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Yaoundé - Cameroon, Nkoloul Carrière

# NEWSLETTER



A publication of the Centre for Research in Infectious Diseases, N°018, Second quarter, April- June 2025

## GRANTS

### Prof Blaise Bougnom joins CRID with two game-changing research ventures

Prof Blaise BOUGNOM, Senior Research Scientist from the University of Yaoundé I recently joined CRID team of Principal Investigators (PIs).



He has secured two significant projects through the institution. The first project, spanning from 2025 to 2027 funded by the Science for Africa Foundation (SFA), is entitled "Predicting drug-resistant bacterial dynamics in maternity wards of Burkina Faso and Cameroon under climate change: a precision public health study", with a funding of 196,900 (approximately 117,633,967 XAF Francs). The second one, funded by the International Centre for Antimicrobial Resistance Solutions (ICARS), is entitled "Preventing the spread of antimicrobial resistance (AMR) through wastewater used in urban agriculture in Cameroon", with funding of \$ US 672,228.8 (approximately 401,609,700 XAF Francs), and will run from 2025-2029.



## INTERNATIONAL LABOUR DAY CRID commemorated the occasion

■ **May 1, 2025, marks International Labour Day, celebrated worldwide. This year, CRID commemorated the occasion with a massive representation.**

On May 1, 2025, CRID joined global celebrations for International Labour Day with strong participation at the Mfou Festival Square. Fifty staff members attended the parade in the presence of Thierry Kin-Nou Nana, Divisional Officer of Mefou et Afamba Department. CRID's football team received the Champion Trophy and medals for winning the Mfou tournament. During the procession, CRID staff took part to the parade, carrying a banner and exposing some mosquitoes images. The 139<sup>th</sup> Labour Day observance centered on the theme "Social Dialogue and Decent Work for a Peaceful Cameroon." CRID's involvement highlighted its commitment to these values and strengthened community engagement.

**Celebration of excellence.** After the parade, CRIDians headed on site for festivities. The ceremony began with a speech from the Executive Director, Prof Charles Wondji. As he acknowledged staff efforts, he promised to strive even harder to improve their working conditions, for greater scientific achievements. After this, prizes were awarded to the best employees in each category. Bruno Essame, Project manager, was named Best Administration and Finance staff 2025. Dr Basile Kamgang, Head of Medical Entomology Department, was awarded the prize for Best Research Scientist. Sonia Nzembon received the Best Laboratory Technician award for 2025. Dr Armel Tedjou earned the distinction of the Best Post-doctoral researcher, while Nelly Tatchou was recognized as the outstanding PhD student of 2025. The Best Support Staff Award for 2025 went to Adamou Ousmaila, CRID's Security Guard.

## COLLABORATION CRID and CPC sign a memorandum of understanding



On Wednesday, 9<sup>th</sup> April 2025, CRID and Centre Pasteur du Cameroun (CPC) officially formalised their collaboration, as previously announced in September 2024. The signing ceremony took place at CPC's premises, with CRID represented by a delegation under the leadership of its Executive Director, Prof Charles Wondji, and CPC represented by its Director, Dr. Mirdad Kazanji. This agreement establishes a framework to enhance scientific collaboration in infectious diseases research and strengthen institutional capacities through joint initiatives. The partnership will facilitate knowledge exchange, technical expertise sharing, and resource optimization to advance research capabilities and innovation. Both institutions emphasized their commitment to translate this agreement into concrete actions, reiterated during discussions: "Alone we go fast, but together we go far." Together, CRID and CPC are set to achieve unprecedented strides.

**Centre Pasteur du Cameroun**

### Forum National Jeunes Chercheurs

**theme**  
Young Researchers Facing Global Health Challenges: Environment, Climate Change, and Artificial Intelligence

**Aims:**

- Promote scientific and professional growth
- Encourage scientific and professional growth
- Promote scientific and professional growth
- Promote scientific and professional growth

**Candidates must:**

- be under 35 years Old
- be a PhD holder / Master's degree holder
- submit an abstract

**Deadline**  
15<sup>th</sup> August 2025

**25-26 September 2025**

Places des Congrès

www.crid-cam.net

LA SERVICE DE COORDINATION DE RECHERCHE ET D'INNOVATION CANTWILLE

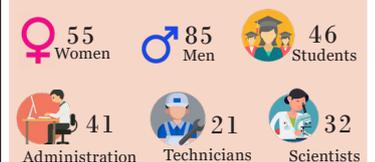
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## OUR STATISTICS





## EVENTS

### Novel control tools

From March 31 to April 3, 2025, during an intensive working session, CRID and its international partners evaluated innovative vector control tools, with a focus on new spatial repellents.



#### Scientific and strategic discussions

The first three days focused on epidemiology, including Randomized Controlled Trials (RCTs) as the gold standard, randomization strategies, and ethics. On day-3, social science integration and trial design cohesion were discussed.

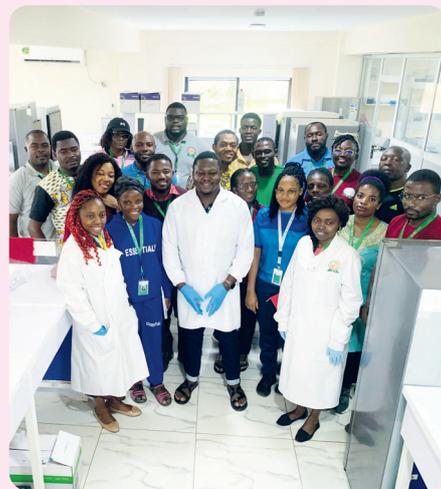
#### Field assessment in Mbandjock

On April 3, the team visited Mbandjock, Centre Region, Cameroon, engaging health officials and community leaders to gather local insights for implementation strategies, reinforcing CRID's commitment to malaria control.

From March 31 to April 3, 2025, CRID and international partners, including Burkina Faso's National Malaria Research and Training Center (CNRFP), the London School of Hygiene & Tropical Medicine (LSHTM), and the Liverpool School of Tropical Medicine (LSTM), assessed new spatial repellents to combat malaria and other vector-borne diseases. Fifteen experts, epidemiologists, entomologists, and social scientists evaluated the feasibility and acceptability of these tools. Spatial repellents showed promise by complementing traditional methods like insecticide-treated nets and indoor spraying.

### CRID Administrative staff explore our world of research

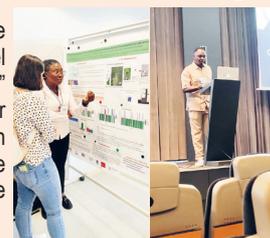
On April 25, 2025, World Malaria Day, CRID organized an immersive experience for its administrative staff to deepen their understanding of the institution's malaria research. More than thirty staff members participated in a guided tour of CRID's insectarium and laboratories, where they observed how technicians extract genetic materials and learned about the real-world impact of this research. Participating in the event gave attendees a chance to learn about the scientific data generation process that CRID use to support public health policy. Questions flowed freely throughout the one-hour tour, reflecting the staff's growing engagement with CRID's scientific work. At the conclusion of the visit, participants gained a clearer appreciation of CRID's mission and could better articulate the meaning behind its motto: "Saving Lives Through Quality Research."



## CRID was at the malaria Gordon Research Seminar and conference 2025

CRID researchers Gadji Mahamat and Marie-Mae Ambadiang, participated in the prestigious Malaria Gordon Research Seminar (GRS) and Conference in Barcelona, Spain (May 24-30, 2025). Gadji delivered a presentation on genomic evolution and insecticide resistance in *Anopheles funestus*, showcasing genomic evidence of rapid spread of major pyrethroid resistance loci within seven years in *Anopheles funestus* populations from Mibellon, and across Cameroon.

Marie-Mae presented her PhD research titled "Genome-wide sequencing and oviposition dual-choice experiments unravel the phenotypic basis of local adaptation in *Anopheles gambiae*," revealing this species' strong oviposition site preference for water from their origin site, unlike *Anopheles coluzzii* which showed no discrimination, indicating significant source specialization despite low genome-wide divergence within the same biome.



## VISIT

### Visit of Prof Louis-Albert Tchuem Tchuente at CRID

On April 30, 2025, CRID had the privilege to welcome Prof Louis-Albert Tchuem Tchuente, a distinguished Professor of Parasitology at the University of Yaoundé I, Director-Founder of the Centre for Schistosomiasis & Parasitology, Coordinator of the National Programme for the Control of Schistosomiasis and Soil-Transmitted Helminthiasis (STH), Country Director of the COUNTDOWN Project on Neglected Tropical Diseases (NTDs) in Cameroon, and NTD Ambassador - LSTM. Prof Tchuem Tchuente was welcomed by Prof Wondji Charles, along with a team of eight senior scientists. In a thirty-minute briefing, he was informed on CRID's activities, projects and vision.



This was followed by a visit of CRID's Labs and Insectary facilities. Could this mark the beginning of a new partnership? Thank you, Prof Tchuem Tchuente, for visiting CRID!

## Visit

Prof Benjamin Koudou, a renowned entomologist and epidemiologist from the Centre Suisse de Recherches Scientifiques (CSRS) in Côte d'Ivoire, recently visited CRID to establish collaborative pathways between both institutions.

### ICEMR malaria research initiative launched in Cameroon hospitals

This project phase comprised four principal activities, all conducted by the CRID team.

On March 9, 2025, CRID trained medical staff from Clinique Saint Joseph de Nkol-Eton (Yaoundé) for the International Centers of Excellence for Malaria Research (ICEMR) project's Phase I, focusing on non-falciparum malaria prevalence in urban areas. The delegation, including Rev. Sister Tata Relindis, lab technicians Adelbert Lemfon and Hamga Henna Nestor, revised participant enrollment and blood sample handling procedures. Sample collection began subsequently at the clinic, with CRID providing materials (EDTA tubes, Rapid Diagnostic Tests RDTs, etc.) and training hospital staff under the supervision of Drs. Glwady Cheteug and Daniel Nguiffo. On April



21, CRID donated a 120 L refrigerator 4°C to -20°C to ensure proper sample storage.

From May 8-9, the project expanded to Cité des Palmiers, District Hospital in Douala 5, where Dr. Emmanuel Elanga and the team trained 10 nurses. This marks the second urban study site investigating non-falciparum malaria prevalence in symptomatic populations across Cameroon. Collected samples are analyzed weekly at CRID.

## TRAINING

### Empowering Researchers: Functional Genomics training at CRID

On April 4, 2025, the first cohort of CRID staff trained in functional genomics by the African Centre for Vector Genomics (AVecGen) project received their certificates following a five-day intensive workshop. The closing ceremony, chaired by Prof Charles Wondji, Principal Investigator of AVecGen, included an address where he urged participants to apply their newly acquired knowledge and skills. He also pledged to upgrade laboratory equipment to enable full local implementation of functional genomics techniques. CRID plans to expand these training opportunities to the broader African scientific community.



### Interpersonal communication training for all staff

*It was conducted by Promise Akanteh, Director of Communication at ICT University, and Ngobesing Linda, Communication Strategist.*

On Wednesday, May 28, 2025, CRID staff attended an interpersonal communication training session in the CRID amphitheatre, facilitated by Promise Akanteh, Director of Communication at ICT University, and Ngobesing Linda, Communications Strategist. The workshop focused on enhancing collaboration skills, delivering constructive feedback, and managing difficult workplace conversations through practical exercises. Participants learned to choose appropriate words, offer specific improvement suggestions, and address behaviors rather than personalities when providing criticism. The session also covered conflict resolution techniques to foster a positive work environment at CRID. This second edition of the training equipped staff with practical communication strategies to strengthen professional relationships and refine their interaction styles.



## HISTORIC MILESTONE

### Foundation stone laid for AVecGen building

On May, 16, 2025, Prof Charles Wondji laid the foundation stone for the African Centre for Vector Genomics (AVecGen) building. Funded by the Gates Foundation, this project will establish state-of-the-art genomic and bioinformatic facilities at CRID. The Centre will serve as a regional reference hub for malaria vector control research, leveraging advanced genomic approaches to combat malaria. This initiative is implemented by CRID in collaboration with the Liverpool School of Tropical Medicine (LSTM) and the Malaria Genomic Epidemiology Network (MalariaGEN).



### CRID scientists trained in advanced genomics at IGH Nigeria

From June 23 to July 19, 2025, a next-generation sequencing (NGS) platform at CRID, utilizing both Illumina and Oxford Nanopore technologies. The overarching objective was to enable the detection and validation of structural variants associated with insecticide resistance in major malaria vector species. During their stay, they were mentored by Dr Sola Ogunsanya and Mrs Philomena Eromon, Laboratory Manager, under the supervision of Pr Christian Happi, Director of IGH.



## WELFARE

### New bus inaugurated to enhance employee transportation

*On June 09, 2025, CRID's Executive Director officially launched a brand-new staff bus to improve employee commuting comfort and efficiency.*

The ceremony, held at 11 a.m. in the institute's courtyard, brought together all staff members for this significant milestone. In his speech, Prof Charles Wondji highlighted the institute's progress since moving to its new premises in Nkoulou-Carrière in 2022. "Given our growth and standing, it was imperative to upgrade our transportation services," he emphasized. "This achievement is a testimony to the dedication and hard work of our staff, and I urge everyone to continue striving for excellence," he added. He also encouraged drivers and users to take good care of the new bus. A prayer led by Dr. Armel Tedjou, Post-Doctoral Researcher, sought divine protection for drivers and passengers. After the ribbon-cutting, honour was given to the Head of Administration, Head of Finance and Head of Human



Resource for the champagne toast. Prof Wondji expressed gratitude to Caleb Yangkoulo for his role in facilitating the bus's acquisition. The ceremony concluded with a joyous ride on the bus, symbolizing a new chapter in staff transportation.

**Features of the New Bus.** The newly acquired staff bus is a Toyota Coaster, designed to comfortably accommodate up to 30 passengers. Equipped with air conditioning and a manual transmission, the vehicle ensures a smooth and pleasant commuting

experience for employees. This particular model, the HZB70L-ZGMSS A3, is powered by a 14 CV diesel engine, offering both reliability and efficiency for daily transportation needs. With its spacious interior and robust build, the bus is well-suited to support the institute's growing workforce. Fistele Woume, laboratory technician at CRID living in Damas neighbourhood said: "I'm delighted, because getting to work in a comfortable bus like this is a real pleasure for me. What's more, punctuality and regularity are guaranteed, which will have a positive impact on my productivity and well-being." This acquisition reflects the institute's ongoing commitment to enhancing staff welfare through practical and high-quality infrastructure investments.

### VOX POP

#### Carine Nguemegni, Head of Human Resources Department

I have welcomed the new bus with joy and great enthusiasm. It is a great addition to the first one and is a sign of CRID growing and development. Our appreciation goes to CRID leadership for this step forward, which shows their commitment to making staff wellbeing their priority. This more reliable bus reduces stress for employees who otherwise use the transportation means available in our area.



#### Grace Ndjuiffo, PhD student

For me as a daily user, the new bus is more spacious and comfortable compared to the former one, making the journey less tiring and more pleasant. It's a great help for students and staff, reducing stress and making our commute safer and more efficient. Thanks once more to the Top management.



## Prof Wondji shares strategic insights on malaria elimination in Kigali



On June, 17, 2025, CRID's Executive Director, Prof Charles Wondji took center stage at the "Science of Defeating Malaria" Course in Kigali, Rwanda. He presented key challenges in implementing cutting-edge vector control tools for malaria elimination and proposed key solutions for overcoming these challenges.

Organized in collaboration with Harvard University in United States of America, UCAD in Sénégal, and the University of Health and Allied Sciences in Ghana, this unique course empowers leaders with a multidisciplinary perspective on malaria, equipping them to tackle the disease across

diverse transmission settings. Among participants, Dr Magellan Tchouakui, a Wellcome Trust fellow at CRID, gained practical experience through interactive discussions and real-world case studies with RBC technical teams. The course focused on the following areas: Community Surveillance; Logistics and Supply Management Systems; Biological Threats and Entomological Surveillance; Epidemic Detection and Response. Begun on June 15, the "Science of Defeating Malaria" Course was concluded on June 20, 2025. CRID stays focused on innovation and leadership in the fight against malaria.

## EMPLOYEES MILESTONE

### DO YOU KNOW Dr Basile Kamgang?

#### Leading Arbovirus & Vector expert in Africa

Renowned for his expertise in medical entomology, Dr. Basile Kamgang is a distinguished scientist specializing in arboviruses—including dengue, Zika, chikungunya, and yellow fever—and their primary vectors, *Aedes aegypti* and *Aedes albopictus*. Since obtaining his PhD in 2011, he has conducted groundbreaking research across Africa, investigating mosquito bio-ecology, population genetics, and the transmission risks of emerging viral threats. His postdoctoral work at the Pasteur Institute in Bangui from 2011 to 2014, and collaborations with Yale University led to pivotal discoveries, proving that Central African *Aedes* mosquitoes can transmit deadly pathogens like yellow fever and Zika virus.

#### A Recognized Leader in Public Health and Research

Dr. Kamgang, a 2017 Wellcome Trust Fellow and World Health Organization Expert, currently leads the Medical Entomology Department at CRID, an institution for which he is among the founding members since its establishment in 2018. His contributions to vector-borne disease research earned him the title of CRID's Best Scientist in both 2022 and 2025. In 2024, he obtained his HDR (Habilitation à Diriger les Recherches) at the University of Montpellier, further solidifying his academic stature.



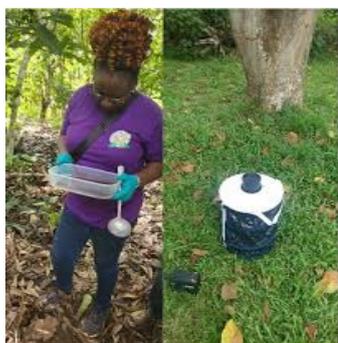
### SPOKEN WORD Malaria ends with us!

Because we've let borders divide what science could unite.  
Because the old weapons won't win this fight.  
Because embers still glow where the world turned cold.  
This isn't just a mosquito's sting, it's a century of shadows, a war we've half-fought, half-financed, half-cared about.  
But endings don't come from halves.  
So, dig deeper than pockets, dig conscience.  
Dream bigger than nets, dream zero.  
Burn brighter than excuses, burn action.  
Malaria ends when we stop asking «Can we?» and start shouting «We must.»  
The tools exist.  
The choice is ours.  
What's missing? Only the fire.  
—Light it. Now!!!!

TTW

### Dr Aurelie Yougang Awarded RRF3

#### A project investigating Aedes Mosquito Dynamics and Arbovirus Transmission in Cameroon



The Resilience Against Future Threats (RAFT) Responsive Fund (RRF3) has been awarded £ 34,350 (approximately 26 146 938 XAF Francs) to assess the physiological age of *Aedes aegypti* and *Aedes albopictus* along an urbanisation gradient and their role in arbovirus transmission in Cameroon. From January 2025 to February 2026, Dr. Aurélie Yougang will be leading this project at CRID under the

supervision of Dr. Basile Kamgang and Prof Charles Wondji. Specifically, the team will undertake two specific objectives. Firstly, assess the physiological age and parity of *Aedes aegypti* and *Aedes albopictus* along an urbanisation gradient; and secondly, determine the presence of dengue, Zika and chikungunya virus infection in field-collected mosquitoes.

### ARRIVALS

1. Assonkeng Fodong Evodie - Master Student
2. Enenbine Cecile Audrey - Project Manager
3. Dr Tseuko Toghua Dorine Godelive - Researcher
4. Tatsa Josselin - PhD student
5. Dooh Tongue Anais Alexandra - PhD Student
6. Assena Michèle Débora - PhD Student
7. Nkoumou Ambassa Marie Cécile - Master Student
8. Karson Panacea Miracle - Master Student
9. Mbanwi Edna - Finance Assistant/ Intern

### DEPARTURES

1. Ngong Amy Futela - Master Student
2. Amine Mahamat - PhD Student
3. Lontsi Londo Jemima - Master Student
4. Nlombo Ndema Grace - Master Student
5. Agoum Ngang Grace - Master Student
6. Djorandi - Microscopist Technician
7. Buh Joycelyne Esah - Finance Officer

## SCIENTIFICS PUBLICATIONS

Fadilatou Foule B, Tchami Mbagnia MC, Kamwa Ngassam RI, Kengne-Fokam AC, Ngambia Freitas FS, Nguiffo Nguete D, Nana Djeunga HC, Wondji CS, Melachio Tanekou TT, Njiokou F. Mapping and phylogeny of *Biomphalaria* snail in the Adamawa Region of Cameroon: A step towards vector control and schistosomiasis elimination. *PLoS Negl Trop Dis.* 2025 Jun 27;19(6):e0013265. <https://doi.org/10.1371/journal.pntd.0013265>

Oruni A, Arinaitwe E, Adiga J, Otto G, Kyagamba P, Okoth J, Ayo D, Asiimwe JR, Zedi M, Rek J, Walker KJ, Braithwaite A, Kayondo J, Conrad MD, Bousema T, Paine MJI, Ismail HM, Krezanoski P, Wondji CS, Kanya MR, Dorsey G, Donnelly MJ. Significant variations in tolerance to clothianidin and pirimiphos-methyl in *Anopheles gambiae* and *Anopheles funestus* populations during a dramatic malaria resurgence despite sustained indoor residual spraying in Uganda. *Parasit Vectors.* 2025 Jun 23;18(1):237. <https://doi.org/10.1186/s13071-025-06867-z>

Manuela M. Nimpa, Hyacinthe N. Teytsa, Joseph Mbang, Charles S. Wondji, Ramsès Djidjou-Demassee. Optimizing MDA and antimalarial treatment in the presence of drug resistance for effective malaria control [J]. *Mathematical Biosciences and Engineering*, 18 June 2025, 22(8): 1898-1930. doi: 10.3934/mbe.2025069