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„Investing in people, by investing in higher education and skills in Africa“

Capacity Building in Laboratory and Field

University Bremen, Germany; Ahmadu Bello University, Nigeria; KNUST, Ghana;
University of Ngaoundéré, Cameroon; University of N'Djamena, Chad; SUZA, Zanzibar, Tanzania



Project Presentation

Prof. Sørge Kelm and his team from University of Bremen have a long standing experience in co-ordinating collaborative research projects with partners in Sub-Saharan Africa, both in research as in capacity building. Currently his main projects are addressing African Trypanosomiasis, one of the major neglected tropical diseases (NTD) listed by the WHO, and the role of nutrition in non-communicable diseases (NCD) on the continent.

Basically, the continuous joint research projects have provided the frame work for two lines of capacity building:

- 1) More general training programs for students and young researchers have been developed and established at partner universities, both in the laboratory and in joint field work to boost the competencies to perform solid research projects addressing problems in their home countries.
- 2) Targeted research visits of selected young researchers from Africa to the University of Bremen have been arranged to provide (a) specific training (b) access to special infrastructure not available in their home countries, (c) opportunities to perform experiments essential for their research projects and (d) potential for establishing international contacts and networks.

Nigerian and Cameroonians at Bremen lab



Based on the long standing collaboration of several groups from University Bremen with the University of Ngaoundéré, Cameroon, now the two partner universities have started developing a platform for enhancement of employability and entrepreneurship towards a sustainable society to be established in Ngaoundéré. The intention is to bring problems of rural communities together with academic knowhow and creativity to develop sustained interdisciplinary solutions. The mission of this platform is to support the development and implementation of innovative ideas.



Students from Chad and Cameroon trained by Nigerian in Cameroon



Trained technician instructing students on Zanzibar



German technician supporting students on Zanzibar



Trained PhD student at field work in Chad



Chadian PhD student training students from Nigeria and Ghana in Bremen lab

Project Activities

Examples for cooperations in Sub-Sahara Africa

Research on African Trypanosomiasis as Neglected Tropical Disease is an ongoing project since almost ten years funded by the Infectiology Program of DFG (German Research Council). Partners in this program have been the Ahmadu Bello University and NITR in Nigeria from the beginning. Recently, the consortium has been expanded to partners in Ghana, Cameroon and Chad. The current title of the project is "Animal African Trypanosomiasis in humans: An emerging zoonosis?"



Nigerian, Cameroonian and German students field training in Nigeria

Research and capacity building in the area of nutrition and health has started on Zanzibar, where an epidemiological study "Access to Food and Nutrition Status of Zanzibari Population" was performed in collaboration with the Bremen Institute for Preventive Studies (BIPS) and the State University of Zanzibar (SUZA). Based on this collaboration University Bremen now supports SUZA in the development of a new curriculum in biochemistry and nutrition for medical students as well as for professionals in the health sector. For this, he developed together with SUZA a new program (MENTION), for which funding has been obtained from DAAD (PAGEL program).

As an ext step the experience gained from these activities and the resulting outcomes will be disseminated to the partners in other countries in sub-Sahara Africa.

Project Results

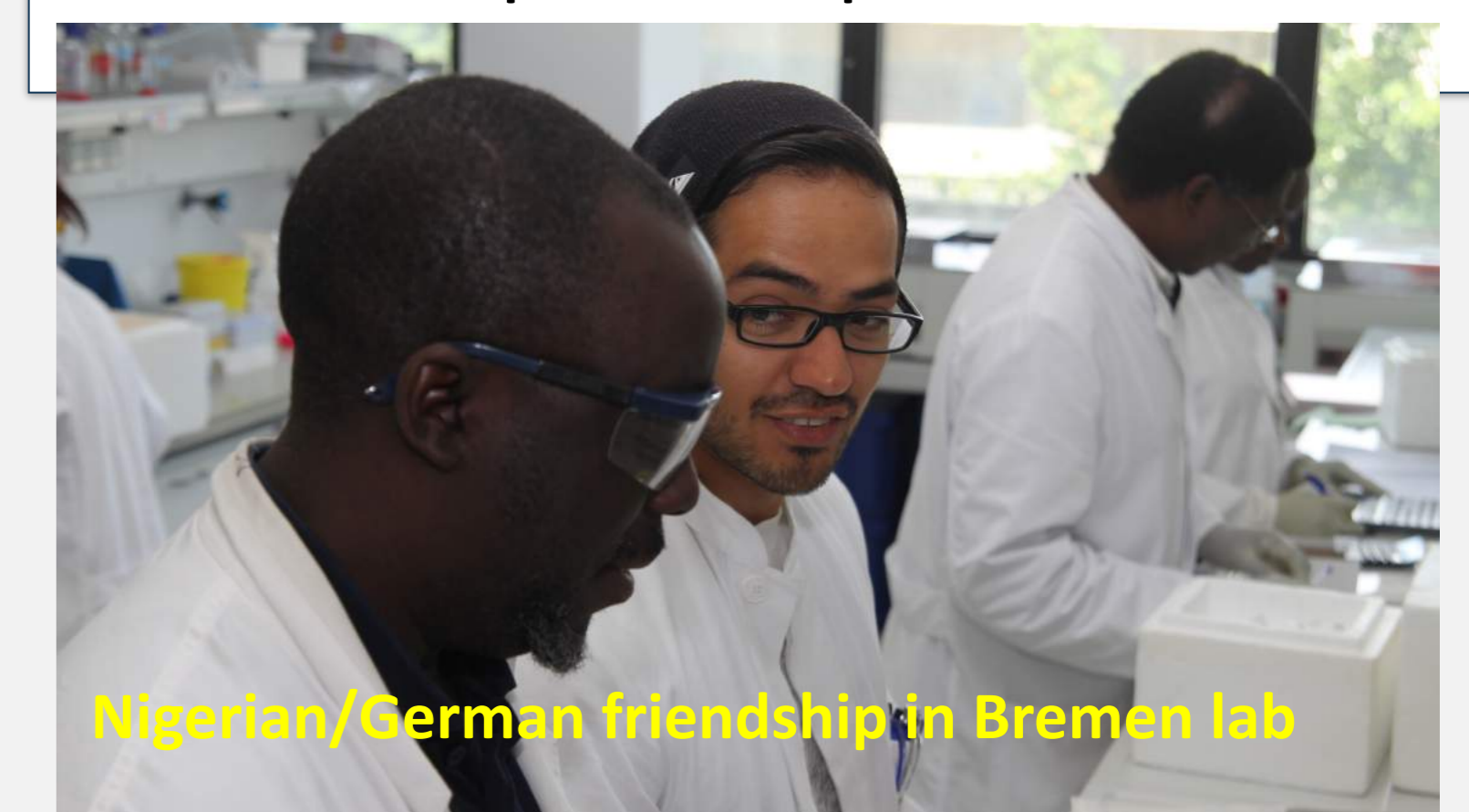
Training programs in Nigeria and neighbouring countries

During these years this project has supported about ten PhD students from Africa in their projects by supervision and providing opportunities to perform experiments at his laboratory in Germany as well as during their field work.

As integral part of the collaboration with the partners in Africa the German team has developed and performed training programs in Nigeria at ABU and NITR: Now these programs are run independently at ABU and the partner institutions. Furthermore, they have been exported and performed at the University of Ngaoundéré in neighbouring Cameroon. As a next step these activities will be jointly expanded to the University of N'Djamena in Chad.

A specific challenge for good laboratory-based research at Universities in Sub-Sahara Africa is the lack of appropriately trained technical staff in the laboratories. Therefore, the team from Bremen University has recently started to perform dedicated trainings of technicians at SUZA on Zanzibar in practical teaching laboratory maintenance and work. As immediate result the quality of the practical training in several curricula of the School for Health and Medical Sciences at SUZA, Zanzibar, has dramatically improved.

The concepts of student-centred teaching and problem-based learning are currently introduced at SUZA by training and mentoring of selected lecturers on order to establish examples for best practice.



Nigerian/German friendship in Bremen lab

Sustainability & Synergies

Regular visits of numerous PhD students from African partner institutions and their co-supervision, both during their visits in Germany and their work at their home institutions, have become your researchers now developing their own research project and PIs, in collaborations with research groups at University Bremen and other European Institutions. Preferably, emphasis in these projects is directed at addressing challenges of the societies in their come countries.

In order to foster sustainability of this development it is essential to provide good mentorship to these young academics on their challenging career path.

Information

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- University of Ngaoundéré, Cameroon
- University of N'Djamena, Chad
- State University of Zanzibar, Tanzania



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