The Centre for Research on Filariasis and other Tropical Diseases (CRFilMT)

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Plan

- History

- Presentation

- Infrastructure

- Main research topics

- Main achievements

- CANTAM Network
CRFilMT was created in 2005 with the main objectives to:

- ensure the surveillance of post-ivermectin Severe Adverse Events (SAEs)
- ensure the safe implementation of Community Directed Treatment with ivermectin in Loa co-endemic areas following the MEC/TCC guidelines
- conduct research to identify the other risk factors, the pathophysiology, the better management and the prevention of post-ivermectin SAEs

With years, CRFilMT has extended his activities to NTDs in general.
CRFilMT Government Bodies

- Administration council
- Scientific committee
- Management board
Staff (20 personnel)

- Scientists (Epidemiologists, Parasitologists, Immunologists, Entomologists)
- General practitioners
- Pharmacist
- Nurses
- Lab Technicians
- Administration team
  - Administrator
  - Accountants (2)
Infrastructure (1)

Actual site

- Offices
- Meeting room
- Laboratories
- Insectary
- Molluscarium
Infrastructure (2)

Future site
- Clinical Research Centre
  - Pre-clinical studies
  - Phase I or II Clinical Trials (12 beds)
- Clinical Laboratory
- Specialized Laboratories
  - Molecular Biology
  - Virology
  - Bacteriology
  - Parasitology
- Amphitheater
- Meeting room
Main Research Topics

- Mapping of Filariasis in Cameroon and the Sub region
- Mass treatment Impact studies
- Diagnostic tools evaluation
- Post Ivermectin SAEs
- Pre-clinical tests and Clinical trials
- Experimental studies on the transmission of NTDs (Ongoing)
Mapping of filariasis and impact studies

- Nationwide Mapping of lymphatic filariasis in Cameroon
- Contribution in onchocerciasis and loiasis mapping in Cameroon and in the sub-region
- Lymphatic Filariasis Transmission Assessment Survey in Cameroon
- Onchocerciasis post-treatment impact assessments and collateral impact of CDTI on loiasis
Diagnostic tools Evaluation

- Evaluation of newly designed RDT for onchocerciasis, lymphatic filariasis and loiasis diagnosis
  - Ov16 (Onchocerciasis)
  - Ov16 / Wb 123 Biplex (Onchocerciasis + lymphatic filariasis)
  - FTS (Lymphatic Filariasis)
  - Loa Antibody Rapid Test (Loiiasis)

- Evaluation and validation of the LoaScope, the tools for Test and Not Treat Strategy
Severe Adverse Events (SAEs)

- Surveillance of post-ivermectin (IVM) SAEs
- Other risk factors of post IVM SAEs
- Pathophysiology of post IVM SAEs
- Prevention of Post IVM SAEs
Since 2000 to date, we have recorded all the SAEs in Cameroon.

These SAEs were reported to the Ministry of Public Health and to Mectizan Donation Program.

Training of personnel in Cameroon and in Africa about the diagnosis and management of post IVM SAEs.
Others risk factors of post IVM SAEs

- Malaria was hypothesized as risk factor of post-IVM SAE, but we found no relationship between infection by malaria and post IVM SAE.

- Loa strains was also considered as a potential risk factor of post-IVM SAE with the hypothesis that L. loa inducing SAEs had a nocturnal periodicity. A similar periodicity was observed between cases of SAEs and controls.
Prevention of post IVM SAEs

- Five clinical trials with the objective to safely treat Loiasis (Pre-treatment)
  - Albendazole
    - Low dose ivermectin
  - Antimalarial drugs
- Test and Not Treat (TaNT)
Test and Not Treat (TaNT)

- Systematic test of loa microfilaraemia before the treatment with IVM
  - Pilot Studies in 02 Health Districts in Cameroon (Okola and Soa)
  - More than 55,000 treatments in Loa endemic areas without a single post-treatment SAE

- Extension of this strategy in Loa endemic areas in Central Africa
  - Coordinators of Oncho program of the Sub-Region and DRC will come to Cameroon
Achievements

- More than 100 MD, Master and PhD theses

- \~100 Scientific Publications in peer reviewed Journals

- National Recognition
  - 2009: Ministry of Health Official Satisfaction Testimony

- International Recognition
  - 2015: Islamic Bank of Development Price for Science and Technology

- Networking
CANTAM is a Network funded by EDCTP

- HIV
- TB
- Malaria

- Since 2017: NTDs
  - Coordination of NTDs’ activities in the Network by CRFilMT
Thank You for your kind Attention