

## DONATIONS

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## VISITS

### An inspiring visit

The students were given the opportunity to discover CRID's insectarium and laboratories, where they could observe insects up close and learn about scientific experiments. p4

## LABOR DAY 2024

### Labor Day celebration at CRID

Yaoundé, May 1st, 2024. Celebrating the 138th edition of International Labor day, CRID organized a ceremony at its premises following the parade at Mfou Festival Square.

## EVENTS

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# NEWSLETTER



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## OUR VISION

### Elevating the fight against infectious diseases in Cameroon

Prof. Charles Wondji



As the global community intensifies its efforts to combat the persistent threat of infectious diseases, CRID in Cameroon is poised to make significant contributions to this crucial endeavour. CRID's commitment to high-quality research on infectious diseases in Cameroon and across Africa is evident in their impressive publication record, with nearly 100 scientific articles published in the last three years. Moreover, their ability to secure competitive research grants from prestigious international funders, such as the Bill and Melinda Gates Foundation, Wellcome Trust, and the National Institutes of Health (NIH), underscores the centre's scientific excellence and the relevance of its work.

Recognizing the importance of cutting-edge tools and technologies, CRID has recently established a state-of-the-art genomics unit, enabling the sequencing of vector and pathogen genomes to enhance epidemiological and entomological surveillance. This strategic investment in infrastructure demonstrates CRID's forward-thinking approach to tackling infectious diseases. Beyond research, CRID is also committed to strengthening the capacity of the next generation of infectious disease researchers. The centre currently hosts around 30 Ph.D. students from various Cameroonian universities, as well as several postdoctoral researchers. Furthermore, CRID provides valuable training for young scientists in the art of securing research funding and writing competitive proposals, a crucial skill for sustaining scientific progress.

CRID's role as an innovation hub is equally noteworthy. The centre is collaborating with international partners to explore the use of gene drive technology, a pioneering approach to genetically interrupt malaria transmission by mosquitoes. This ambitious project, funded by the Wellcome Trust, underscores CRID's willingness to embrace cutting-edge solutions in the fight against infectious diseases.

As Cameroon and the African continent grapple with the persistent challenge of infectious diseases, the work of CRID stands as a beacon of hope. Through its commitment to high-quality research, capacity building, and innovative approaches, the centre is poised to make a lasting impact on the health and well-being of communities across the region. It is this unwavering dedication that positions CRID as a vital player in the national and global effort to combat infectious diseases.

## CRID'S head office building inaugurated

■ On May 8, 2024, CRID officially inaugurated its new head office building located at Nkoulou-Carrière, Odza, Yaoundé, Cameroon. Over 150 guests and partners attended the special occasion to celebrate this milestone. The inauguration ceremony was graced by the presence of Dr. Etoundi Mballa Georges, the representative of the Minister of Health of Cameroon. P3



Dr. David Wolton receiving a gift from Prof Charles Wondji

## DEFENSE

### Sado Francine ended her Ph.D journey

■ Dr. Sado Francine conducted all the research related to her Ph.D Thesis at CRID, an institution committed to training the next generation of scientists in Cameroon and Africa. p4

## TRAINING

### N. IAEA regional training course on population genetic studies hosted CRID

■ On May 6, 2024, CRID welcomed the commencement of the IAEA ( Agence Internationale de l'Énergie Atomique ) Regional training course on population genetic studies to support Tsetse intervention programmes. p2



# TRAINING

## IAEA regional training course on population genetic studies for Tsetse intervention hosted CRID

On May 6, 2024, CRID welcomed the commencement of the IAEA ( Agence Internationale de l'Energie Atomique ) Regional training course on population genetic studies to support Tsetse intervention programmes.



The course was directed by Prof. Charles Wondji, the Director of CRID. The scientific sessions started with an engaging introductory course by Prof. Njiokou Flobert, a renowned expert in the field. In a concise yet informative 30-minute session, he provided a comprehensive overview of the significance of population genetic studies, highlighting the importance of the markers developed over time and the outcomes they yield. The training program encompassed both theoretical lectures and hands-on practical sessions led by a team of CRID researchers, including Dr. Tito Trésor Melachio, Dr. Francois Sougal Ngambia Freitas, and Mr. Bertrand Mbakam. This comprehensive learning experience equipped the participants with the necessary skills and understanding of genetic population studies of tsetse flies. By equipping the participants

with these valuable insights and practical techniques, the training course aimed to bolster efforts in tsetse intervention programs across the region. The exchange of ideas and experiences among the trainees from diverse backgrounds added value to the learning process, fostering a collaborative atmosphere that promotes growth and innovation. Through collaborative efforts, CRID and the IAEA strive towards a future where tsetse-borne diseases are effectively controlled, ensuring the well-being and prosperity of communities across the region.

## MINT Training Workshop on Malaria Modeling



From May 27-31, 2024, CRID hosted the Malaria Intervention Tool (MINT) training workshop on malaria modeling. This hands-on led training brought together vector biologists, malaria modelers, and the National Malaria Control Program (NMCP). The workshop focused on mathematical modeling of malaria transmission and the MINT tool, which was developed by Imperial College London in the UK. The MINT tool aims to assist stakeholders in malaria-endemic countries by exploring how transmission dynamics mathematical models can support decision-making for the allocation of resources to vector control.

## National Preparedness for Escalating Arbovirus Threats

**The workshop aimed to assess Cameroon's national preparedness for addressing the growing danger of arbovirus.**



A workshop on the assessment of national preparedness for escalating arbovirus threats in Cameroon took place in Soa municipality in the Centre Region from July 4-5, 2024. This workshop was organized by Malaria Consortium through CRID as part of the Resilience Against Future Threats (RAFT) project, which is financed by the Foreign, Commonwealth & Development Office (FCDO). A total of 25 participants attended the workshop. The workshop aimed to assess Cameroon's national preparedness for addressing the growing threat of arbovirus infections, such as dengue, Zika, and chikungunya, which have been on the rise in the region. The Director and Deputy Director from the Ministry of Health, as well as health agents from municipalities, NGOs, and health districts attended the workshop. Through this workshop CRID's renewed its commitment to capacity-building and knowledge-sharing in the fields of malaria and arbovirus research and control.

## A workshop to master Flow Cytometry

**The training was organized as part of the FlowAfrica Project, which aims to develop flow cytometry capabilities in Africa. As part of this project, CRID received a FACSCalibur flow cytometer donated by the**

### FlowAfrica team.



From June 25 to July 04, 2024, CRID hosted a capacity building workshop on Flow Cytometry. The training was organized as part of the FlowAfrica Project, which aims to develop flow cytometry capabilities in Africa. As part of this project, CRID received a FACSCalibur flow cytometer donated by the FlowAfrica team, led by Professor Oscar Fornas from the Pompeu Fabra University (UPF) and the Centre for Genomic Regulation (CRG) in Barcelona, Spain. The donation was coordinated by TRéND in Africa, which also helped fund the shipping of the equipment and the training course.

The training covered various aspects of flow cytometry, including the technical operation of the FACSCalibur instrument, cell preparation, antibody labeling, and data analysis. The sessions emphasized the importance of proper controls and the application of flow cytometry in biomedical research and diagnostics. The workshop included both theoretical and hands-on practical sessions, where the 16 trainees from CRID had the opportunity to directly work with the FACSCalibur instrument. These hands-on exercises were essential for developing the necessary skills and confidence to utilize flow cytometry technology in their future research and work at CRID. This capacity building initiative is expected to strengthen the Flow Cytometry capabilities at CRID, enabling researchers to leverage this advanced analytical technology to improve public health research and diagnostics across Africa.

# GRADUATION

## BASILE KAMGANG AWARDED HDR

**The HDR is the highest academic qualification in the French system, recognizing exceptional research and teaching expertise.**

Dr. Basile Kamgang has received the prestigious HDR (Habilitation à Diriger des Recherches) from Montpellier University on March 28, 2024. The HDR is the highest academic qualification in the French system,

recognizing exceptional research and teaching expertise. Basile's HDR honors his outstanding work in medical entomology, particularly his research on Aedes-borne viral diseases in Central Africa. Dr. Kamgang contributions have significantly advanced the understanding of these critical diseases. Basile's colleagues highly appreciate the remarkable impact of his work.



# EMPLOYEES MILESTONE

### Departure

- NZUEMI Aurianne : Master student

### New

- TCHAMO Adèle : Finance Officer

- KAMEGNE Alvine : Laboratory Technician

- BUH Joycelyne: Finance Officer

- NTYAME Angeline: Finance Officer

- MBAKOP Renaise: Post doc

- KANTE Satrien: Post doc

- MELLA Ghislaine: Master student

- NKODA Armelle Carine: Master student

# STATISTICS

51 Women

73 Men

41 Students

38 Administration

18 Technicians

27 Scientists

## LABOR DAY 24

### Sports activities to promote camaraderie among researchers

*Prior to the 138th edition of International Labour Day, the Centre for Research in Infectious Diseases (CRID) embraced the spirit of self-fulfillment by organizing engaging sports activities.*



Prior to the International Labour Day on May 1st, CRID organized sports activities. It was on April 27, 2024, the event took place at the International Rainforest

School in Nkoulou-carrière, Odza, Yaoundé, Cameroon. People from CRID and from Centre Pasteur du Cameroun (CPC), another research institution, came together for games.

The event had football and handball matches. CRID men's football team played against CPC team. CRID women's handball team played against CPC women's team. The sports activities helped

both research institution staffs to socialize and connect with their peers from the other institution. It was a fun and memorable event, with fair play, teamwork, and unity among the participants. By such activities, CRID top management is showing a will to remain focus on the well-being and fulfillment of its staff. The aim here is to foster a supportive environment beyond just scientific research.

### CRID joined Labor day parade for the first time

*CRID's staff were excited and proud to represent their institution in the Labor day celebrations.*



On May 1, 2024, CRID took part in the International Labor day celebrations placed under the theme : «Constructive social dialogue vector of decent work

and social progress.» A highlight for CRID was when around 50 of their staff members joined the Labor Day parade in Mfou Festival Square. This was the first time CRID had participated in this event. The local government official, Thierry Kin-Nou Nana, who is the Prefect of the «Mefou et Afamba» area, attended the parade. CRID's procession was led by a young woman from staff

carrying a flag, followed by three boys holding a banner.

For the relatively new CRID organization, this was an important moment. It showed the commitment to workers' rights and social progress. CRID's staff were excited and proud to represent their institution in the 138th edition of the Labor day celebrations.

### Labor Day celebration at CRID

*Yaoundé, May 1st, 2024. Celebrating the 138th edition of International Labor day, CRID organized a ceremony at its premises following the parade at Mfou Festival Square.*



The event started with a speech from the deputy personnel delegate, Bertrand Mbakam. He called the attention of colleagues on the importance of being dedicated, disciplined, and keeping the work environment clean. He urged top management to prioritize the organization's human resources, recognizing them as the foundation of all

achievements. The ceremony also recognized excellent work done at CRID. Certificates were given to Dr. Francine Sado, Dr. Francis Nkemngo, and Dr. Calmes Bouaka for successfully defending their Ph.D. theses. Dr. Djova Valdi and Dr. Emmanuel Elanga were honored for becoming university lecturers, and Dr. Basile Kamgang was recognized for receiving a research qualification from Montpellier University in France. Bokali Jean Aubierge was named the best support staff of the year, and Gyen Romario Munakwa was recognized for great work in

administration and finance. Dr. Francis Nkengmo was the best student of the year, Dr. Tchouakui was awarded the prize of the best scientist at CRID.

Prof. Charles Wondji in his speech talked about the importance of following procedures and being disciplined. He encouraged students to work hard and build a strong foundation for their careers, not just focus on revenues. He then announced that CRID staffs will get their salaries increased. This made the audience in auditorium made mainly of staff from CRID very happy and they cheered.

## DONATIONS

### CRID team donates equipment to NMCP

*In the morning of April 12, 2024, a delegation from CRID visited the National Malaria Control Program (NMCP) in Yaoundé, Cameroon.*



CRID team, comprising Dr. Magellan Tchouakui, Bruno Essame, Ngahan Yamedjeu Vanelle, Tseyep Rodrigue, and other members of the African Consortium in Modeling

for Effective Vector Control (ACoMVeC) project, provided NMCP with essential equipment. The donated items included a video projector, laptops, desktop computers, external hard drives, statistics and modeling software, and other necessary tools. The goal was to help the NMCP establish a dedicated Mathematical Modeling unit. The NMCP leadership, led by Permanent Secretary Dr. Joel Ateba and his team, gratefully received the equipment. Dr.

Ateba expressed his heartfelt appreciation for the support, which will contribute to strengthening malaria control efforts in Cameroon.

This collaborative effort between CRID team and NMCP demonstrates a shared commitment to leveraging advanced tools and techniques, such as mathematical modeling, to enhance the effectiveness of malaria control programs in the region.

## EVENT

### CRID'S head office building inaugurated

*The inauguration of CRID's new head office building marks a significant milestone, reflecting the organization's unwavering commitment to healthcare and research in Cameroon and across Africa.*



On May 8, 2024, CRID officially inaugurated its new head office building located at Nkoulou-Carrière, Odza, Yaoundé, Cameroun. Over 150 guests and partners attended the special occasion to celebrate this milestone. The inauguration ceremony was graced by the presence of Dr. Etoundi Mballa Georges, the representative of the Minister of Health of Cameroon. Prof. Charles Wondji, CRID's Executive Director, personally welcomed and greeted each of the distinguished guests, making them feel valued and appreciated.

The new building left a lasting impression on all who attended, with its impressive beauty and advanced facilities. Mr. Ondigui Owona Jean Francois, the Mayor of Nkolafamba municipality, joined the event and expressed his admiration for this architectural masterpiece within the community. During the ceremony, Dr. Etoundi Mballa Georges, representing the Minister of Public Health, officially cut the ribbon to inaugurate the new building. A guided tour of the facility showcased CRID's state-of-the-art equipment and laboratories, further inspiring Dr. Etoundi Mballa to encourage the Minister of Public Health to visit and witness this remarkable achievement.

The inauguration of CRID's head office building marks a significant milestone, reflecting the organization's unwavering commitment to healthcare and research in Cameroon and across Africa. CRID extends its heartfelt gratitude to all the guests and partners for their presence and support. Together, we will continue working towards a healthier future. Rubby Aworka from GAEC, Ghana was also present.

# DEFENSES

## Sado Francine ended her Ph.D journey

*Dr. Sado Francine conducted all the research related to her Ph.D Thesis at CRID, an institution committed to training the next generation of scientists in Cameroon and Africa.*



Great !!! On April 4, 2024, Sado Yousseu Francine defended her Ph.D thesis in Microbiology at

the University of Buea, Faculty of Science, Department of Microbiology and Parasitology, with distinction. The thesis topic focused on the « genetic diversity of ticks, tick-borne pathogens, and arboviral zoonoses circulating in domestic ruminants from various origins in two markets of Yaoundé, Cameroon ». Dr Sado's thesis was supervised by Prof. Charles S. Wondji and Prof. Roland Ndir Ndir. The jury, consisting of Prof. Samuel Wanji as the Chairperson, Prof. Ateujieu Jerome as Rapporteur 1, Associate Prof. Achaiango Patrick Njukeng as Rapporteur 2, and Prof. Tatsinkou Fossi Bertrand as a member, congratulated the candidate for her outstanding work. Dr. Sado Francine conducted all the research related to her Ph.D Thesis at CRID, an institution committed to training the next generation of scientists in Cameroon and Africa.

## Fotso Kongne Bebert defended his dissertation in Animal Biology

*The successful defense of his Master's dissertation is a testament to his hard work, dedication, and the support provided by the CRID research team.*



On June 26, 2024, M. Fotso Kongne Bebert, a Master's student at the University of Yaoundé 1, successfully defended his dissertation in Animal Biology

(Option: Parasitology and Ecology) with distinction. His research at the Centre for Research in Infectious Diseases (CRID) focused on «Investigating the cross-resistance between pyrethroid and chlorfenapyr insecticides in the primary African malaria vector Anopheles gambiae.» His study was under the supervision of Prof. Charles Wondji from Liverpool School of Tropical Medicine and Prof. Flobert Njio from University of Yaoundé 1

M. Fotso Kongne Bebert's study contributes to the ongoing efforts to understand and address the challenge of insecticide resistance in the Anopheles gambiae mosquito, the primary vector of malaria in Africa. The successful defense of his Master's dissertation is a testament to his hard work, dedication, and the support provided by the CRID research team.

## World Malaria Day 2024

*The theme this year is «Accelerating the fight against malaria for a more equitable world.» This emphasizes our shared goal of achieving a world free from malaria, where everyone.*

April 25 was World Malaria Day. At the occasion, CRID stood with the global health community to celebrate World Malaria Day 2024. The theme this year was «Accelerating the fight against malaria for a more equitable world.» This emphasizes our shared goal of achieving a world free from malaria, where everyone has equal access to prevention, diagnosis, and treatment. In recent years, progress in reducing malaria has slowed down. Malaria continues to endanger health and cost lives. It also keeps people in a cycle of inequality. Those living in the most vulnerable situations, like

pregnant women, young children, refugees, and indigenous people, are impacted the most by malaria.



The World Health Organization's African region has the highest burden of malaria. According to World Health Organization (WHO), in 2022, this region accounted for 94% of malaria cases and 95% of malaria deaths globally. People living in poverty and with less access to education in rural Africa are the most affected. At the current rate, WHO's global malaria reduction goals for 2025 will be missed. All together, let us give our best to decrease malaria burden in Africa.

# VISITS

## An inspiring visit

*The students were given the opportunity to discover CRID's insectarium and laboratories, where they could observe insects up close and learn about scientific experiments.*

On May 3rd, 2024, CRID had the pleasure of welcoming 20 students from the Bilingual School Complex Mekouja, accompanied by a staff member team comprising Ms. Yadjui Doline, a guidance counselor and Mr. Kuetche Jed, All the students were given the opportunity to discover CRID's insectarium and laboratories, where they could observe insects up close and learn about scientific experiments.

The visit not only exposed the students to various aspects of CRID's research but also aimed to inspire their interest in the field of science. By providing them with firsthand experiences and interactions with CRID's team, the organization hoped to ignite the students' curiosity and passion for scientific exploration. Through such educational initiatives, CRID remains committed to promoting scientific literacy and engagement among the younger generation, nurturing the next wave of researchers and scientists.

CRID is dedicated to fostering a love for science and encouraging students to pursue their curiosity in the field. The organization looks forward to welcoming more young minds to its facility in the future, as part of its ongoing efforts to support and inspire the next generation of scientific leaders.

## EVENT Team CRID at MIM Conference

*Professor Wondji gave a plenary talk on «Innovative Vector Control Tools,» sharing the latest developments in new insecticides, future bed nets, and transformative tools such as spatial repellents.*



April 2024, Kigali, Rwanda. Professor Charles Wondji, the ics at the Liverpool School of Tropical Medicine, attended high-level scientific meeting with the Minister of Health of Rwanda during the Multilateral Initiative on Malaria (MIM) conference in Kigali. This was an opportunity to discuss Rwanda's strategy to become a hub for biomedical research in Africa and to strengthen collaboration with other African and global partners. At the MIM conference, Professor Wondji gave a plenary talk on «Innovative Vector Control Tools,» sharing the latest developments in new insecticides,

future bed nets, and transformative tools such as spatial repellents. Researchers from CRID, including Dr. Magellan Tchouakui, Dr. Jonas Kengne, Daniel Nguiffo Nguete, Carlos Djoko, and Mrs. Sonia Ngongang, also presented their research on various aspects of insecticide resistance and its impact on the efficacy of vector control interventions. These contributions highlighted the critical work being done at CRID to address the challenges of malaria control in Africa.

## AMMNET meeting

The Applied Malaria Modeling Network (AMMnet) meeting took place in Kigali, Rwanda on 18-19 April 2024, focusing on the Training in Modeling and Networking Event. The project ACoMVeC was represented by four members from CRID Cameroon: Dr. Kuipou William, Kezeta B. Sylvere, and Dongmo Franck J. Additionally, Rubby Aworka from GAEC, Ghana was also present.



**PARTNERS AND FUNDERS**

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