

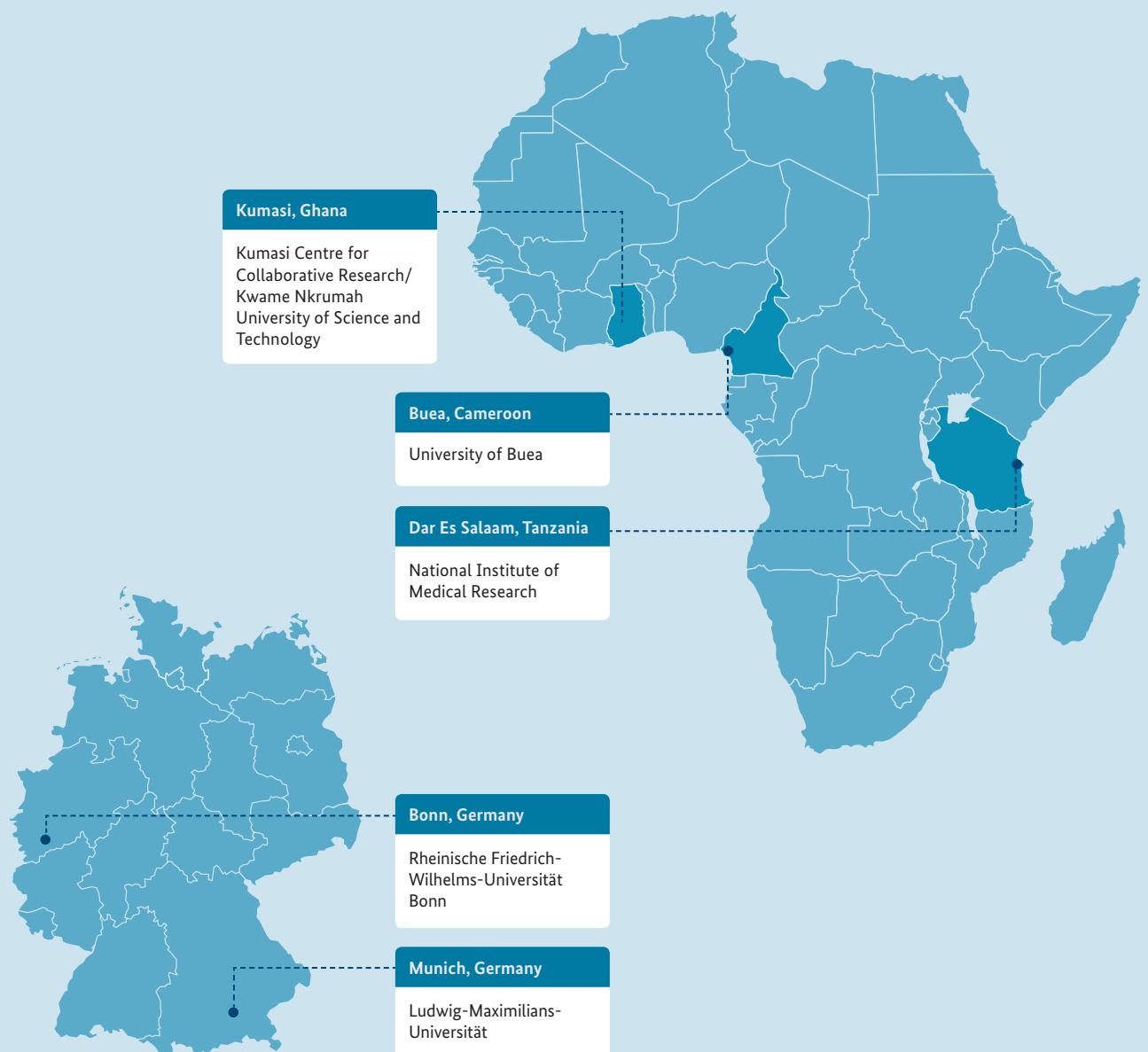


# TAKeOFF

## Tackling the Obstacles to Fight Filariasis

Mainly in Africa and Asia, more than 200 million people are parasitised by filarial nematodes (roundworms), which cause the neglected tropical diseases lymphatic filariasis, loiasis and onchocerciasis. By establishing a Filarial Clinical Trial & Research Platform (F-CuRE), the TAKeOFF consortium aims to harmonise the procedure for clinical trials in filariasis. To improve treatment regimens for morbidity control of filarial and non-filarial lymphedema (podoconiosis), the partners will conduct multinational clinical trials in sub-Saharan Africa, thereby addressing patient needs as well as the science behind these diseases.

### TAKeOFF – Project Partners





*Wuchereria bancrofti* microfilaria  
(Quelle: Robert Knauft/Biology Pics/Getty Images)

Worldwide, approximately one billion people are at risk of infection from filariae (parasitic nematodes). Mainly in Africa and Asia, more than 200 million people are currently infected, with lymphatic filariasis the most prevalent disease – one of 18 neglected tropical diseases as defined by the WHO. Filariae become lodged in lymphatic tissues, causing dysfunction of lymph vessels; this may result in lymphoedema. Furthermore, the drainage of lymph fluid within tissues can be blocked, causing an abnormal enlargement of the affected body parts. The most serious manifestation of the disease is also known as elephantiasis or elephant disease. The afflicted suffer from severe pain, physical impairment and great mental

distress. The economic impact includes poor school performance, low productivity and higher healthcare costs and a reduced life span.

The TAKEOFF consortium aims to establish a Filarial Clinical Trial & Research Platform (F-CuRE) – a platform addressing the science behind filarial and non-filarial elephantiasis as well as patient needs. Its task will be to prepare and conduct multinational clinical trials on new treatment and diagnostic options with the goal of harmonising the procedures for clinical trials in filariasis. By engaging the Ministries of Health in the respective African partner countries and by taking WHO control programmes into account, F-CuRE will also strengthen local teaching capacities for scientific and clinical staff.

Previous data from this consortium suggest HIV does not alter worm burdens but diminishes anti-filarial immune reactions and thus pathology. Conversely, it has been hypothesised that treatment of HIV may have an impact on filarial pathology. Therefore, the network partners will also investigate how an HIV infection and its treatment affect the immune response of patients parasitised by filariae.

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Lymphoedema patient

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