

Ivo de Carneri Foundation (IdCF)

ACTIVITY REPORT

1994 – 2006



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TABLE OF CONTENTS

| EDITORIAL | 3 |
|---|----|
| WHO WE ARE | 4 |
| WHERE WE ARE | 4 |
| WHAT WE DO | 4 |
| COOPERATION PROJECTS | 6 |
| TANZANIA (Pemba – Zanzibar) | 6 |
| 1) Public Health Laboratory Ivo de Carneri (PHL-IdC) | 6 |
| 1.1) Control of Diarrhoeal diseases | 7 |
| 1.2) HIV/AIDS base-line Survey | 7 |
| 1.3) Training on control of tropical diseases (Utaalam) | 8 |
| 1.4) Safe Water project, Phase I | 8 |
| 1.5) Malaria control | 9 |
| 1.6) AIDS/TB project | 9 |
| 2) Mother and Child Clinic | |
| NEPAL | 11 |
| 3) TSA-WHO | 11 |
| VIETNAM | |
| 4) Deworming campaign | 12 |
| 5) UPCOMING PROJECTS | |
| TANZANIA (Pemba – Zanzibar) | |
| 5.1) Surgical Service Rehabilitation | |
| 5.2) HIV/AIDS outpatient clinic | |
| 5.3) Health Management Information System | |
| 5.4) Safe Water Project, Phase II | |
| 5.5) TSA-WHO | |
| 5.6) Electrical System Renovation | |
| TRAINING | |
| 1) Courses in Tropical Medicine and Public Health | |
| 1.1) Training courses 1995 – 2005: | |
| 1.2) Training courses in 2006 and onwards | |
| 1.3) Training of Trainers (ToT) - upcoming | |
| 2) Courses in Ultrasound Diagnostics | |
| 2.1) 2002 - 2003 | |
| 2.2) 2006 - 2010 | |
| SCIENTIFIC ACTIVITIES | |
| 1) University textbook | |
| 2) Scholarships | |
| 3) Conferences and workshops | |
| 4) Newsletter | |
| 2005 BUDGET BREAKDOWN | 20 |

EDITORIAL

Health In Development: Let's Break The Chain Between Disease And Poverty

Malaria, Tuberculosis and AIDS are among the health calamities that hit the populations of the South of the World. Malaria in Africa is among the first causes of death in children under five; every year malaria hits 300-500 million of people, of which more than one million dies for complications related to severe malaria. And yet, malaria is curable with low cost drugs.

In a year Tuberculosis and AIDS kill 1,7 million people and more than 3 million respectively, 90% of which are in Africa Sub-Saharan, most productive part of the population, leaving 10 million orphans and entire countries without a future.

Diarrhoea and acute respiratory infections, which can be cured with common antibiotics, are at the first place of this tragic hit parade. Also measles, despite the success of vaccination campaigns, can still kill half a million children a vear, as has happened in 2004. Other diseases such as schistosomiasis, intestinal helminthiasis, lymphatic filariasis, leishmaniosis, trypanosmiasis are sometimes defined as "neglected diseases", even if they are among the most important causes of the poverty-chain for entire nations of the tropical and sub-tropical area. These are diseases where little is said and for which in too little scientific research (new drugs and diagnostic tools) is invested. Nevertheless approximately 1.5 billion people (a quarter of the world population) suffers from these diseases which impact heavily on the socio-economic development of these countries. Schistosomiasis and intestinal helminthiasis affect 1 billion children causing delayed growth and intellectual impairments. The disabling consequences of schistosomiasis and intestinal helminthiasis could be avoided and many children could grow in health if the treatment campaigns would cover completely the endemic areas reaching also the people living in the most neglected areas. In some countries successful targets have been reached, however the mass drug administration campaigns should be strengthened and the local Governments should be supported in planning the campaigns. Effective drugs are accessible on the market since many years: the challenge is to make them available to the communities that live every day with this dramatic reality of disease and poverty. The drugs cure and, if used in mass campaigns, they prevent the chronic consequences of the diseases: however, in order to prevent and to eliminate infectious diseases, the interventions in the countries should not only focus on the cure of the sick individual, but also the improvement of the infrastructures and the training of health care workers. Training, costs containment and the use of appropriate technologies guarantee the sustainability of any health cooperation intervention and build the ground of a more and more autonomous health care management.

The fight of tropical diseases, which are diseases closely linked to poverty and underdevelopment, is a global challenge because it can fortify the poorest communities, allowing their economies to grow and their quality of life to improve. It is possible to act immediately to help fight.

Let's get started now: the unmet need for health of millions of women and children can no longer wait.

Jaucho de Camers Alessandra Carozzi de Carneri President

WHO WE ARE

The Ivo de Carneri Foundation (IdCF) is an NGO (non-governmental organization) established in 1994. The Foundation was named after late professor Ivo de Carneri, an Italian well known parasitologist deeply involved in research, education and control of tropical diseases in developing countries, to continue his scientific work and his commitment in research and cooperation projects for the control of parasitic diseases.

In 1996 the Ivo de Carneri Foundation was legally authorised by the Italian Minister of Health; in 1999 it became ONLUS (Non Profit Organization with social function) and in 2002 it was recognised as a NGO by the Ministry of Foreign Affairs.

Today, the Foundation is a reliable and transparent organization operating effectively without heavy bureaucracy. Its solid technical background allows to set up health development projects aimed at local communities in least developed countries.

The Foundation is managed by a Board of Directors and by a Scientific Committee. The Scientific Committee is made up of qualified international experts in the field of epidemiology, parasitology and infectious diseases. Their core responsibilities include the planning, implementing and monitoring of the Foundation's scientific activities.

The organizational chart of the Foundation includes:

- President
- Scientific Secretary
- Board of Directors (6 members)
- Auditors (3 members)
- Committee of Honour (7 members)
- Scientific Committee (8 members)¹:
 - Dr Marco Albonico, Infectious and Tropical Diseases Specialist, Turin
 - Prof Luigi De Carli, Genetist, Milan
 - Dr Luigi Di Matteo, Hospital Microbiologist, Pavia
 - Dr Albis Francesco Gabrielli, Associate Professional Officer NTD/WHO, Geneva
 - Prof Claudio Genchi, Parasitologist, University of Milan
 - Dr Edoardo Pozio, Parasitologist, National Institute for Health, Rome
 - Dr Giovanni Rezza, Epidemiologist, National Institute for Health Rome
 - Dr Lorenzo Savioli, Director of Neglected Tropical Diseases Department WHO (NTD/WHO), Geneva

The Foundation relies also on the precious contribution of many people working as volunteers.

WHERE WE ARE

The headquarter is in **Milan**, Italy. Another office is located in **Cles** (TN - Italy), professor Ivo de Carneri's hometown. Finally, in 2000 the Ivo de Carneri Foundation was recognised as a local NGO in **Zanzibar** (Tanzania). The Zanzibar branch, through its resident representative, aims at being close to the local community and guaranteeing the Foundation's projects sustainability in the long term.

WHAT WE DO

The mission of the Foundation is the promotion of strategies to control parasitic diseases in developing countries and the improvement of research in parasitology.

Parasitology is a branch of medicine dealing with some of the most common diseases in developing countries like malaria and helminth infections. These diseases are often also called "neglected" diseases

¹ All members of the Scientific Committee intervene on a voluntary basis.

because they are no longer present in industrialised countries thanks to the better living conditions in terms of hygiene and sanitation. Most of these diseases are closely related to poverty, i.e. higher living standards would dramatically drop the prevalence and incidence of these diseases. Not being of concern in developed countries, research and new tools to control these infections are not a priority on the political agenda and pharmaceutical companies do not invest in drugs which don't have a profitable market. Often these diseases don't have high mortality rates, thus do not attract global attention. Yet they represent a huge burden to society in terms of disability and reduced adult productivity, triggering the vicious circle of poor health induced poverty.

The Foundation's main activities are:

- **Cooperation projects**, to contribute to the fight against parasitic diseases in developing countries
- **Training**, to improve human resources capacities as a crucial tool for development and self- reliance
- Scientific activities, to encourage scientific research and knowledge in parasitic diseases

COOPERATION PROJECTS

TANZANIA (Pemba – Zanzibar)

1) Public Health Laboratory Ivo de Carneri (PHL-IdC)

Phase 1: Building the PHL-IdC

The laboratory has an essential role for diagnosis of the main communicable diseases affecting Zanzibar community, for guiding decisions concerning the planning, control and monitoring of preventive chemotherapy campaigns through analysis of their outcomes and for developing human resources.

An Agreement between the Foundation and the MoH for the construction and use of the PHL-IdC was signed in 1997.

The MoH donated the plot where to build the PHL-IdC, whereas the Ivo de Carneri Foundation raised funds from public and private donors.

In the Agreement it was also established that the Public Health Laboratory Ivo de Carneri (PHL-IdC) would have been ruled by a Board of Directors called "Commission" with two members from the MoH, two from the Foundation and one external observer from WHO.

It took two years to complete the building construction. In 1999 the first meeting of the PHL-IdC Commission took place in Geneva to discuss the mission, the strategic plan and the organization of the PHL-IdC.

In June 2000 the PHL-IdC was officially opened and started its activities on operational research, public health control programmes and development of human resources.

Today the PHL-IdC is an infrastructure integrated in the Ministry of Health and Social Welfare, Zanzibar. It consists of two buildings for a total of around 1000 m² and employs 40 permanent staff and 600 health staff in the field. For a more detailed description of the PHL-IdC facility and equipment please refer to the *PHL-IdC Report 2005-2006*.

Financial Support for building works: Autonomous Province of Trento, Italian Ministry of Foreign Affairs, Private Funds Duration: 1998 - 2000

Phase 2: Managing and Supporting the PHL-IdC

The Laboratory has been active since 2000 and has collaborated widely with research centres, universities, national and international organizations.

The PHL-IdC's goals are:

- Prevention, diagnosis and control of endemic diseases
- Applied research focused on local health priorities
- Training programs for building local capacity

For a complete list of PHL-IdC activities and projects, please download from our web-site the PHL-IdC Report 2005 – 2006.



The PHL-IdC is a demanding project for the Foundation who is involved on an ongoing basis in its management and is investing in its growth. The Foundation continues supporting PHL-IdC through:

- assisting in the implementation of public health interventions and applied research trials
- facilitating the fundraising activities
- assigning scholarships to local health staff
- investing in training and organizing courses
- giving administrative and technical support both from distance and through regular missions of selected experts.



In addition, the Foundation, being part of the PHL-IdC Commission (Board of Directors), follows the smooth running and management of PHL-IdC through decisions concerning: strategic planning, priority setting, financial statements approval, selection of projects, control programmes and research trials, organization of training courses.

Main collaborators: Tanzanian, International and Italian Universities and Research Institutes, UN organizations, Tanzanian and International NGOs Financial Support: public and private bodies Duration: 2000 -> ongoing

The projects the Foundation is directly promoting and implementing through PHL-IdC are the following:

1.1) Control of Diarrhoeal diseases

Diarrhoeal diseases are a major health problem in low income countries and are, along with acute respiratory infections, malaria, measles, HIV/AIDS and perinatal conditions, among the six leading causes of mortality in children under five. In Zanzibar cholera is hypoendemic with annual epidemics that have hit the islands in recent years. The Foundation decided to equip the Microbiological Laboratory within the PHL-IdC with materials, reagents and goods for the diagnosis and control of diahorreal diseases.

Financial Support: Fondazione Cassa di Risparmio di Verona Duration: June – September 2003

1.2) HIV/AIDS base-line Survey

The project for the control of HIV/AIDS launched on Pemba by the Foundation started in 2002. The main aim of the study was to collect reliable data on prevalence and distribution of HIV infection in selected groups of the Zanzibar community, and to strengthen prevention and control of HIV/AIDS. To this end the Virology Unit of PHL-IdC has been fully equipped to function as reference centre and the staff trained accordingly.

Main collaborators: Sacco Hospital - Milan University (prof. M. Galli's team) Financial Support: Anlaids, Private Donors Duration: 2002 - 2004

1.3) Training on control of tropical diseases (Utaalam)

The project's aim was to intervene within the National Health Education and Training Plan through the optimisation of the PHL-IdC teaching role in Pemba and the organisation of upgrading courses for health staff and primary school teachers, with regard to the control of tropical diseases in Zanzibar.



Main collaborators: DISVI (NGO from Asti) Financial Support: 50% Italian Ministry of Foreign Affairs Duration: June 2003 – November 2006

Direct Beneficiary was the local health and teaching staff consisting of 210 units: 20 teachers of the local health training schools 20 medical doctors 40 basic health workers 40 nurses 20 laboratory technicians 70 primary school teachers.

Indirect beneficiaries were the College of Health Science students, the pupils of the primary schools, their families and the local community using the healthcare services in which the trained staff will operate.

1.4) Safe Water project, Phase I

The need for this intervention in Chake Chake District came from direct observation of the following shortcomings: (1) the lack of awareness on the quality of water; (2) the systematic severe epidemics of cholera and intestinal infections caused mainly by dirty water. This project is therefore an extension of the health measures the Foundation is implementing on Pemba.

The project's main aim was to help improving the health conditions of the population by reducing the morbidity and mortality due to diseases carried by water.

The project's specific objectives were:

- the establishment of a routine monitoring system of the water quality through chemical-physical and microbiological analysis
- the digital mapping of all water sources
- the transfer of knowledge to the local staff in charge of controlling and monitoring the water network.



This project can be seen as a preliminary work for an intervention project based on the rehabilitation of the water sources.

The project has confirmed a very dangerous situation, with most water sources contaminated with faecal material. The data collected gave a clear picture of the current critical situation and represent the starting point for the targeted rehabilitation of the network (to be addressed with a subsequent project).

Main collaborators: Institute of Hygiene - Milan University, Engineers without borders – Trento, Department of Water Development (DWD) - Zanzibar

Financial Support: 70% Autonomous Province of Trento, Municipalities of Bollate (MI), Cles (TN) and Lerici (SP)

Duration: January 2005 - December 2006

1.5) Malaria control

The Foundation, through the PHL-IdC, is involved in two crucial activities for the control of malaria, namely the quality control of microscopy diagnosis and the monitoring of Intermittent Preventive Therapy (IPT) in pregnant women.

In 2005 the MoH of Zanzibar, with the financial support of the Global Fund, has introduced the artemisininbased combination therapy, as recommended by WHO, to fight the emerging resistance of the parasite to chloroquine. For the optimal use of the drug it is essential to know both if the febrile illness is due to malaria and, if so, the parasitemia. This can only be done through reliable microscopic diagnosis; PHL plays a crucial role in assessing the quality of microscopic diagnosis.



PHL is also involved in monitoring and evaluating the adequacy and effectiveness of IPT delivery to pregnant women in Pemba.

Intermittent Preventive Therapy of malaria with SP (Sulfadoxine-Pyrimethamine) twice during pregnancy is promoted by the local MoH to prevent anaemia in mothers and low birth weight in newborns.

PHL-IdC has been involved to assess the effectiveness of this new policy and its consequences for the mother and the neonate.

Main collaborators: ZMCP (Zanzibar Malaria Control Programme) Financial Support: Global Fund, Italian Ministry of Foreign Affairs Duration: March 2006 – June 2007

1.6) AIDS/TB project

Four main areas of interest are addressed by this project:

- Building/rehabilitation works: rehabilitation of the laboratory in Chake Hospital, by providing needed lab equipment and supplies in order to improve its services. The lab would be linked with the PHL-IdC for referral or third level diagnosis.
- 2) TB microbiological strategy: Promote TB and HIV integration, with strengthening the TB diagnosis, culture, and MDR TB testing. PHL would act as quality control for peripheral (hospital) diagnosis on the sputum smear, as well as reference centre for culture and identification of Multi DR TB. PHL-IdC will be equipped with a PCR equipment..
- 3) Radiology training: Reinforce the diagnostic facility of radiology (with special reference to chest xRay) and ultrasound unit in Chake hospital through on the job training.
- 4) Non HIV virology intervention: Address other potential virological hazards (febrile but malaria-negative patients) in order to set up public health priorities and intervention in Zanzibar.

Main collaborators: INMI Lazzaro Spallanzani Institute, Rome Financial Support: Italian Ministry of Foreign Affairs Duration: January – December 2006

2) Mother and Child Clinic

In the year 2002 the Foundation decided to rehabilitate an existing primary health care unit (PHCU) in the village of Gombani.

The project implies sustaining the existing clinic which is part of the national health system and adding a new service which consists of a mobile clinic.

The rehabilitated PHCU, in operation since January 2003, provides free health care service and drugs.

The size of the clinic and the number of staff involved enable it to visit more than 100 patients per day.



The PHCU consists of the registry office, the visiting room, a room for storage and distribution of medicine and a small laboratory. Inpatient department (overnight beds) are not foreseen. The clinic is fully staffed by local medical and nursing personnel.



In 2004 the project also added a mobile service to boost the clinic's activities, permitting access to basic health services for people living in the more disadvantaged areas of the island.

The mobile clinic implements the outreach service twice a week in more remote areas of Pemba Island by transferring its health staff and the needed drugs to selected PHCUs. The existing structure, plus the mobile service, enable to serve a sizeable proportion of the mothers and children on the island.

Main collaborators: Scottish Charity "St Andrew's Clinics for Children" (Glasgow - UK) Financial Support: Private Donors Duration: 2003 -> ongoing

NEPAL

3) TSA-WHO



Soil-transmitted helminth (STH) infections have been an enduring public health problem in Nepal. Various large scale de-worming interventions have been conducted to control the problem.

Since 1998, as part of school feeding programme, about half a million primary-school-aged children have been dewormed twice a year with locally-manufactured generic albendazole.

In 1999, de-worming was integrated with the national biannual vitamin A capsule distribution. As part of the programme, about two million children aged 13-59 months have been de-wormed twice a year. An impressive reduction of anaemia has been recently demonstrated as a major outcome of this intervention.

Anthelminthic treatment is also routinely offered at primary heath care facilities to all those suspected to be infected. The government of Nepal plans to expand de-worming of school-age children nationwide covering a total of 3.5 million children and to initiate de-worming adolescents.

Since the inception of biannual de-worming of pre-school children in 1999, millions of albendazole tablets have been procured from different local suppliers. Quality of the procured products was not routinely tested.

In 2004 and in 2006 IdCF has been entitled two Technical Service Agreements (TSA) from WHO (World Health Organization) to provide technical support to the Ministry of Health in Nepal.

In 2004 the technical activity was a randomised trial to compare the efficacy and the quality of the local generic albendazole products for the treatment of STH infections in children against the imported original GSK albendazole².

In 2006 the technical activity was a trial to monitor the efficacy of albendazole for the treatment of soil-transmitted nematode infections in children after six years of periodic treatment.



Main collaborators: UNICEF, Vitamin A and Deworming programme, Ministry of Health Nepal Financial support: WHO Duration: February – April 2004; October – November 2006

² Albonico M. et al., Comparative study of quality and efficacy of originator and generic albendazole for the mass treatment of soil-transmitted nematode infections in Nepal, *Transactions of the Royal Society of Tropical Medicine*, 2006 Nov 25; [Epub ahead of print]

VIETNAM

4) Deworming campaign



In 2005 the Foundation decided to support the annual deworming campaigns promoted by the local Ministry of Health and Social Welfare.



Viet Nam is among the most affected countries in the world in terms of intestinal worm infection. This situation is mainly due to the tropical and humid climate together with the very poor sanitation structures and the common use of night soil as fertilizer in small-scale agriculture. Worm infections are widely distributed throughout the country. Its prevalence in the North is roughly between 70-95%, in the Centre 50-80% and in the South 15-50%. The most vulnerable group are primary school age children. The only solution that can permanently solve the problem is the significant increase of the number and the quality of the sanitation infrastructure (especially on the countryside) and the improvement of the health awareness in the affected population. However, global experiences show that these solutions, apart from being extremely expensive, take decades to be put in places and, presently, the majority of the children in Viet Nam is heavily affected by worm infections that decrease their nutritional status, their school performance and their resistance to other infectious diseases.

In this severe situation, the recommendation from WHO is the periodical deworming (drug distribution & health education) for at least primary school children. The strategy is twice a year deworming in areas with prevalence over 50% and once a year in areas with prevalence between 30% and 50%.

Every year the Ministry of Health of Viet Nam, with the support from WHO, implements deworming campaigns to 2 million children and their teachers. The Foundation participated at the 2005 – 2006 campaign by supporting the deworming of 1.4 million children and providing educational material. By cutting all redundant costs, this proved to be one of the most cost-minimizing deworming campaigns worldwide, with a cost of 0,03 Euro per child, meaning that with 3 Euros it was possible to deworm 100 children. An article has been recently published to point out the cost minimization of the Viet Nam campaigns³.

Main collaborators: MoH Vietnam, WHO Financial Support: Private Donors Duration: October 2005 – May 2006

³ Montresor A et al., Cost containment in a school deworming programme targeting over 2.7 million children in Vietnam, *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 2006 Oct 17 [Epub ahead of print].

5) UPCOMING PROJECTS

TANZANIA (Pemba – Zanzibar)

5.1) Surgical Service Rehabilitation



The operating theatre at Chake hospital is suffering major shortcomings with regard to its equipment and materials. In addition, it is now two years that Chake hospital misses a general surgeon. Local surgeons are unavailable and, for the time being, the only solution is the presence of foreign surgeons. To fill this gap the Foundation is launching a two years initiative for 2007 which will see the involvement of several surgeons from the hospitals of Torino, Novara, Florence and Cles. On a rotational basis, the surgeons will be based for one-three months each in Chake hospital to carry out surgical interventions and to do on-the-job training to local health staff for the sustainability of the service after the end of the project.

To solve the materials shortcomings, thanks to the sistership launched between Cles Municipality and Chake Chake Districts, it will be possible to send to Chake hospital several missing items among which an ultrasound machine, a new operating table, laboratory analysis kits, surgical instruments and an ambulance.

Main collaborators: Selected Italian Hospitals, Municipality of Cles (TN – Italy) Financial Support: Compagnia di San Paolo di Torino (to be confirmed), Municipality of Cles Duration: March 2007 – February 2009

5.2) HIV/AIDS outpatient clinic

Based on the results of the survey carried out in 2002, the Foundation, in line with the request of the MoH, would like to establish an outpatient clinic, close to Chake hospital, which offers voluntary counselling and preventive services addressed to mothers and children for the control of HIV/AIDS and sexually transmitted diseases.

Main collaborators: Sacco Hospital - Milan University (prof. M. Galli's team) Financial Support: Rotary (to be confirmed) Duration: April – December 2007

5.3) Health Management Information System

The importance of this project relies in the need of reliable health data aimed at better targeted control intervention of endemic and epidemic diseases. Only by being aware of the prevalence and incidence of endemic diseases and epidemics it will it be possible to plan preventive and control measures accordingly. Hence, the general objective is the improvement of the health of the population through the rehabilitation of the current endemic and epidemic diseases surveillance system from the periphery to the centre.

Specific objectives are: (1) strengthening of the PHL-IdC as epidemiological reference centre in Pemba; (2) rehabilitation of the Districts health infrastructures; (3) training of human resources on epidemiological surveillance. The strategy is based on the improvement of the diagnostic and data collection capacity for a better knowledge of the spread of diseases aimed at a more effective control.

Direct beneficiaries are the health workers operating in the primary health care units (PHCU), in the districts and in the hospitals for a total amount of around 235 units. Indirect beneficiaries will be the local community which will refer to a more efficient and effective health care service.

Main collaborators: MoH Zanzibar, Danida Financial Support: 50% Italian Ministry of Foreign Affairs (to be confirmed), private donors Duration: October 2007 – September 2010

5.4) Safe Water Project, Phase II



The project, as from direct request of the authorities of the District and the Government of Zanzibar to address a critical health situation due to the recurrent epidemics of cholera, typhoid, shigellosis and other intestinal infections, is based on:

1. rehabilitation of the water network in Chake Chake District with urgent reclamation works of the infrastructures for which conditions of serious contamination have been documented;

2. strengthening of technical skills for the continuation of the microbiological and chemical-physical laboratory analyses, both on a routine basis and in case of epidemics (cholera in particular);

3. extension to primary and secondary schools of the health education activities on the correct use of domestic water.

The project is the natural continuation of the previous one that terminated in December 2006 and is based on its outcome.

Main collaborators: Department of Public Health, Microbiology, Virology - Milan University, Engineers without borders – Trento, Department of Water Development (DWD) - Zanzibar Financial Support: 70% Autonomous Province of Trento (to be confirmed), private donors Duration: June 2007 – May 2010

5.5) TSA-WHO

The IdCF has been entitled a Technical Service Agreement to carry out a randomised, single-blind trial to assess efficacy and safety of single-dose Tribendimidine 400 mg versus Albendazole 400 mg for the treatment of Ascaris, Trichuris and hookworm infections, in Zanzibar.

Main collaborators: MoH - Zanzibar Financial Support: WHO Duration: three months (spring-summer 2007)

5.6) Electrical System Renovation

After six years from the beginning of its activities, the need to renovate PHL-IdC's electrical system has emerged. Due to the constant expanding of its activities, which include the purchase of highly consuming equipments such as low temperature freezers for the preservation of lab specimens, the present electrical system has resulted inadequate. The renovation works will thus improve PHL-IdC's performance in implementing efficiently public health projects and applied research trials.

Main collaborators: selected electrical contractors from the Province of Trento Financial Support: Autonomous Province of Trento Duration: 10 months (March – December 2007)

TRAINING

Training is one of the priorities for the Foundation, together with promoting the control of parasitic diseases in Tropical settings through development cooperation projects: a health project which doesn't focus also on the transfer of knowledge, i.e. on the training of the local staff involved in the project who will eventually be responsible of the activities, risks to be an isolated intervention without any perspective of continuation. The local human resources development is the only way to guarantee the sustainability in the long term and the autonomy of any project.

Starting from this belief, the Foundation promotes advanced training courses in tropical medicine and public health targeted at Italian and international health workers.

The importance of organizing training courses for health staff coming from developed and developing countries lies in the adoption of a strategy pointing at the exchange of resources between the North and the South of the world.

The sharing of know-how between different countries contributes to increment the competences and widen the scientific knowledge of the people involved. On one hand, the possibility for health workers from European Countries to have an experience "in the field", i.e. in Countries where tropical diseases are endemic, is extremely important for a better understanding of the reality and the epidemiological scenario. On the other hand, the possibility for health workers from Sub-saharan African Countries to exchange ideas on problems of common interest and to discuss possible intervention strategies represents a highly valuable experience and an opportunity of upgrading specific scientific competences, in line with the local priorities.



1) Courses in Tropical Medicine and Public Health

1.1) Training courses 1995 - 2005:

- National Course in Clinical Parasitology Perugia, 7-11 May 1995
- 1st Regional training and updating course on "Basic technical diagnosis of imported and indigenous parasites", Pavia, 20-24 May 1996
- 2nd Regional training and updating course on "Basic technical diagnosis of imported and indigenous parasites", Pavia, 5-9 May 1996
- Advanced Course in Microbiology "Diagnosis of parasitic diseases", Cles (Trento), 2-6 June 1997
- Residential Course for laboratory doctors, "Parasitological Diagnostic Medicine", Cremona, 3-5 December 1997
- "Practical course in infectious and tropical diseases" organised in collaboration with the Amedeo di Savoia Hospital and the Turin University Centre for Tropical Diseases, Turin, 3-4 May 1999
- 3rd Regional training and updating course on "Basic technical diagnosis of imported and indigenous parasites", Bergamo, 31 May - 4 June 1999
- "Advanced Training on Tropical Medicine" in collaboration with Médecins sans Frontières, ASL of Macerata, 11-25 May 2000
- Research, training, control and surveillance of tropical diseases in sub-Saharan Africa: the Ivo de Carneri Foundation's experience at Pemba, Rome, 28 February 2003, National Health Institute

- "Challenges of tropical medicine in the third millennium", in collaboration with the Polytechnic University of the Marche, Infectious diseases department, Ancona, 22-26 March 2004, and Pemba (Tanzania), 19-27 June 2004.
- Workshop on "Helminth Control in East Africa: the way forward", Pemba Island, Tanzania, 6 8 January 2004
- Challenges of Tropical Medicine in the Third Millennium (TMTM 2005), in collaboration with the Universities of Ancona and Brescia and the Public Health Laboratory Ivo de Carneri, 9 May – 16 July 2006

1.2) Training courses in 2006 and onwards

Since 2006 the Foundation collaborates with the University of Brescia, Infectious and Tropical Diseases Institute, for the organization of two training courses, namely:

- "Advance Course in Tropical Medicine and International Health" (in Italian), organized by the Infectious and Tropical Diseases Institute, University of Brescia (Italy) in collaboration with the Ivo de Carneri Foundation, CUAMM, Medici Senza Frontiere Italy, Don G. Calabria Foundation for Tropical Medicine, the IRCCS Burlo Garofalo and Medicus Mundi Italia, Brescia
 - Duration: 15 weeks Time-frame: February – May Recognized as Core Course within the TropEd circuit (20 credits)
- "Tropical Medicine and Public Health Priorities in Sub-saharan Africa" (in English), organized in collaboration with the Infectious and Tropical Diseases Institute, University of Brescia and hosted by the Public Health Laboratory Ivo de Carneri in Pemba island (Zanzibar – Tanzania)
 - Duration: 2 weeks Time-frame: November Recognized as Advanced Course within the TropEd circuit (3 credits)

TropEd is a network of European institutions for higher education in international health leading to the Master's Degree in International Health. The Master programme consists of an introductory core course, specialised optional modules and a research project (for further details: www.troped.org).

The collaboration with the University of Brescia is targeted to creating dynamic synergies for building new capacities in public health and tropical diseases and strengthening the Public Health Laboratory's capacity and international visibility.

The Foundation assigns scholarships to support the participation to these courses. The scholarships, cover inscription fees, travel, full board, training material and health insurance.

To apply for them, check out regularly our web-site!



1.3) Training of Trainers (ToT) - upcoming

The Foundation, in collaboration with the World Health Organization (WHO), is promoting the organization of the 2007 edition of the Course on the new strategies for the integrated control of helminthic diseases: lymphatic filariasis, onchocerciasis, schistosomiasis and intestinal hemlinths. The Course is addressed to programme managers of the Ministries of Health from different African Countries responsible for the control of the above-mentioned diseases. The Course ("Training of Trainers" - ToT), will be a residential course of

the total duration of two weeks (tentative date: June 2007) and will be hosted at the Public Health Laboratory Ivo de Carneri on Pemba island, United Republic of Tanzania.

In June 2006 WHO has officially approved the manual "Use of Preventive Chemotherapy", a handbook containing the guidelines for an integrated control of parasitic infections. This new approach, that considers as main target populations living in endemic areas (often hit from more than one of these diseases), rather than the single disease, allows more effective interventions and the optimization of the human and financial resources available. These diseases, according to their similar epidemiology and pathogeneses, can all be controlled through routine mass drug administration and health education. Hence, converging these activities allows an optimal use of the resources with important cuts in the costs. A crucial role in the implementation of integrated control programs is plaid by the programme managers responsible for the organization of the campaigns of drug distribution, the health education activities, the monitoring of the data on coverage, compliance, appearance of major side-effects and pharmacological resistance. The course tries thus to respond to the need of promoting and spreading the new WHO policies by training the Programme Managers on their correct application. The two weeks course, addressed at twenty participants, is structured in frontal lessons held by experts of International Organizations, presentation of standardized guidelines, group works and exchange of good practices.

2) Courses in Ultrasound Diagnostics

2.1) 2002 - 2003

Diagnostic ultrasound course. Zanzibar, January 2002 – January 2003. The two weeks courses were managed in collaboration with the University of Pavia, Center for Infective and Tropical Diseases.

2.2) 2006 - 2010

In January 2006 the Foundation started a collaboration with the medical Association "World Medical Colours" (WMC), an association formed by experienced ultrasonologists working in hospitals and university's Institutions in Italy. A five-year program of training in diagnostic ultrasound at the hospital of Chake Chake, island of Pemba has thus been launched. The course is addressed to health care staff and aims at training on the techniques for a correct ultrasound diagnosis of the greater pathologies of the gastro-intestinal and uro-genital tract, in addition to establishing a distance on-line consultancy service.



SCIENTIFIC ACTIVITIES

1) University textbook

The Foundation, thanks to its Scientific Committee and the knowledgeable contribution of several scientists, continued the publication of the university textbook "General and Human Parasitology", brought to the 11th edition by prof. Ivo de Carneri and now available in its 13th edition (Editors prof. Claudio Genchi, University of Milan and Dr. Edoardo Pozio, National Institute for Health, Rome. Casa Editrice Ambrosiana).





The Foundation also published the Italian edition of the *WHO Bench Aids for the diagnosis of intestinal parasites* Ed. Folini, 1997

It is possible to order a copy of both books by contacting the Foundation: info@fondaziondecarneri.it

2) Scholarships

The Foundation sustains young and dedicated scientists with scholarships assigned either to attend the training courses promoted by the Foundation or other university study programmes.

In addition, every two years since 1994 the Foundation assigns the "Ivo de Carneri Prize", a scholarship addressed to a Sub-saharan African student for his/her final doctoral thesis. Candidates are invited to send their thesis with CV and Covering Letter to our email address for the 2008 edition of the Ivo de Carneri Prize.

3) Conferences and workshops

To contribute to the dialogue on public health issues and on the diseases affecting the majority of the population living in developing countries, to sensitize policy makers on putting more efforts in the attainment of the MDG (Millennium Development Goals) addressing the most crucial areas of poverty and inequality worldwide, to inform the public opinion on the problems representing a burden to societies in the attainment of their wellbeing, the Foundation is also involved in organizing and promoting conferences and workshops. The major ones are mentioned hereunder:

- "Parasitic infections related to Migration Problems", Milan, 23 May 1995. In collaboration with the Health Councillor's Office of the Region Lombardy
- "Migrations, Parasitic Infections and Migration Problems: an emerging problem", Turin, 15-16 November 1996, in collaboration with the Infectious Diseases Institute – Amedeo di Savoia Hospital and the World Health Organization. With the Patronage of the Health Councillor's Office of the Region Piemont
- "South-North, North-South: migration and health problems", Verona, 4 October 1997. Organized in collaboration with Soroptimist International Club Verona and Verona University. Sponsored by Fondzione Cariverona
- "Gian Battista Grassi and his heritage", Rovellasca (Como), 3 October 1998. Organized with the Municipality of Rovellasca, hometown of the great scientist, for the 100 years of his discovery of malaria

transmission, in collaboration with WHO, the Italian Society of Parasitology and with the patronage of the Ministry of Health and of the Region Lombardy

 "Voices from Pemba: the experience of volunteers who worked on Pemba Island for the Ivo de Carneri Foundation".

Projection of the video "Pemba, green island", shot by Michelangelo Carozzi and Andrea Martelli, Cles (TN), 22 October 2005

- "Project Pemba, four years later", Verona, 6 April 2002. Organized by Soroptimist International Club -Verona with the collaboration of the Centre of Tropical Medicine – Negrar Hospital and Verona University
- "Cooperation North South: local communities responsible for development", Cles (TN), 23 October 2004, organized for the 10th Anniversary since the establishment of the Foundation.

On October 25th the sistership between Cles and Chake Chake (Pemba - Zanzibar) has been launched



PEMBA ISOLA VERDE

Fondazione Ivo de Carneri-

- "Research and multisectoral cooperation in Developing Countries", Milan University, Institute of Hygiene, 20th January 2005
- "A public health laboratory for Sub-saharan Africa: a sustainable challenge?", 5th National Congress of the Italian Society of Tropical Medicine (SIMET), Brescia University, September 2005

4) Newsletter

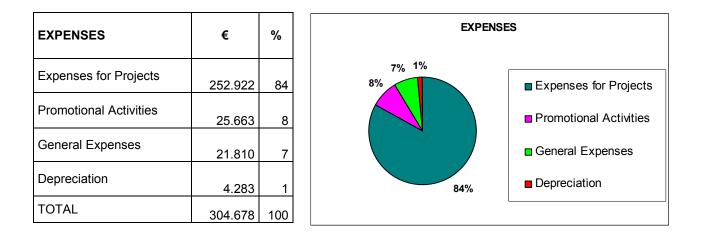


Every six months a newsletter is printed, updating on the current activities and projects implemented by the Foundation and presenting a disease affecting people in Tropical settings.

If you would like to receive the newsletter "Notizie" by post or by email, contact us!

2005 BUDGET BREAKDOWN

| INCOME | € | % | INCOME |
|----------------------------|---------|-----|---|
| Tropical Diseases Projects | 78.644 | 26 | ^{3%} 15% 26% □ Tropical Diseases Projects |
| Tropical Diseases Training | 169.815 | 56 | Tropical Diseases Training |
| Non-Finalized Donations | 46.291 | 15 | ■ Non-Finalized Donations |
| Other Incomes | 9.928 | 3 | 56% |
| TOTAL | 304.678 | 100 | |



Authors of the pictures: Marco Albonico, Sara Bigoni, Michelangelo Carozzi, Deborah Cocorullo, Andrea Graiff, Franca Meloni, Sergio Miglietta, Yahya Al Sawafy, Alessandro Viganò

Source of the Maps: www.nationsonline.org