciparum malaria in Lambaréné, Gabon: an open-label clinical trial. Malar J. 2019 Dec 16;18(1):424. doi: 10.1186/s12936-019-3015-4. PMID: 31842893; PMCID: PMC6916217.
- 10. **Nguyen, T.T.**, Nzigou Mombo, B., Lalremruata, A. et al. DNA recovery from archived RDTs for genetic characterization of Plasmodium falciparum in a routine setting in Lambaréné, Gabon. Malar J 18, 336 (2019). https://doi.org/10.1186/s12936-019-2972-y
- 11. Woldearegai, T.G., Lalremruata, A., **Nguyen, T.T**. et al. Characterization of Plasmodium infections among inhabitants of rural areas in Gabon. Sci Rep 9, 9784 (2019). https://doi.org/10.1038/s41598-019-46194-9
- 12. Lell B, Mordmüller B, Dejon Agobe JC, Honkpehedji J, Zinsou J, Mengue JB, Loembe MM, Adegnika AA, Held J, Lalremruata A, Nguyen TT, Esen M, Kc N, Ruben AJ, Chakravarty S, Lee Sim BK, Billingsley PF, James ER, Richie TL, Hoffman SL, Kremsner PG. Impact of Sickle Cell Trait and Naturally Acquired Immunity on Uncomplicated Malaria after Controlled Human Malaria Infection in Adults in Gabon. Am J Trop Med Hyg. 2018 Feb;98(2):508-515. doi: 10.4269/ajtmh.17-0343. Epub 2017 Dec 14. PMID: 29260650; PMCID: PMC5929186.
- 13. Groger M, Veletzky L, Lalremruata A, Cattaneo C, Mischlinger J, Zoleko-Manego R, Endamne L, Klicpera A, Kim J, **Nguyen T**, Flohr L, Remppis J, Matsiegui PB, Adegnika AA, Agnandji ST, Kremsner PG, Mordmüller B, Mombo-Ngoma G, Ramharter M. Prospective Clinical Trial Assessing Species-Specific Efficacy of Artemether-Lumefantrine for the Treatment of Plasmodium malariae, Plasmodium ovale, and Mixed Plasmodium Malaria in Gabon. Antimicrob Agents Chemother. 2018 Feb 23;62(3):e01758-17. doi: 10.1128/AAC.01758-17. PMID: 29311086; PMCID: PMC5826119.
- 14. Sy BT, Boutin S, Kieu Linh LT, Weikert-Asbeck S, Eger E, Hauswaldt S, Nhat My T, **The NT**, Rupp J, Song LH, Schaufler K, Velavan TP, Nurjadi D. Heterogeneity of colistin resistance mechanism in clonal populations of carbapenem-resistant Klebsiella pneumoniae in Vietnam. Lancet Reg Health West Pac. 2024 Sep 23;51:101204. doi: 10.1016/j.lanwpc.2024.101204. PMID: 39387065; PMCID: PMC11462480.
- 15. Dong DV, Boutin S, Sang VV, Manh ND, Hoan NX, Quang HX, Lien TT, Trang VD, **The NT**, Linh LTK, Schmauder K, Ueltzhöffer V, Hafza N, Hauswaldt S, Rupp J, Kremsner PG, Song LH, Nurjadi D, Peter S, Velavan TP. Optimization of the Diagnosis of Central Nervous System Infections in Vietnamese Hospitals: Results From a Retrospective Multicenter Study. Open Forum Infect Dis. 2024 Sep 13;11(9):ofae531. doi: 10.1093/ofid/ofae531. PMID: 39346707; PMCID: PMC11429109.
- 16. Mombo-Ngoma G, Remppis J, Sievers M, Zoleko Manego R, Endamne L, Kabwende L, Veletzky L, **Nguyen TT**, Groger M, Lötsch F, Mischlinger J, Flohr L, Kim J, Cattaneo C, Hutchinson D, Duparc S, Moehrle J, Velavan TP, Lell B, Ramharter M, Adegnika AA, Mordmüller B, Kremsner PG. Efficacy and Safety of Fosmidomycin-Piperaquine as Nonartemisinin-Based Combination Therapy for Uncomplicated Falciparum Malaria: A Single-Arm, Age De-escalation Proof-of-Concept Study in Gabon. Clin Infect Dis. 2018 Jun 1;66(12):1823-1830. doi: 10.1093/cid/cix1122. PMID: 29293893; PMCID: PMC5982710.