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OUR VISION

Embracing values for an excellent 2024



Prof Charles Wondji

As we enter 2024, CRID's staff and researchers must reflect on values guiding us to excellence: hard work, team spirit, continuous learning, collaboration, and vision. Hard work is the foundation of our achievements, driving contributions to infectious diseases research and improving public health outcomes.

Team spirit fosters a supportive, collaborative environment where collective achievements surpass individual efforts. Embracing "camaraderie" and diverse expertise, we tackle complex questions and address infectious

disease challenges. Continuous learning is essential as infectious diseases constantly evolve. Staying updated with research, technologies and methodologies is crucial. Committing to lifelong learning, attending conferences, and maintaining curiosity keep us at the forefront of scientific advancements.

Collaboration is pivotal for impactful research. Infectious diseases demand interdisciplinary collaboration within CRID and with external partners. By fostering strong collaborations, we leverage expertise and resources to develop comprehensive solutions. Vision provides purpose and direction. Let's envision a future

free from the threat of infectious diseases. Aligning our efforts with this vision inspires transformative changes. Bold aspirations and belief in our work's significance drive us forward.

In 2024, let's wholeheartedly embrace these values. With hard work, team spirit, continuous learning, collaboration, and vision, we will achieve extraordinary results. As CRID's dedicated staff and researchers, we will make a lasting, positive impact on global health, with groundbreaking research, transformative collaborations, and progress toward a world without infectious diseases.

## Employee Milestone

### New staff recruited at CRID in 2023

- **FOGAN JESSE** : Policy and external affairs manager - January
- **GYEN MUNAKWA Romario** : Finance officer-January
- **AYUK AMBANG** : Finance officer -January
- **BIAKOLO Benjamin** : Driver-January
- **NDJODJA TALLA Florentine** : HR Assistant-February
- **NZOUJET Richie** : Estates officer-May
- **KARAWA Rachel** : Receptionist-September

## Capacity Building

### Williams Tchapga selected for a prestigious scholarship!

*Williams Tchapga, Laboratory Technician at the Centre For Research In Infectious Diseases (CRID), is currently pursuing a Master's of Science in Infectious Biology and Control at CERMEC Lambaréné in Gabon, as part of the Central African Infectious Diseases and Epidemics Research Alliance (CAIDERA) program.*



The Master program is a scholarship offered by the University of Tübingen in Germany and is the first of its kind in Central Africa. Since the start of the program on October 2, 2023, Williams has been fully immersed in his studies, eager to acquire theoretical knowledge that complements his practical skills gained during his time at CRID.

Williams out of numerous applicants, was among the fortunate 15 students chosen for the first cohort of this prestigious program. Motivated by his passion for scientific research, Williams recognized the importance of augmenting his practical experience with a solid theoretical foundation. The Master's program in Infectious Biology and Control will provide him with the opportunity to deepen his understanding of the field and broaden his prospects for future research endeavors. Upon completion of the program, Williams plans to pursue a Ph.D., enabling him to further advance his career in scientific research. Prior to undertaking his Master's program, Williams made significant contributions as the Insectary Manager at CRID. The world eagerly awaits the future achievements and breakthroughs that Williams will undoubtedly bring forth as he continues to excel in his scientific journey.

### Exploring new frontiers

*Sylvère Kezeta and Manuela Metsadong, two PhD students from the ACoMVeC Project, recently completed a 4-month research stay at Ecole Polytechnique de Thies in Senegal. They were invited by Prof. Ramses Djidjou-Demassee.*



During their stay in Senegal, they worked closely with their supervisor and achieved significant milestones in their research. Firstly, they established the well-posedness of their model, which is a crucial step in ensuring the validity and reliability of their research. They thoroughly studied the existence and stability of steady states within their model, contributing to a deeper understanding of its dynamics. Additionally, they conducted numerical simulations to further explore and validate their findings.

In addition to their research work, Sylvère also took advantage of the opportunity to attend two seminars. The first seminar, titled «Randomness and PDEs,» was organized by the African Institute for Mathematical Sciences (AIMS-Senegal). This seminar provided insights into the intersection of randomness and partial differential equations, broadening Sylvère's knowledge in his field of study. The second seminar, titled «Evolutionary Dynamical Systems and Applications,» was organized by Ecole Polytechnique de Thies and covered various applications of evolutionary dynamical systems. Attending these seminars expanded Sylvère's understanding of related topics and provided valuable networking opportunities. Overall, Sylvère Kezeta and Manuela Metsadong's industrial training at Ecole Polytechnique de Thies was highly productive. They made significant progress in their research, attending seminars that

enriched their knowledge and fostering collaboration with experts in their field.

### Students from CRID, broadened their skills in data analysis

*Brice Natchema and Yvan Fotso, two Ph.D. students from CRID, recently attended a course in Tanzania focused on data analysis and World Health Organization (WHO) guidelines for vector control products.*



They gained valuable skills in data management, regression analysis, equivalence trials, and understanding WHO guidelines. This knowledge empowers young African researchers like Brice and Yvan to contribute to comprehensive meta-analyses, evaluate the efficacy of vector control strategies, and navigate international standards for malaria interventions. Their expertise will strengthen research capacity, inform evidence-based decision-making, and improve public health outcomes across Africa.

Attending the course in Tanzania, Brice Natchema and Yvan Fotso, Ph.D. students from CRID, broadened their skills in data analysis and understanding WHO guidelines for vector control products. Equipped with expertise in data management, regression analysis, equivalence trials, and WHO guidelines, they can now contribute to comprehensive meta-analyses, evaluate vector control interventions, and ensure adherence to international standards. This knowledge empowers young African researchers to strengthen research capacity, inform evidence-based interventions, and enhance public health outcomes on the continent.



## Grants



### Magellan Tchouakui awarded Wellcome Trust Early Career Award (WTECA)

Dr. Magellan Tchouakui, the first PhD graduate from CRID, has been awarded a 5-year Wellcome Trust Early Career Award fellowship. The project focuses on studying the fitness cost of insecticide resistance in malaria vectors, specifically *Anopheles gambiae* mosquitoes

from Cameroon and Uganda. The research aims to identify genetic modifiers that compensate for fitness cost of resistance and evaluate their impact on malaria control interventions. The collaboration between CRID and LSTM will train African scientists and seek novel inhibitors for improving existing control strategies. This fellowship, with a funding of approximately £681,000 (approximately 562,000,000 XAF), providing significant resources for Dr. Tchouakui's research and the advancement of malaria control efforts in Cameroon, Uganda, and beyond.

**Events**
**Cridians attend ASTMH Annual Meeting in Chicago**

*Dr. Magellan Tchouakui and Mrs. Sado Yousseu Francine, from the Centre for Research in Infectious Diseases (CRID), were awarded the prestigious American Society of Tropical Medicine & Hygiene (ASTMH) 2023 Annual Meeting Travel Award.*



Their exceptional achievement was made possible through the generous support of the Bill & Melinda Gates Foundation. The ASTMH Annual Meeting, held from October 18-22 in Chicago, United States, provided an outstanding platform for showcasing their groundbreaking research in the field of tropical medicine and infectious diseases. This esteemed award not only recognizes their outstanding contributions but also highlights the Society's commitment to fostering professional development and career advancement for researchers and trainees worldwide. This incredible opportunity will expand their scientific networks, facilitate new collaborations, and contribute to lifelong learning experiences. During the ASTMH Annual Meeting on October 19, 2023, Dr. Magellan Tchouakui presented on behalf of Prof. Charles Wondji, the Executive Director of the Centre for Research in Infectious Diseases (CRID). The presentation, titled «Molecular Markers

of Metabolic Resistance in Malaria Vectors,» focused on their research funded by the Bill and Melinda Gates Foundation, which aims to detect molecular markers of resistance to pyrethroids, the primary insecticide used for bednet impregnation, in major malaria vectors. This work holds significant importance in addressing the challenge of malaria control.

**Successful defense of Miss Viviane Ongbassomben's master's dissertation**


In Yaoundé, Cameroon, on Thursday, October 5, 2023, Miss Viviane Ongbassomben, a Master of Science (MSc) student from Prof. Ndo Cyrille's team, successfully defended her Master's dissertation with distinction at the Faculty of Medicine and Biomedical Sciences, University of Yaoundé I. Her study, titled «Investigation of Plasmodium falciparum pfrp2 Gene Deletion Frequency and Its Impact on the Reliability of Rapid Diagnostic Tests for Malaria,» concluded that there was no evidence of pfrp2 partial deletion in the screened samples. This finding is encouraging, but ongoing monitoring of the performance of Rapid Diagnostic Tests (RDTs) for malaria detection in Cameroon remains crucial. This monitoring is necessary to ensure the reliability and accuracy of these diagnostic tests. Miss Viviane Ongbassomben's exceptional work was recognized with the mention of «Excellent.» Congratulations to Viviane for this remarkable achievement !

**Time to rejoice**

*Cameroon witnessed a remarkable day at CRID. It was on December 22, 2023, Yaoundé.*



The festive season brought together administration staff, support staff, and researchers for a delightful gathering at CRID. It was a valuable occasion that fostered social connections and strengthened relationships among the personnel. The Rainforest International School hosted the handball and football matches between staff and researchers. Within the CRID premises, laughter and cheer filled the air as people engaged in card games, lively dance contests, strategic checkers battles, and even tried their hand at archery.

The event served a deeper purpose by uniting everyone and fostering a sense of togetherness, offering a glimpse into the future. Professor Charles Wondji, CRID's Executive Director, shared his vision for 2024, emphasizing the importance of unwavering dedication, capacity building, refined organizational skills, and maintaining discipline. He encouraged everyone to be trailblazers for their aspirations, giving their best in every endeavor and becoming their own greatest advocates. As Christmas approached, Professor Wondji extended his Christmas wishes to the staff. The event showcased the vibrant spirit and unity within CRID, inspiring everyone to approach the upcoming year with renewed energy and enthusiasm.

**Collaboration**
**CRID promotes North-South collaboration: RAFT team visits for Arbovirus control**

*At CRID, the promotion of North-South collaboration is highly encouraged, especially regarding the strengthening of local capacity for controlling arboviruses.*



In line with this objective, a team from the Resilience Against Future Threats (RAFT) program visited the Centre for Research

in Infectious Diseases (CRID). The team consisted of twenty members from the United Kingdom, Thailand, Mexico, Tanzania, Côte d'Ivoire, Burkina Faso, and Cameroon. Their visit, which took place in Yaoundé on November 2, 2023, aimed to gain a better understanding of CRID's research and public health activities in Cameroon and Central Africa. They had the opportunity to explore the malaria research laboratories and the insectarium, further enhancing their knowledge and collaboration in arbovirus control.

**Audience at the Ministry of Health (MoH)**

On Tuesday, November 7th, 2023, Professor Njock Louis, the General Secretary of MoH, held a meeting with the RAFT team, headed by Professor Sian Clarke from the London



School of Hygiene and Tropical Medicine (LSHTM), and Professor Charles Wondji, the Executive Director of CRID. Dr. Phanuel Habimana, the World Health Organization (WHO) representative in Cameroon, was also in attendance. The purpose of the meeting was to address the risks associated with arbovirus diseases, including dengue and yellow fever, and to exchange information about the ongoing initiatives undertaken by the RAFT consortium and CRID to prepare Cameroon for future outbreaks. The discussion also focused on strategies aimed at reducing the burden of malaria in the country.



## Field Activities

### The WHO-TDR project was launched in Bamenda



In Bamenda, Cameroon, on November 9, 2023, Dum-Buo Nnamdi, Principal Investigator and social scientist at CRID, met with key stakeholders at the regional and district levels to plan the implementation of a mobile phone-based SMS system for assessing and reporting malaria burden by Community Health Workers in the conflict-affected North-West region. The meeting included representatives from the regional delegation, district

medical officers, Reachout Cameroon, and the research team from CRID.

The next day, the research team, held a preparatory meeting at the District Health Service in Bamenda to ensure the success of the upcoming training session. They focused on finalizing the details for training community health workers on the implementation of the mobile phone-based SMS system. Exciting progress was made on November 11, 2023, as the research team successfully launched the training workshop. Dum-Buo Nnamdi, along with William Tadam Tadam and Fuh Donatien, empowered community health workers in the North-West region to detect and report malaria burden using the Trinity 2.0 mobile application. The workshop included opening remarks, participant introductions, presentations, practical sessions engaging discussions, and a group photo, marking a significant step forward in the fight against malaria.



## Visits

### CRID Staff visited S<sup>t</sup> Emilie orphanage

On December 16, 2023, a team of over 100 CRID staff members had the privilege of visiting children at the Saint Emilie Orphanage in Yaoundé.



The visit was filled with warmth and happiness as the team brought an array of gifts, including toys, books, clothes, and essential items, spreading Christmas cheers throughout the orphanage. The atmosphere was filled with joy as the children and CRID staff engaged in meaningful conversations, shared laughter, and even danced together, creating precious and lasting memories for everyone involved.

During the visit, the CRID staff provided invaluable support and encouragement to the children, offering guidance and inspiring them to have big dreams and believe in their abilities. The importance of education, resilience, and kindness was emphasized, instilling seeds of hope and empowerment in the young hearts.



## Awards

### A pleasant surprise for CRID's Communication Manager



**William Tadam Tadam Honored with National Prize for Health Reporting in Cameroon.**

On November 16, 2023, at the Hilton Hotel in Yaoundé, Cameroon, the Organizing Committee of the African Health Leadership Award

(PALSA) and the 6th edition of the Excellence in Health Leadership Award (PELSCA) in Cameroon honored William Tadam Tadam,

Communication Manager of CRID, with the 3rd National Prize for Health Reporting in Cyber Press for the year 2023. This recognition serves as a testament to his outstanding leadership in the field of healthcare, demonstrated through his informative and impactful medical awareness initiatives aimed at benefiting the general population.

The title was bestowed upon him based on public votes and rigorous evaluations conducted by the scientific and organizing committee. Upon receiving the award, the recipient expressed his surprise and satisfaction, stating, «It was a pleasant surprise. This recognition reflects the dedication and seriousness with which we approach our work at CRID every day. It motivates us to continue our efforts without hesitation. It is clear that we can't stop, we won't stop», said the recipient calm and confident.



## Scientific Publications

Abel Agbevo, Idelphonse Ahogni, Benjamin Menze, Patrick Tungu, Elison E. Kemibala, Renaud Govoetchan, **Charles Wondji**, Germain Gil Padonou, Corine Ngufor. **Community evaluation of the physical and insecticidal durability of DuraNet® Plus, an alpha-cypermethrin and piperonyl butoxide incorporated mosquito net: protocol for a multi-country study in West, Central and East Africa.** *Arch Public Health.* 2023; 81: 202. Published online 2023 Nov 20. <https://doi.org/10.1186/s13690-023-01217-w>.

**Brice Natchema S.** Fonkou, Magellan Tchouakui, Benjamin D. Menze, Leon M. J. Mugenzi, Derrick Fofie, Daniel Nguiffo-Nguete, Lucia Nkengazong, Jeannette Tombi & Charles S. Wondji. **Entomological longitudinal surveys in two contrasted eco-climatic settings in Cameroon reveal a high malaria transmission from *Anopheles funestus* associated with GSTe2 metabolic resistance.** *BMC Infect Dis* 23, 738 (2023). <https://doi.org/10.1186/s12879-023-08698-8>



## Partners and funders

