

## **Cutaneous Leishmaniasis in northern Cameroon: immunological studies of Leishmania and Leishmania/HIV co-infection in the Mokolo endemic focus**

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

Ausschreibung: Tropical Medicine 2004

Bewilligung: 10.07.2006

Laufzeit: 3 Jahre

Cutaneous leishmaniasis (CL) is a protozoan parasitic disease with 1-1.5 millions new cases per year worldwide and is widely regarded to be one of the most important opportunistic infections in HIV+ individuals. Recently, studies of CL in murine and other systems have identified several important mechanisms of host immune responses raised against *Leishmania major*. However, the relevance of these important findings for humans remains to be shown. The project aims at defining aspects of the immune response against *L. major* in CL patients and in patients co-infected with *L. major* and HIV, including an evaluation of the prevalence of CL and Leishmania/HIV co-infection in an endemic focus of CL (northern Cameroon), the identification of underlying cellular and humoral mechanisms of susceptibility and resistance in *L. major*-infected patients and a correlation of the clinical course of CL with the host immune response in affected patients. In addition to the scientific work, the medical personnel will be trained in the diagnosis, management and report of CL cases. The project could lead to the identification of novel mechanisms of protection against *Leishmania* and in the long run to the development of improved treatment concepts, the generation of effective vaccine strategies and the design of an effective control program.

### **Projektbeteiligte**

#### **Prof. Dr. Esther von Stebut-Borschitz**

Universitätsmedizin der Johannes  
Gutenberg-Universität Mainz  
Hautklinik und Poliklinik  
Mainz

#### **Dr. Blaise Dondji**

University of Ngaoundéré  
Faculty of Natural Sciences  
Department of Biological Sciences  
Ngaoundéré  
Kamerun (Cameroun)

**Prof. Dr. Marcus Maurer**

Charité - Universitätsmedizin Berlin  
Dermatologie und Allergologie  
Dermatologische Allergologie  
Berlin

**Prof. Dr. Albert-Légrand Same-Ekobo**

University of Yaoundé  
Faculty of Medicine and Biomedical Sciences  
Medical Division  
Laboratory of Parasitology & Mycology  
Yaoundé  
Kamerun (Cameroun)