Swiss TPH

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Since it’s founding in 1943, the Swiss Tropical Institute (STI) has become a world-renowned institution for teaching, research and services in the field of International Health Development. The multi- and cross-disciplinary activities and experience of scientific laboratory studies, conceptual clinical work and practical transfer of technical expertise to health system planning and programmes in local, national and partner countries are the building blocks of our success. In June 2009 the Institute for Social and Preventative Medicine of the University of Basel, internationally recognized in the areas of environmental epidemiology and women’s health, was integrated into the STI. With the beginning of the year 2010, the physical integration of our offices is taking place, and the whole Institute publicly takes on its new name, the “Swiss Tropical and Public Health Institute”, also to be known as the “Swiss TPH”.

Today over 500 colleagues from 40 nations work worldwide for the Swiss TPH in research, teaching and service provision with the single goal of facilitating and contributing to global health development with a strong focus on underdeveloped countries. We are determined to improve public health, strengthen health systems and reduce poverty through partnerships, mutual learning, contribution and achievements. As an associate institute of the University of Basel, the Swiss TPH takes part in teaching within the medical, philosophy, natural sciences, and historical philosophy faculties, as well as is engaged in post-graduate education and advanced training in the Swiss Public Health Continuing Education Programme (SSPH+) and an international network of academic facilities in the field of global health (tropEd).
Research

Research and teaching are the primary focus of the Epidemiology and Public Health (EPH) and Medical Parasitology and Infectious Biology (MPI) departments. Their strengths lie in the innovation, validation, and application of new molecular, cellular, and epidemiological research approaches to advance public health on a Swiss, European, and global scale. The activities of both departments benefit from a commitment to interdisciplinary collaboration and a network of well-established partnerships in both, low- and middle-income countries in Africa, Asia and South America, as well as in Europe and North America.

Finances

The Swiss TPH is a public organisation of the Basel-City region receiving 20% of its core budget from Basel-City and Basel-Land (12%) and the Swiss federal government (8%). The remaining contributions (80%) are received through competitive fundraising and the earnings of our service departments. The total projected turnover of the Institute amounts to CHF 41.6 Mio for 2010. Nearly 75% of the Institutes funds cover personnel costs of the currently 320 staff members on the payroll of the Swiss TPH. Including all of the local contracts of staff abroad, the students working for the Institute, and third party paid scientists and associates, 570 people are engaged at the Swiss TPH.

MPI parasitology studies, and medical and cellular processes, contribute to infectious disease control by advancing basic biological science, developing new vaccines, improving diagnostics and screening for new compounds. For its interdisciplinary scientific strategy, integration of clinical, field and laboratory research elements is of prime importance. Linking molecular biological and immunological approaches to epidemiological studies enables detailed exploration of pathogenesis, virulence mechanisms, host immunity and transmission. Improved understanding of infection processes builds the foundation for the development and validation of progressive...
concepts, methods and products, such as new vaccines, diagnostics and drugs. Diseases of long-standing interest include malaria, tuberculosis, African trypanosomiasis, helminth infections, Buruli ulcer and bacterial meningitis. Field work in partnership with colleagues in disease-endemic countries typically complements our laboratory studies.

**EPH** research also relies on a wide range of partnerships concerned with modern epidemiology (enhanced by inventive mapping and modelling), health systems, the vulnerability and resilience of communities, and population behaviour among critical determinants of public health. Malaria, tuberculosis, HIV/AIDS and various neglected tropical diseases (especially schistosomiasis and other helminthiases, food-borne trematodes, trypanosomiasis, and Buruli) are priority disease interests in Africa and Asia. The integration of the former Institute of Social and Preventive Medicine into the Swiss Tropical Institute to create the Swiss TPH inspires the agenda for research on chronic diseases including cardiovascular, respiratory and allergic disorders, as well as cancer, its exogenous and endogenous causes (e.g., environmental, life-style, socio-cultural and genetic factors). EPH environmental and ecological health studies are concerned with air and noise pollution, interconnectedness of human and animal health, sanitation and safe water, and non-ionizing radiation.

Cross-disciplinary interests represented in various activities of the research agenda include study of social gender and biological sex differences, links between population-based interventions and the organization and access to health systems, as well as the social and cultural determinants of health status and disease control. Additional distinctive priorities include long-term follow up of large national and international partners, the integrated analysis of health data bases with social, cultural, environmental, molecular and genetic information, and the modeling and mapping of diseases and exposures. These activities of the Swiss TPH are active in advancing knowledge and providing policy-relevant information for the improvement of public health.
Teaching and Training

In conjunction with research and services – teaching, training and continuous education build another fundament of the Swiss TPH. At the Swiss TPH – a University of Basel associated Institute – reside the two disciplines of Epidemiology and Medical Parasitology in the Humanities and Natural Sciences Faculty, and Social and Preventative Medicine in the Medical Faculty. The Swiss TPH is heavily involved in the planning and facilitation of the curricula for the Faculty of Sciences, the Faculty of Medicine and the Faculty of Humanities. Here, the core areas are infection biology, epidemiology, public health, and social sciences, the latter focusing on health, medical anthropology and African studies. Each year, we supervise more than 120 PhD and 40 MSc candidates. We also offer a Masters program for Advanced Studies in International Health, currently attended by more than 80 students. Furthermore, the institute is a hub for the Masters of Public Health program (German speaking) of the Universities of Basel, Bern and Zürich and is represented in several committees of the Swiss School of Public Health+ (SSPH+). Within the SSPH+, the Swiss TPH is responsible for the PhD program. The programs of the Swiss TPH are complemented by a series of advanced courses in International Health. These courses last between one and three weeks and are attended by more than 150 students per year. “Change things by learning from each other” is our guiding principle and reflects the format and atmosphere of our course offerings. They are aimed at health experts from all over the world and take place primarily in Basel, but also abroad, for example, in collaboration with the Tanzanian Training Center for International Health in Ifakara, Tanzania. The Swiss TPH’s further education efforts are complemented by courses for Swiss pharmacists, diagnostics of various tropical diseases and general tropics courses.
Services

In addition to having a strong reputation as a world-class research centre, the Swiss TPH contributes its experience and expertise to the Basel area and Swiss community, as well as internationally. This is achieved through the three departments of the Swiss Centre for International Health (SCIH), Medicines Research (MedRes) and Medical Services (MEDDIA). The combination of these services with research and teaching creates synergies increasing the quality of work across the entire Swiss TPH.

The SCIH supports projects and consults management and public policy in healthcare, both in industrialized and developing countries. Their focus areas are Sexual and Reproductive Health and HIV/AIDS, Health Technology & Telemedicine, Health Systems Economics, and Systems Performance and Monitoring. Among the clients of the SCIH are the Swiss Federal Office of Public Health, the Swiss Agency for Development and Cooperation, the State Secretariat for Economic Affairs, the World Bank, the World Health Organization and many other bi- and multi-lateral organizations. The SCIH employs over 130 experts from more than 30 nations at the Basel site and in 15 countries in Europe, Africa, Asia and Latin America. According to the complex requirements, the professional background of the staff is widespread and spans medicine, pharmacy, engineering, economy, education, sociology, and administration.

The experts in MedRes integrate research and services, developing and improving drugs and vaccines and diagnostics. Their main activities are the collection of epidemiologic data, support in the scientific selection process for new health interventions, and the execution and monitoring of clinical studies in countries with little resources. In these countries, MedRes also supports drug registration and offers counselling on access to medicines and drug safety/pharmacovigilance. Additionally, MedRes helps to create ethical and regulatory guidelines for the development of new medicines, working closely with international consortia and hospitals primarily in tropical countries. Currently, the focus is on indicators such as African sleeping sickness, malaria, and tuberculosis.
MEDDIA focuses on consultation and treatment in the areas of tropical and travel medicine, mainly supporting the population in north-western Switzerland and the neighbouring countries. Each year, a small team of experienced medical doctors treat approximately 2,500 sick returnees from the tropics and provide more than 10,000 pre-travel consultations, playing a nation-wide advisory role. The institute also runs a laboratory for parasitology providing Swiss-wide service and is a national reference laboratory for imported human parasitic diseases, as well as offers a 24-hour telephone service for clinical and diagnostic emergencies. MEDDIA continuously develops new diagnostic tools and facilitates a test centre for repellents and insecticides recognised across Europe.

In close cooperation with the centres for travel medicine in Zurich and Bern, MEDDIA provides coverage in travel and tropical medicine in the German part of Switzerland. Furthermore, the medical department directly supports a clinic for chronic diseases in Tanzania, where, amongst other treatments, more than 2,500 HIV/AIDS patients are administered continuous antiretroviral therapy.