The establishment of the Hirsch Institute of Tropical Medicine in Asella, Ethiopia, as part of the Clinic of Gastroenterology, Hepatology and Infectious Diseases in Düsseldorf, Germany is a challenging project with the objective of establishing a platform for high-quality education, know-how transfer and research in Asella.

In Focus: Health Care in Ethiopia

**Health indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>90 million</td>
</tr>
<tr>
<td>Rural population:</td>
<td>85%</td>
</tr>
<tr>
<td>Average income per person</td>
<td>390 USD/year</td>
</tr>
<tr>
<td>Average amount for health care</td>
<td>7,14 USD/year</td>
</tr>
<tr>
<td>Life expectancy (m/w)</td>
<td>53/56 years</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>10%</td>
</tr>
<tr>
<td>Malaria cases per year</td>
<td>3,149,741</td>
</tr>
<tr>
<td>Estimated HIV prevalence countrywide</td>
<td>2.1%</td>
</tr>
<tr>
<td>Prevalence of TB, all forms (WHO 2009)</td>
<td>585/100,000</td>
</tr>
</tbody>
</table>

Provision of high-quality health care is a great challenge in Ethiopia. The most demanding health care problems are infectious diseases like malaria, tuberculosis, HIV/AIDS, viral hepatitis, diarrhoeal diseases and diseases of the respiratory tract. Furthermore, so-called neglected tropical diseases, such as leishmaniasis, schistosomiasis and echinococcosis, are highly prevalent. As a high proportion of the population lives in rural areas, the journey to the next hospital may take several days. In many health centres, equipment and training of health-care personnel are insufficient for the management of more complex cases. On average, the physician to patient ratio is 1:32,500. Thus, training of physicians is an essential issue in the effort to improve the quality of medical care in Ethiopia.

**Adama Science and Technology University**

The Medical Faculty of the Adama Science and Technology University (ASTU) on Asella Campus was founded in 2009. The ASTU has recently been restructured in cooperation with the German Academic Exchange Service (DAAD), and now serves as a model university for Ethiopia. Apart from a school for nurses and midwives, a school for laboratory technicians is currently being established.

**The Hirsch Institute of Tropical Medicine**

**Formation of the Institute**

The Hirsch Institute of Tropical Medicine was founded in cooperation with the ASTU in order to establish a long-lasting partnership for medical training and high quality medical research in the field of infectious diseases and tropical medicine. The institute is located on the premises of the University Teaching Hospital on the Asella Campus, about 75 km south of Adama, and about 165 km south-east of Addis Ababa.

The collaboration between the ASTU and the Medical Faculty of the Heinrich Heine University Düsseldorf was launched in 2009 and an official collaboration agreement was signed in 2010. After almost 2 years of planning and construction, the building was completed in early 2013 and commenced operation shortly afterwards. One specialist physician from Düsseldorf is permanently based in Asella to coordinate activities and provide continuous training on site. The furnishing with laboratory fittings and analysers will be completed by October 16th, 2013, when the official opening ceremony is scheduled.

**Aims of the Institute**

The objective of the institute is to provide the infrastructure for advanced medical and scientific training, as well as high-quality medical research within a long-term collaboration with the ASTU and other Ethiopian partners. Continuous training is provided by specialist physicians of the German clinic, which is complemented by exchange activities and joint workshops in Asella.

**Research Areas**

According to the local needs and the key expertise of the German clinic, the focus of training and research activities is on hepatology and infectious diseases, comprising most pressing clinical problems, like HIV-infection, tuberculosis, viral hepatitis and parasitic infections (e.g., malaria, recurrent fever, cystic echinococcosis and schistosomiasis).

First projects

Among the first on-going programmes is a hospital partnership project on infectious diseases with impact on Mother and Child health, which is one of the most important medical problems. The project is funded for 2 years by the German Federal Ministry for Economic Cooperation and Development via the ESTHER initiative (Ensemble pour une Solidarité Thérapeutique Hospitalière en Réseau).

It comprises a comprehensive capacity building program in the field of infectious diseases affecting the health of mothers or newborns in the perinatal period, as HIV, hepatitis B virus infection, puerperal sepsis and sexually transmitted diseases. The prevention of infectious diseases of the new born is one priority of this project.

Capacity building activities comprise joint workshops in Asella and exchange programs. An operational research project investigating the prevalence and complications of selected infections in pregnant women is integrated into the project.

Another on-going pilot study is investigating the prevalence and aetiology of chronic liver diseases in Asella. For this study, patients attending the clinic will be screened for the presence of chronic liver disease using the transient elastography, a fast and non-invasive technique. The causes, risk factors and determinants for clinical progression in patients with chronic liver diseases in the region shall be investigated. Again, the study is framed by clinical training on the management of chronic liver diseases and associated complications.

Finally, the establishment of the institute represents an important step towards internationalisation of the tropical medicine and infectious diseases department in Düsseldorf and offers training opportunities in the field of tropical medicine for its physicians.
Funding
The institute and its activities are mainly funded by donations and internal funds of the Clinic for Gastroenterology, Hepatology and Infectious Diseases. A generous private donation by Mr Wolfgang Hirsch enabled the construction of the institute and generous support was provided by the Heinz-Ansmann Foundation and the Rotary Club Düsseldorf. Part of the equipment was donated by the Eppendorf AG, Germany and Roche Diagnostics, Germany. Maintenance and operation of the institute also depends on donations.

Donation account
Association of Friends and Supporters of the Heinrich-Heine-University Düsseldorf e. V. (Gesellschaft der Freunde und Förderer der Heinrich-Heine-Universität Düsseldorf e.V.)
Deutsche Bank AG Düsseldorf
Konto 303 117 6
BLZ 300 700 10
IBAN: DE56 3007 0010 0003 0311 76
Keyword „WHITM Asella”

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Ethiopia
Ethiopia, located at the Horn of Africa is also called “roof of the world” with one quarter of the country lying above 2000 m. From its humid high mountains to the arid savannah and half desert in the south east, Ethiopia offers fascinating wildlife and vegetation. Deep valleys have divided the country and have thus promoted the development of very diverse cultures.

Ethiopia provides an interesting history. Lucy, the three-million-year-old skeleton of Australopithecus afarensis makes the region the „cradle of mankind“. Ancient civilisations already inhabited the Horn of Africa when the Egypt Empire was the centre of the world. Powerful kingdoms as well as the early Orthodox Church have marked the area with their legends and impressive buildings, most famously the monolithic churches.

Ethiopia stayed independent even throughout African colonisation. This exceptional status is built on the cultural consciousness and pride. Frequent drought and famine periods as well as regional wars and domestic conflicts inhibited Ethiopia’s development for a long time, so that it is now classified as one of the world’s poorest countries. Stability, political openness and a cooperative partnership with countries like Germany raise its hopes for continuous and sustainable development.