



European & Developing Countries Clinical Trials Partnership

CHARTING RESEARCH

EDCTP MEMBER STATE
PROGRAMMES AND ACTIVITIES IN
THE SCOPE OF EDCTP-II

AUGUST 2012



Towards the second EDCTP programme

This report presents a summary overview of activities and programmes of the current EDCTP member states which are of relevance to the scope of EDCTP-II. It highlights available capacities such as research infrastructure and expertise which will build the foundation of the second phase of the programme. Institutional and researcher collaborations in projects of the current EDCTP programme are also listed. It is intended to be part of a series reviewing past achievements and future opportunities for increased European integration and African partnership in the field of clinical research to address the burden of poverty-related diseases.

EDCTP was created in 2003 as a European response to the global health crisis caused by the three main poverty-related diseases (PRDs) of HIV/AIDS, tuberculosis and malaria. Currently EDCTP is a partnership between 14 European Union Member States plus Norway and Switzerland with 47 sub-Saharan African countries. The aim of the programme

is to accelerate the development of new and improved drugs, vaccines and microbicides against HIV/AIDS, tuberculosis and malaria through a balanced partnership of European national research programmes on PRDs with their African counterparts in collaboration with the pharmaceutical industry and like-minded organisations.

The second EDCTP programme is expected to start in January 2014 as part of the European research framework programme Horizon 2020. Its scope is based on the current objectives and achievements and will be expanded to include: all clinical trial phases I-IV including health services optimisation research; other neglected infectious diseases; closer collaboration with industry, like-minded product development partners and development agencies; and collaborative research with other developing countries outside sub-Saharan Africa when possible and desirable.

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List of abbreviations and acronyms

ABL	Advanced Biological Laboratories	BMWi	German Federal Ministry of Economics and Technology
AC	Associated Countries		
ACT	Artemisinin-based combination therapies	BNI	Bernard Nocht Institute
AdI	Portuguese Agency for Innovation	BZgA	Federal Centre for Health Education
AERC	African Economics Research Consortia	CAIBER	Spanish Clinical Research Network
AfDB	African Development Bank	CANTAM	Central African Network for Tuberculosis, HIV/AIDS and Malaria
AIDSRN	Red de Investigación en SIDA		
AISPO	Associazione Italiana per la Solidarietà tra i Popoli	CGAP	Charitable Giving and Philanthropy
AIRD	L'Agence inter-établissements de recherche pour le développement	CGF	Calouste Gulbenkian Foundation
AMANET	African Malaria Network Trust	CEPS-INSTEAD	Centre de recherche de référence au Grand-Duché de Luxembourg
ANRS	French National Agency for AIDS Research	CIBER	Centers for Biomedical Research (Spain)
APEFE	Association pour la promotion de l'éducation et de la formation a l'étranger	CIBERESP	Consorcio de Investigación Biomédica de Epidemiología y Salud Pública
APPEAR	Austrian Partnership Programme in Higher Education and Research for Development	CICC	Spanish National Institute of Consumer
AFD	French Economic Development Agency	CID	Centre for Infectious Diseases Research
APRIORI	African Poverty Related Infection Oriented Research Initiative	CIFF	Children's Investment Fund Foundation
ARCEAU	Alliance for Clinical Research and Clinical Epidemiology in the Democratic Republic of Congo	CIM	Centre for Infectious Medicine, Karolinska Institute
ART	antiretroviral therapy	CIEC	Competence Centre - Clinical and Epidemiological Investigations Luxembourg
AU	African Union		
AvecNet	African vector Control: New Tools	CIFF	Children's Investment Fund Foundation
BBSRC	Biotechnology and Biological Sciences Research Council (UK)	CIH	University of Bergen Centre for International health
BFH	Bern University of Applied Sciences	CIIT	Innsbruck Medical University, Comprehensive Center for Infection, Immunity and Transplantation
BTC	Belgian Technical Cooperation		
BMG	German Federal Ministry of Health	CISA	Centro de Investigaçã o em Angola
BMGF	Bill & Melinda Gates Foundation	CISM	Centro de Investigaçã o em Saú de de Manhiça
BMFG	German Federal Ministry of Education and Research		
BMMH	Biamba Marie Mutombo Hospital	CIUF	Conseil Interuniversitaire de la Communauté française
BMWF	Austrian Federal Ministry of Science and Research	CMDT	Portuguese Centre for Malaria and Tropical Diseases

COHRED	Council on Health Research for Development	DPFS/DCS	Development Pathway Funding Scheme/Development Clinical Studies Scheme
CoM	College of Medicine		
CoMMAL	Malawi-Amsterdam-Liverpool partnership programme	DPP	Department of Programmes and Projects
CPLP	Community of Portuguese Language Countries	DPPICDT	Department for Scientific Research Projects and Technological Department
CRESIB	Barcelona Centre for International Health Research	DZI	German Centre for Neglected Diseases
CRIStin	Current Research Information System in Norway	EAC	East African community
CSA	Coordination and Support Action	EC	European Commission
CSIC	Spanish National Research Council	ECOWAS	Economic Community of West African States
CSRS	Swiss Centre of Scientific Research	EDCTP	European and Developing Countries Clinical Trials Partnership
CRAfrica	Clinical Research Africa		
CTI	Swiss Commission for Technology and Innovation	EDCTP-I	Currently running programme (2003-May 2015)
CTU	Clinical Trial Units	EDCTP-II	Proposed programme (January 2014–2024)
CVCE	Virtual Resource Centre for Knowledge about Europe	EEA	European Economic Area
CUAMM	Medici con l’Africa	EEIG	European Economic Interest Group
CYTED	Ibero-American Programme for Science, Technology and Development	EFINTD	European Foundation Initiative for African Research into Neglected Tropical Diseases
DBL	Danish Centre for Health Research and Development	EPFL	École Polytechnique Fédérale de Lausanne
DBT	Department of Biotechnology (Norwegian Ministry of Science and Technology)	EPSRC	Engineering and Physical Sciences Research Council
DDRC	Diarrhoeal Disease Research Centre	ERA	European Research Area
DFG	German Research Foundation	ERC	Ethics Review Committee
DFID	Department for International Development	ERI	Swiss Education, Research and Innovation
DFRH	Department of Human Resources Capacity, FCT, Portugal	ESTHER	Ensemble pour une Solidarité Thérapeutique Hospitalière En Réseau
DGDC	Minister of Belgian Development Cooperation	EU	European Union
DGIS	Directorate General of Development Cooperation	EURICE	European Research and Project Office GMBH
DLR	German Aerospace Centre	EVI	European Vaccine Initiative
DNDi	Drugs for Neglected Diseases initiative	FCRB	Fundació Clínic per a la Recerca Biomèdica
		FCT	Fundação para a Ciência e a Tecnologia, Portugal

FFU	Danish Consultative Research Committee for Development Research	HES-LRG	Les Roches-Gruyères University of Applied Sciences
FGIN	Health Research Management Training (Spain)	HES-SO	University of Applied Sciences Western Switzerland
FHNW	University of Applied Sciences and Arts Northwestern Switzerland	HGF	Helmholtz Association of German Research Centres
FIND	Foundation for Innovative New Diagnostics	HHVI	Human Hookworm Vaccine Initiative
FIPSE	Foundation for the Research and Prevention of AIDS in Spain	HIVACAT	AIDS Vaccine Research Project
FLAD	Luso-American Foundation	HPV	Human Papilloma Virus
FM	Faculty of Medicine	HRB	Health Research Board (Ireland)
FNIH	Foundation for the National Institutes of Health	HSLU	Lucerne University of Applied Sciences and Arts
FNR	Luxembourg's National Research Fund	HTMR	Hubs for Trials Methodology Research
FORSK	Sida Unit for Research Cooperation	HUDERF	Queen Fabiola Children's University Hospital
FORTH	Greek Foundation for Research and Technology	IIB	Infection and Immunology Board
FPD	Foundation for Professional Development	IAVI	International AIDS Vaccine Initiative
FP7	Seventh EU Framework Programme for Research	ISCIH	Institute of Health Carlos III
FWF	Austrian Science Fund	ISGlobal	Barcelona Institute for Global Health
FWO	Research Foundation Flanders	IBBL	Integrated Biobank of Luxembourg
GA	General Assembly	ICASA	International Conference on AIDS and STIs in Africa
GCP	good clinical practice	ICH	International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use
GIS	geographical information systems	ICRH	International Centre for Reproductive Health
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	ICT	information and communication technology
GFR	The German Health Research Council	ICP	Indicative Cooperation Programmes
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria	IDS	Institut de droit de la santé
GLOBVAC	Global Health and Vaccination Research	IKE	Linköping University Hospital, Department of Clinical and Experimental Medicine
GNI	gross national income	ILO	International Labour Organization
GUVAX	Gothenburg University, Vaccine Research Institute	IMH	Department of Medical and Health Sciences, Linköping University
HAART	Highly Active Anti-Retroviral Therapy	IMM	Institute of Molecular Medicine
HEA	Higher Education Authority		
HEI	High Education Institute		

INDEPTH	International Network for the Demographic Evaluation of Populations and Their Health	KI	Karolinska Institute
INTERACT	Infectious diseases Network for Treatment and Research in Africa	KICGH	Karolinska Institute for Global Health
IPM	Institute of Preventive Medicine	KIT	Dutch Royal Tropical Institute
IPPF	International Parenthood Federation	KNCV	KNCV Tuberculosis Foundation
IPAD	Portuguese Institute for Development Support	LBR2	Competence Centre- Luxembourg Biomedical Research Resources
ISC III	Institute of Health Carlos III	LCSB	Luxembourg Centre for Systems Biomedicine
ISP-WIV	Scientific Institute of Public Health	LiU	Linköping University
ISS	Italian National Institute of Health	LMU	Ludwig Maximilians University of Munich
IWT	Flemish Institute for the Promotion of Innovation by Science and Technology in Flanders	LSHTM	London School of Hygiene and Tropical Medicine
IDI	Infectious Diseases Institute	LSTM	London School of Tropical Medicine
IDIBAPS	Investigacions Biomèdiques August Pi i Sunyer	LuxDev	Luxembourg Agency for Development Cooperation
IHI-IRB	Ifakara Health Institute	LU	Lund University
IMBB	Institute of Molecular Biology and Biotechnology	MARIB	Malaria Research Initiative Bandarban
INSERM	Institut national de la santé et de la recherche médicale	MDG	Millennium Development Goals
INTERACT	Infectious diseases Network for Treatment and Research in Africa	MDR-TB	multi-drug resistant tuberculosis
IPM	International Partnership for Microbicides	MIM	Multilateral Initiative on Malaria
IPTp	intermittent preventive treatment in pregnancy	MIMS	Laboratory for Molecular Infection Medicine Sweden
IRB	institutional review board	MinBuZA	Dutch Ministry of Foreign Affairs
IRD	Institut de recherche pour le developpement	MINVWS	Dutch Ministry of Health, Welfare and Sport
ITM	Institute of Tropical Medicine	MIUR	Italian Ministry of Education, Higher Education and Science
IVI	International Vaccine Institute	MIVAC	Mucosal Immunobiology and Vaccine Center
JMP	Joint Malaria Programme	MMI	Medicus Mundi Italiani
KCMC	Kilimanjaro Christian Medical College	MMV	Medicines for Malaria Venture
KEMRI	Kenya Medical Research Institute	MRC	Medical Research Council
KFPE	Commission for Research Partnerships with Developing Countries (Switzerland)	MS	Member States
KfW	Kreditanstalt für Wiederaufbau	MSc	Master of Sciences
		MPIIB	Max Planck Society Institute for Infection Biology
		MUHAS	Muhimbili University Of Health And Allied Sciences
		MVVC	Malaria Vectored Vaccine Consortium
		NACCAP	The Netherlands-African partnership for capacity

	development and clinical trial interventions against poverty-related diseases	OFID/OPEC	Fund for International Development
NAME	Network Approach in Medical Education	PACTR	Pan African Clinical Trials Registry
NATNETS	Tanzanian National Insecticide Treated Net Programme	PDP	public development partnership
NCCR	National Centres of Competence in Research, Switzerland	PFIS	pre-doctoral grants for health research training (Spain)
NeTropica	Network for Research and Training in Tropical Diseases in Central America	PGU	Policy for Global Development (Sweden)
NIH	National Institutes of Health	PMTCT	prevention of mother to child transmission
NIMR	National Institute For Medical Research	PMU	Pharmaceutical Medicine Unit
NID	neglected infectious disease	PPSAC	Prevention of HIV/AIDS in Central Africa
NIFU	Nordic Institute on Studies in Innovation, Research and Education	PRD	poverty-related disease
NUFU	Norwegian Programme for Development, Research and Education	PRO	public research organism
NIMR	National Institute for Medical Research	PRET	Partnership for the Rapid Elimination of Trachoma
NIPH	Norwegian Institute of Public Health	R&D	research and development
NIVEL	Netherlands Institute for Health Services Research	RED	AIDS Spanish Network
NMCP	National Malaria Control Program	RETICS	Cooperative Health Research Thematic Networks (Spain)
NORAD	Norwegian Agency for Development Cooperation	RICET	Spanish Network of Tropical Diseases
NRP	National Research Programmes	RIVM	Dutch National Institute for Public Health and the Environment
NTD	Neglected Tropical Disease	RSC	Research Support Centre
NTNU	Norwegian University of Science and Technology	RSTMH	Royal Society of Tropical Medicine and Hygiene
NUCOOP	Norway-Sudan educational institution cooperation	SAAVI	South African AIDS Vaccine Initiative
NWO	Nederlandse Organisatie voor Wetenschappelijk Onderzoek	SAC	Scientific Advisory Committee
OCEAC	Organisation for the Coordination of the Struggle Against Epidemics in Central Africa	SADC	Southern African Development Community
OCW	Dutch Ministry of Education, Culture and Science	SADEV	Swedish Agency for Development Evaluation
ODA	Official Development Assistance	SANORD	South African-Nordic Centre
		SANTE	Spraying And Nets Towards malaria Elimination
		SCORE	Schistosomiasis Consortium for Operational Research and Evaluation
		SDC	Swiss Agency for Development and Cooperation
		SECI	Secretariat of State for International Cooperation

SER	Swiss State Secretariat for Education and Research	UNDP	United Nations Development Programme
SNSF	Swiss National Science Foundation	USOS	University Foundation for Development Cooperation
SPHD	Section for Parasitology, Health and Development, University of Copenhagen	UP	University of Porto
SPLASH	EU Water Initiative Research Area Network	UTISOR	Development Paths in the South
Sida	Swedish International Development Cooperation Agency	UU	Uppsala University
SIU	Norwegian Centre for International Cooperation in Higher Education	UVRI	Uganda Virus Research Institute
SME	Small and Medium Enterprise	VicRes	Lake Victoria Research Initiative
SMI	Swedish Institute for Communicable Disease Control	VINNOVA	Swedish Governmental Agency for Innovation Systems
SPHD	Section for Parasitology, Health and Development, University of Copenhagen	VLIR	Flemish Interuniversity Council
SSB	Statistics Norway	VS	Volkswagen Foundation
SSF	Swedish Foundation for Strategic Research	VSCR	Vienna School of Clinical Research
SSI	Statens Serum Institute	VVOB	Flemish Association for Development Cooperation
TBVI	Tuberculosis Vaccine Initiative	WGL	Gottfried Wilhelm Leibniz Scientific Association
TDR	Special Programme for Research and Training in Tropical Diseases	WHO	World Health Organisation
TESA	Trials of excellence in Southern Africa	WHO-AFRO	WHO Regional Office for Africa
THET	Tropical Health and Education Trust	WANETAM	West African Network of Excellence for TB, AIDS and Malaria
THRIVE	Training Health Researchers into Vocational Excellence in East Africa	ZHAW	Zurich University of Applied Sciences
TNO	Knowledge for Business	ZonMW	Netherlands Organisation for Health Research and Development
TRREE	Training and Resources in Research Ethics Evaluation		
UCMR	Umeå Centre for Microbial Research		
UDSM	University of Dar es Salaam		
UK	United Kingdom		
UL	University of Lisbon		
UMB	Norwegian University of Life Sciences		
UNAIDS	Joint United Nations Programme on HIV/AIDS		

1. About EDCTP

The mission of EDCTP is to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria, with a focus on phase II and III clinical trials in sub-Saharan Africa. EDCTP's approach is to develop new clinical interventions to fight these three diseases through increased integration of European research and in partnership with African Countries. In the Joint Programme A, EDCTP sets out the following specific objectives:

- Supporting relevant clinical trials (with a focus on phase II and III clinical trials in sub-Saharan Africa) in order to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria
- Strengthening African capacity through:
 - Human capacity – increasing the cadre of researchers and technical staff to conduct clinical trials
 - Infrastructure and facilities to conduct trials
 - Ethical and regulatory framework for conducting trials.
- Networking and coordination of African research programmes
- Networking and coordination of European national research and development programmes along with their partners in the south
- Advocacy and fundraising: to ensure the development, visibility and sustainability of the EDCTP Programme
- To work in partnership where possible to ensure synergy and optimal use of resources and to achieve maximum impact. In line with the business plan for the no-cost extension, this includes developing a strategy for enhancing cooperation with the private sector.

2. Introduction and aim of this report

This report presents a summary overview of activities and programmes of the current EDCTP partner countries¹ which are of relevance to the scope of EDCTP-II. This aims to highlight available capacities such as research infrastructure and expertise which will form the foundation for the second phase of the programme. It is not intended to be an exhaustive study, but instead to give a snapshot of the past achievements and future opportunities for increased European integration in the area of clinical research and strengthening the research environment to address the burden of poverty-related diseases.

Expected remit of EDCTP-II

In addition to the current focus on HIV/AIDS, tuberculosis and malaria, the second phase of the EDCTP programme is expected to have an expanded scope and thereby to support research related to a number of Neglected Infectious Diseases (NIDs). The list of NIDs in EDCTP-II has not yet been defined; in this report the WHO-TDR list² has been included for reference.

Given the proposed intention to support phase IV studies, epidemiological surveillance activities have been noted. Other activities or initiatives of relevance to EDCTP such as multidisciplinary research including social sciences, ethics and capacity building through fellowships (including academic exchange schemes) have also been captured.

Scope of this report

The information presented here has been drawn from the routine reporting by the Member States (MSs) and Associated Countries (ACs) together with any supplementary data provided by national representatives to EDCTP. Information relating to European member state collaboration in the current EDCTP programme was also extracted and is presented here.

In addition, the G-Finder database³ was referred to in order to identify public and private bodies who currently commission and conduct research of relevance to the proposed scope of EDCTP-II. The EDCTP Secretariat searched the websites of national agencies and ministries in the areas of international cooperation, development, global health and clinical research. Where relevant and feasible, regional or federally funded activities were included. National funding for product development partnerships (PDPs) was also noted. Subsequently the websites of known specialist centres and institutions in tropical medicine and related fields were reviewed and information was extracted from project databases where publicly accessible. Finally, publications on national programmes, including cross-cutting activities were referenced for further investigation.

Note on the currency used

For the G-Finder report, the average conversion rate 0.72 from US Dollars to Euros for the period 2007-2010 has been used. For all other currency values reported, the value in euros is given based on the average rate of conversion for 2011⁴.

¹ Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

² Dengue, rabies, blinding trachoma, Buruli ulcer, yaws, leprosy, Chagas, human African trypanosomiasis, leishmaniasis, cysticercosis, dracunculiasis, echinococcosis, foodborne trematode infections, lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiasis (source: http://whqlibdoc.who.int/hq/2012/WHO_HTM_NTD_2012.1_eng.pdf)

³ http://g-finder.policycures.org/gfinder_report/ (last accessed 4 June 2012)

⁴ www.oanda.com/currency/historical-rates/

3. Austria

Historical trends in funding

Limited information on historical trends in funding is available from the G-Finder database which reports 2007 funding to EDCTP to the value of ~€ 16,715 (\$ 23,216).

Additional information is provided on funding to the International Aids Vaccine Initiative ([IAVI](#)) from the OPEC Foundation for International Development ([OFID](#)) in 2010, to the value of ~€ 1,369,069 (\$ 1,901,485).

Research commissioners and partners

Based on reporting to EDCTP, the major public research commissioner is the Austrian Federal Ministry of Science and Research ([BMWF](#)) which also funds through the Austrian Science Fund ([FWF](#)). The Vienna School of Clinical Research ([VSCR](#)) is a prominent research partner in international cooperation in neglected infectious diseases.

National strategies

1. Research and Innovation

The [Strategy 2020 – Research, Technology and Innovation for Austria](#) has been developed by the Ministry for Science and Research and is closely aligned with the EU agenda for Research and Innovation. In addition to international cooperation through EU initiatives, currently international cooperation in research is focused on the following countries and regions: China, Russia, India and the Western Balkans.

2. Development Cooperation

[Austrian Development Cooperation](#) operates through the [Austrian Development Agency](#) which explicitly aligns its activities with the EU-Africa Strategy and other multilateral strategies. Priority areas for Austrian support include Peace and Security, and Energy.

Programmes

1. Funding for Research

The Austrian Science Fund ([FWF](#)) is the central research funding body for Austria and launches calls for a range of programmes including national research capacity building, fellowships to individual scientists across the career path and transnational research activities. In the specific stream of clinical research, funding is also available for projects lasting up to 36 months. In order to support cooperation with scientists from developing countries, FWF provides lump sum funding to local research institutions to support the participation of their researchers.

2. Programmes related to research for development/development cooperation

Health is not identified as a key priority in Austrian Development Cooperation however health is recognised as part of the overall contribution to the MDGs and some activities in the area are supported (e.g. in the Somali region of Ethiopia).

Austrian Development Cooperation provides up to € 500,000 of cofunding for NGOs seeking EU funds. Funding for NGOs is also available through a range of instruments including micro projects, grants for personnel development and framework projects. Current focus countries in sub-Saharan Africa across all thematic areas are: Cape Verde, Burkina Faso, Senegal, Ethiopia, Uganda, Mozambique, Zimbabwe, Namibia, Republic of South Africa, and Tanzania.

APPEAR, which is the [Austrian Partnership Programme in Higher Education & Research for Development](#), is a global programme for capacity building in all areas and sectors. Although health is not an area of focus, some complementary areas are supported such as

capacity building, agriculture, gender studies and social sciences

3. Independent organisations which fund research

OFID, which is the [OPEC Fund for International Development](#), funds different thematic areas related to development including research under the mission of fostering south-south partnership with fellow developing countries worldwide with the aim of eradicating poverty. Recent project grants include significant support to the University of the Gambia to develop its campus, improve research infrastructure and acquire new technical facilities.

Funding for HIV/AIDS is also available via a Special Grant Account which has been directed to PDPs and initiatives to strengthen health systems and improve delivery of health services. In addition to funding of approximately \$ 3.8 M (~€ 2.6 M) granted to the International AIDS vaccine Initiative ([IAVI](#)) in 2009 for activities in Kenya, Rwanda, Uganda, India, South Africa and Namibia, a grant of \$ 1.5 M (~€ 1.05 M) was made in February 2011 to the International Partnership for Microbicides ([IPM](#)). WHO received a grant for the elimination of Mother to Child Transmission of HIV in Lesotho, Zimbabwe, South Africa, Zambia and Botswana. Further funding was provided to the Foundation for Professional Development ([FPD](#)) and the Ministries of Health in a number of sub-Saharan countries in to train health-care providers involved in the provision of treatment and care to people living with AIDS.

Research performers

Universities with major activities in the field of international health

- [Vienna School of Clinical Research](#)
- [Medical University of Vienna](#), Center for Pathophysiology, Infectious Diseases

and Immunology Institute of Specific Prophylaxis and Tropical Medicine, (Vaccinology & Immunology; Molecular Biology and Parasitology; Epidemiology and Travel Medicine and Experimental Tropical Medicine and Field Research which operates throughout South and South-East Asia

- [Innsbruck Medical University](#), Comprehensive Center for Infection, Immunity and Transplantation (CIIT) – their research portfolio includes AIDS but not explicitly in resource poor settings
- [University of Graz](#), previously conducted research on *Plasmodium falciparum*
- [University of Salzburg, Unit of Molecular Biology](#) previously conducted research on genetic vaccines for Malaria but this project has now been completed.

Other research performers such as SMEs which collaborate in the development components or products for tools to address neglected infectious diseases are listed in the [Austrian Life Sciences Directory](#).

Networks and capacity building initiatives

In order to contribute to lack of capacity in research and medical personnel, the [Medical University of Vienna](#) has trained over 600 physicians and is currently exploring the possibility of partnering with affiliate schools to bring access to postgraduate training in areas related to clinical research, including ethics and GCP. Current partners (many with existing links to EDCTP) include the Medical Research Unit of the Albert Schweitzer Hospital, Gabon, the University of Cape Town, South Africa, Malaria Vectored Vaccine Consortium ([MVVC](#)) and CRAfrica.

Selected research activities and themes in the scope of EDCTP-II

[MARIB](#) is a bilateral research partnership between the Medical University of Vienna and Dhaka and Bandarban in Bangladesh, working on malaria, particularly artemisinin resistance.

Country collaborations on EDCTP grants

Austria

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Belgium	5	Benin	1
Denmark	1	Botswana	
France	3	Burkina Faso	3
Germany	4	Cameroon	1
Greece		Congo, Democratic Republic of	
Ireland		Congo, Republic of	
Italy	3	Cote d'Ivoire	
Luxembourg		Ethiopia	1
Netherlands	7	Gabon	5
Norway	1	The Gambia	3
Portugal		Ghana	3
Spain	4	Guinea	
Sweden	1	Guinea-Bissau	
Switzerland	3	Kenya	6
United Kingdom	7	Liberia	
		Madagascar	
		Malawi	5
		Mali	1
		Mozambique	5
		Namibia	
		Nigeria	
		Rwanda	1
		Senegal	1
		South Africa	3
		Sudan	
		Tanzania	4
		Uganda	1
		Zambia	2
		Zimbabwe	
Total (Europe collaborations)	39	Total (Africa collaborations)	46
Non EDCTP member state collaboration			
Australia	1		
Canada			
Finland			
Slovakia	1		
United States	4		
Egypt			
Total (all collaborations)			91

Austria - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2005.41300.008	Capacity Building	Training on Ethical Aspects of Clinical Research for Members of African National Ethics Committees and for African physicians/ investigator
CB.2010.41302.026	Capacity Building	Customisation and strengthening of the IHI-IRB (Ifakara Health Institute Institutional Review Board) capacity to regulate health research ethics
CB.2005.41302.012	Capacity Building	Establishment and support of a National Ethics Committee in Gabon
JP.2008.10800.001	Capacity Building/HIV	To develop a clinical trial management and support infrastructure at the College of Medicine, Blantyre, Malawi
CT.2005.32080.002	TB	Prospective epidemiological studies of TB in neonates and adolescents in Karemo Division, Siaya district, Western Kenya, in preparation for future clinical trials
CT.2004.31070.001	Malaria	Artesunate for severe malaria in African children
IP.2007.31060.003	Malaria	Special populations and label expansion studies with the fixed dose combinations artemether-lumefantrine, amodiaquine-artesunate, and dihydroartemisinin-piperazine in Zambia, Malawi and Mozambique
IP.2008.31100.001	Malaria	Integrating capacity building and networking in the design and conduct of phase I and II clinical trials of viral vectored candidate malaria vaccines in East and West African children and infants (Vectored Malaria Vaccines)
CB.2005.41301.001	Capacity Building	Establishing an African Coordinating Office for Ethics
IP.2007.31080.001	Malaria	Safe and efficacious artemisinin-based combination treatments for African pregnant women with malaria
IP.2007.31080.002	Malaria	Evaluation of alternative antimalarial drugs to sulfadoxine-pyrimethamine for intermittent preventive treatment in pregnancy (IPTp) in the context of insecticide treated nets
IP.2007.31080.003	Malaria	Optimisation of the existing dose and regimen of intermittent preventive treatment with sulfadoxine-pyrimethamine for the prevention of malaria in pregnancy in the context of high coverage of insecticide treated nets and highly seasonal malaria transmission
IP.2007.32080.003	TB	A Multicentre phase II Trial of a New TB Vaccine in African Infants
NW.2005.10403.004	Networking	Preparatory Consortium to initiate networking in Europe and Sub-Saharan Africa for the establishment of a joint MSC in Clinical Research

4. Belgium

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The total value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was ~€ 7,817,236 (\$ 10,857,272). Non-disease specific support, including core funding to the Institute of Tropical Medicine (ITM), Antwerp, had a value of ~€ 13,736,233 (\$ 19,078,102).

Funding to the Institute of Tropical Medicine (ITM) and to the International Partnership for Microbicides (IPM) for research in the field of HIV/AIDS had an approximate value of € 6,888,483 (\$ 9,567,336.78). Belgian support for TB was ~€ 227,348 (\$ 315,762) mainly to ITM. Funding for malaria (diagnostics) was ~€ 14,234 (\$ 19,769).

Other funding of relevance for selected neglected diseases, including core funding to ITM and multilateral organisations such as the Special Programme for Research and Training in Tropical Diseases (TDR) amounted to ~€ 14,423,404 (\$ 20,032,506).

In terms of distribution across different products related to prevention and diagnosis, funding was ~€ 3,679,051 (\$ 5,109,794) for diagnostics and ~€ 2,853,844 (\$ 3,963,673) for microbicides.

Research commissioners and partners

Core funding for relevant research is from the Belgian National Foundation for Scientific Research, Belgian Ministry of Foreign Affairs and the Belgian Federal Science Policy Office.

The Institute for Tropical Medicine (ITM), together with the Universities of Antwerp and Ghent are important research partners in Belgium.

Key research partner countries in sub-Saharan Africa include: Benin, Burundi, DR Congo, Mali, Mozambique, Niger, Rwanda, Senegal, South Africa, Tanzania and Uganda.

National strategies

1. Research and Innovation

Belgium has emphasised strong support for a substantial budget increase for research and innovation in Horizon 2020 in its recent [position paper](#). In 2010, the department of economy, science and innovation published a [leaflet](#) detailing Belgium's continued investment in research and innovation. In 2007, R&D expenses related to GDRP amounted to 2.03%.

2. Development Cooperation

The right to health and to healthcare was a [policy paper](#) adopted by the Minister of Belgian Development Cooperation (DGDC) in November 2008. The strategy focuses on:

- The need for a multi-sectoral approach to health
- The role of a sector wide approach in healthcare
- Outlining the main challenges of the health systems in the current aid architecture.

The paper underlined the burden that STDs, HIV/AIDS, tuberculosis and malaria have on the health care systems in their 18 partner countries including 11 sub-Saharan African countries.

Belgium has always in the past emphasised the right to health as a means of poverty reduction. However, the paper outlined a new approach to

achieve this goal: through the development of an efficient and sustainable health system able to provide reliable health care.

DGDC funding is divided into [five specific programmes](#).

Governmental cooperation

Cooperation between the government of Belgium and other state governments is facilitated by the Belgian Technical Cooperation/ Belgian Development Agency ([BTC](#)). BTC has a number of projects in sub-Saharan Africa. Their aim is to mobilise resources and expertise to eliminate poverty around the world. They have several projects in sub-Saharan Africa, such as an awareness-raising project about HIV/AIDS conducted in Tanzanian primary schools.

As part of their four year strategy, the BTC outlined their distribution of financial commitments to the health care sectors of several countries in sub-Saharan Africa:

Country	Amount (€)
Benin	€ 18.6 M
Burundi	€ 25 M
DR Congo	€ 21 M
Mozambique	€ 5.5 M
Niger	€ 19 M
Rwanda	€ 55 M
Senegal	€ 21 M
Uganda	€ 26.5

Non-governmental cooperation

The Minister of Belgian Development Cooperation ([DGDC](#)) gives funds to universities (via the Conseil Interuniversitaire de la Communauté française ([CIUF](#)) or the Flemish Interuniversity Council ([VLIR](#)), NGOs, the Association for the Promotion of Education and Training Abroad (Association pour la

promotion de l'éducation et de la formation a l'étranger - [APEFE](#)), Flemish Association for Development Cooperation ([VVOB](#)), Institute of Tropical Medicine Antwerp ([ITM](#)), amongst others.

Multilateral Cooperation

Within the framework of multilateral policy, the DGDC is associated with numerous international organisations such as the World Bank, UNICEF, WHO, International Red Cross, UNAIDS, etc.

Additional programmes address food security and humanitarian aid.

Programmes

1. Funding organisations

The Research Foundation Flanders ([FWO](#)) is an independent agency which supports fundamental research in all disciplines in the Flanders region of Belgium. Other foundations and institutions:

- [King Baudouin Foundation](#)
- [Belgian Federal Science Policy Office](#)
- [Flemish Institute for the Promotion of Innovation by Science and Technology in Flanders \(IWT\)](#)
- [Damien Foundation](#)
- [Rijksinstituut Voor Ziekte- en Invaliditeitsverzekering \(RIZIV\)](#)

2. Programmes related to development cooperation

Be-cause health: This is a knowledge exchange platform on international health care. Its purpose is to strengthen the role and effectiveness of the Belgian Development Cooperation actors in making quality health care globally accessible. Amongst its activities, the programme aims to mobilise Belgian actors in implementing an AIDS policy to reduce the impact of AIDS around the world.

[National Malaria Control Programme](#), Rwanda: The Belgian Development Cooperation provides financial and technical support to the Ministry of Health in Rwanda towards their efforts in tackling malaria. The Institute of Tropical Medicine Antwerp ([ITM](#)) has also established networks to monitor antimalarial treatments in Burundi, the Democratic Republic of Congo, Rwanda and Uganda.

Research performers

1. State institutes

Institute of Tropical Medicine ([ITM](#))

ITM is currently under a [six year framework programme](#) (2008–2013) with the Belgian Directorate-General for Development Cooperation (DGD), whereby DGD provides financial support for ITM activities. The programme aims to strengthen the basis and country ownership of health care systems, in order to improve public health and alleviate poverty in developing countries. The budget for this programme is € 32.5 M.

2. Universities with activities in the field of international health

University of Antwerp

The [University of Antwerp](#) is involved in developmental cooperation. It has created the University Foundation for Development Cooperation ([USOS](#)), which has forged partnerships with universities in Nicaragua, Democratic Republic of Congo, Morocco and India. It is also active in the [VLIR Institutional University Cooperation](#), which much encourages academic collaboration and training between Belgium and its Southern partners including five countries in sub-Saharan Africa (Burundi, DR Congo, Ethiopia, Tanzania and Uganda).

Ghent University

[Ghent University](#) supports research and higher education within its partner institutions in

the south, which includes seven countries in sub-Saharan Africa (Zimbabwe, Ethiopia, Kenya, Tanzania, Zambia, South Africa and Mozambique). The International Centre for Reproductive Health ([ICRH](#)) is a multidisciplinary centre that is operating within the Faculty of Medicine and Health. Its aim is to develop training programmes and advocate for sexual and reproductive rights.

[Katholieke Universiteit Leuven](#)

3. Independent organisations

- Queen Fabiola Children's University Hospital ([HUDERF](#))
- Scientific Institute of Public Health ([ISP-WIV](#))

Networks and capacity building initiatives

Formal networks (both for Flemish and French Universities) are already established to coordinate development aid activities amongst universities:

- [The VLIR University Development Cooperation](#)
- [La Commission Universitaire pour le developpement](#)

The DGDC has numerous [study and training grants](#) available for its 11 sub-Saharan African partner countries. In addition, universities have their own training programmes, such as the [PhD programme at ITM](#).

Selected research activities and themes in the scope of EDCTP-II

Amongst the various projects which focus on specific diseases, ITM is also undertaking a research project which is bringing together available expertise on neglected tropical diseases. '[Network Neglected Diseases](#)' is a 12 month project which started in January 2012. It aims to form a network of experts, identify knowledge gaps and priorities and develop

strategies for the effective and sustainable control of NTDs. ITM also offers diagnostic supplies for African trypanosomiasis and leishmaniasis control programmes and related research activities. The Damian Foundation, a Belgian-based NGO with a budget of € 400,000, supports research to tackle leprosy, tuberculosis and leishmaniasis.

Further information

- [Development cooperation - healthcare](#)
- [The Belgium Development Cooperation Annual Report 2011.](#)

Country collaborations on EDCTP grants

Belgium

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Austria	5	Benin	2
Denmark	1	Botswana	
France	8	Burkina Faso	7
Germany	4	Cameroon	2
Greece		Congo, Democratic Republic of	2
Ireland	1	Congo, Republic of	1
Italy	3	Cote d'Ivoire	1
Luxembourg	1	Ethiopia	2
Netherlands	14	Gabon	3
Norway	1	The Gambia	2
Portugal		Ghana	2
Spain	6	Guinea	1
Sweden	3	Guinea-Bissau	
Switzerland	6	Kenya	5
United Kingdom	11	Liberia	
		Madagascar	1
		Malawi	5
		Mali	1
		Mozambique	5
		Namibia	
		Nigeria	1
		Rwanda	5
		Senegal	6
		South Africa	14
		Sudan	1
		Tanzania	7
		Uganda	13
		Zambia	5
		Zimbabwe	1
Total (Europe collaborations)	64	Total (Africa collaborations)	95
Non EDCTP member state collaboration			
Australia			
Canada			
Finland			
Slovakia	1		
United States	5		
Egypt			
Total (all collaborations)			165

Belgium - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
NW.2005.10400.001	Networking / HIV	Strengthening laboratory capacity and nutrition skills in the context of an ICH-GCP clinical trial for the prevention of mother-to-child transmission of HIV
TA.2007.40200.001	HIV	Characterisation of neutralizing antibody responses in Chronic Clades A and D Human immunodeficiency virus type 1 (HIV-1) infections and the relationship with established markers of disease progression A longitudinal study in Rural Uganda Immunodeficiency Virus Type 1 (HIV-1) infections and the relationship with established markers of disease progression – A longitudinal study in Rural Uganda
TA.2010.40200.0019	HIV	Short and Long term clinical and immunological outcomes of patients with HIV/TB coinfections on ART
CB.2008.41302.0014	Capacity Building	The Mzadi project: strengthening research ethics capacity in the Republic of Congo and the Democratic Republic of Congo
JC.2010.10300.008	Monitoring and Evaluation	Impact of the clinical trials on the health behaviours of the communities and the quality of the health services in West and South Africa (Burkina Faso, Ghana and Zambia)
CT.2005.32090.003	TB	Towards conducting phase III trials of novel TB vaccines in Ugandan infants and adolescents
CT.2005.33070.001	HIV	Preparing for phase III vaginal microbicide trials in Rwanda and Kenya: Preparedness studies, capacity building, and strengthening of medical referral systems
IP.2007.32080.002	TB	A proof-of-concept phase IIb clinical trial to evaluate the protective efficacy of a booster MVA85A vaccination administered to healthy, HIV-infected adults in South Africa, Senegal and The Gambia
TA.2007.40200.0011	HIV	Frequency and determinants of dual infection with different strains of HIV-1 in low and high risk populations in Uganda
IP.2007.33011.002	HIV	International phase 2b randomised clinical trial to assess two once-daily simplified antiretroviral triple therapies among HIV infected children early treated by a twice daily triple therapy between 6 and 52 weeks of age and in virological success in Africa: the MONOD Project
MS.2010.10800.003	Capacity Building / Networking	Towards strengthening of the West African Node of Excellence for TB, AIDS and malaria: WANETAM plus
MS.2010.10800.004	Malaria	The Impact of retreatment with an artemisinin-based combination on malaria incidence and its potential selection of resistant strains
CB.2005.41300.002	Capacity Building	Creating web-based research training courses in biomedical research ethics for Africans
CT.2005.32080.003	TB	Capacity building for the conduct of ICH-GCP level TB vaccine trials in high risk populations in Ethiopia and East Africa
IP.2007.33011.004	HIV	A multicentre phase III trial of second-line antiretroviral treatment in African adults
IP.2009.33011.007	HIV	Prevention of early mortality by presumptive tuberculosis treatment in HIV infected patients initiating antiretroviral therapy
IP.2007.31060.003	Malaria	Special populations and label expansion studies with the fixed dose combinations artemether-lumefantrine, amodiaquine-artesunate, and dihydroartemisinin-piperazine in Zambia, Malawi and Mozambique
IP.2007.33070.001	HIV	Characterisation of novel microbicide safety biomarkers in East and South Africa

Belgium - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
IP.2009.33011.009	HIV	A randomised controlled trial of 3 strategies for the treatment of ARV-naive HIV-infected patients with tuberculosis (RAFA)
CB.2005.41301.001	Capacity Building	Establishing an African Coordinating Office for Ethics
IP.2007.31080.001	Malaria	Safe and efficacious artemisinin-based combination treatments for African pregnant women with malaria
NW.2005.10401.002	Networking / TB	Workshop on Tuberculosis Immune Reactivation Inflammatory Syndrome (TB IRIS)
IP.2007.32080.003	TB	A Multicentre phase II Trial of a New TB Vaccine in African Infants
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial
NW.2005.10403.004	Networking / Capacity Building	Preparatory Consortium to initiate networking in Europe and Sub-Saharan Africa for the establishment of a joint MSc in Clinical Research
CT.2004.31060.001	Malaria	Evaluation of 4 artemisinin-based combinations for treating un-complicated malaria in African children

5. Denmark

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The approximate value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was € 29,558,264 (\$ 41,053,145). Non-disease specific support had a value of ~€ 7,010,131 (\$ 9,736,294).

Funding from [Danida](#) for research in the field of HIV/AIDS had an approximate value of ~€ 8,426,805 (\$ 11,703,897) to the International AIDS Vaccine Initiative ([IAVI](#)) and the Institute of Preventive Medicine ([IPM](#)). Danish support to TB was ~€ 15,668,850 (\$ 21,762,293) principally to Statens Serum Institut ([SSI](#)). Funding for malaria was ~€ 2,294,384 (\$ 3,186,645) from Danida to AMANET, for the Centre for Health Research and Development ([DBL](#)), European Vaccine Initiative ([EVI](#)) and the University of Copenhagen.

Other funding for selected neglected diseases and multilateral organisations such as the Special Programme for Research and Training in Tropical Diseases ([TDR](#)) amounted to ~€ 10,177,966 (\$ 14,136,064).

In terms of distribution across different products funding was ~€ 11,586,539 (\$ 16,092,416) for vaccines, ~€ 5,168,348 (\$ 7,178,262) for HIV microbicides and ~€ 3,841,816 (\$ 5,335,856) for TB diagnostics.

Research commissioners and partners

The majority of Danish clinical research related to neglected infectious diseases, and in the expected remit of EDCTP-II, is funded and

conducted by public institutions directly, or is commissioned by Danish and international partners including the [Bill & Melinda Gates Programme](#) and the [Framework Programme 7](#). Statens Serum Institute and Danida are both major funders in the field of biomedical research for neglected diseases. Based on the G-Finder information, Statens Serum Institut, The [DBL-Centre for Health Research and Development](#) and the University of Copenhagen are principal recipient institutions in Denmark. In addition, Danida has funded a number of PDPs and multilateral programmes including Aeras, EVI, IAVI, IPM and WHO-TDR.

Key research partner countries in sub-Saharan Africa include: Burkina Faso, Ethiopia, Gabon, Ghana, Guinea-Bissau, Kenya, Mali, Mozambique, South Africa, Tanzania, Uganda and Zambia (although the Danida strategy 2012-2016 suggests that support to Zambia will gradually be phased out).

National strategies

1. Research and Innovation

Following the publication of Research 2015 by the Danish Agency for Science, Technology and Innovation in 2008, 'Research 2020', a strategy to identify priorities for research addressing national and global challenges will be published in spring 2012. Although this focuses on Danish research priorities, it is explicitly aligned to the aims of Horizon 2020 and will form the basis of allocation of Danish research funds.

2. Development Cooperation

[Freedom from Poverty – Freedom to Change](#) is the Strategy for Denmark's Development Cooperation (2010) and current priorities for the period 2012–2016 have been set. The strategy focuses on the following areas:

- Freedom, democracy and human rights
- Growth and employment
- Gender equality
- Stability and fragility
- Environment and climate.

In terms of geographical focus, funding to sub-Saharan Africa will be increased, with a focus on growth and employment in accordance with the recommendations of the Africa Commission and to phase out support to selected countries. Multilateral assistance will be focused on efficiency and results (note phasing out support to Global Fund and UNESCO during 2012).

The strategy has a strong emphasis on research, noting that Danish development research underpins the priorities for Danish development policy. The draft finance act 2012, which provides a four-year budget forecast indicates that the government will increase the 'competitive research funds with DKK 60 M (~€ 7.8 M) to DKK 155 M (~€ 20.1 M) in 2012, of which [DKK 20 M \(~€ 2.6 M\) are allocated to research in vaccines](#) for among others HIV, malaria and tuberculosis.'

Programmes

1. [Danish Agency for Science, Technology and Innovation](#)

Funding for individual researchers in health and clinical research is available through The Danish Council for Independent Research – Medical Sciences and the Danish Council for Strategic Research. The Danish Council for Strategic Research also includes calls in health and disease, and provides funding for calls in partnership

[Danida](#)

Competitive funding for development research is allocated by the Minister for Development on the advice of the [Consultative Research Committee for Development Research](#). This

funding includes yearly calls for fellowships and larger strategic projects which are administered via the Danida fellowship centre.

Additional funding, for example to Product Development Partners, is available through the support for thematic areas including Global Health and HIV/AIDS.

In addition Danida cofunds the 'Building Stronger Universities Initiative'.

2. ['Building Stronger Universities initiative: Platform for Human Health'](#)

The Building Strong Universities initiative is supported by both Danida and Universities Denmark, a body that coordinates and represents eight Danish Universities. Building Stronger Universities is a partnership between higher education and specialist institutions in Denmark and sub-Saharan countries and Human Health has been identified as one of four priority areas. This platform is currently in the pilot phase (2011-2013, with a budget of DKK 60 M (~€ 7.8 M) and further funding of DKK 19 M (~€ 2.4 M) but there is mutual agreement that this will continue after 2013. The pilot phase focused on the development of a bilateral partnership with institutions in Ghana, mainland Tanzania and Zanzibar.

In addition to facilitating research activities, the main areas of activities include: development of postgraduate courses and support to PhD and MSc projects; enabling the research environment; institutional capacity building and networking, communication and dissemination.

The following thematic working groups have been established under the PHH and are hosted by a Danish institution:

- Sexual and Reproductive Health, University of Copenhagen

- Climate Change and Health, University of Copenhagen
- Global Health, University of Copenhagen
- Environmental and Occupational Health and Safety, Odense University Hospital
- Governance and Communication - Perspectives on Global Health, Roskilde University
- Guinea Bissau, Århus University.

These programmes emphasise the role of cofunding from both European and international sources to support scientific activities related to global health.

Research performers

1. State institutes

[Statens Serum Institute](#)

SSI is a public enterprise under the Danish Ministry of Health. In addition to epidemiological surveillance, its remit includes R&D, development and production of vaccines and diagnostics.

The [Centre for Health Research and Development \(DBL\)](#), the former Danish Bilharziasis Laboratory, is now an integrated part of the Section for Parasitology, Health and Development ([SPHD](#)) at Department of Veterinary Disease Biology, Faculty for Health and Medical Sciences, University of Copenhagen. SPHD is funded under the Appropriation Act, by a Performance Contract with Danida/Ministry of Foreign Affairs, the Consultative Research Committee for Development Research and other Danish research councils, and through the EU/FP7 programme, the Knud Højgaard Foundation, the Bill and Melinda Gates Foundation and the Wellcome Trust. From 2013 core funding from Danida will cease and a new approach will focus on greater integration in the University of Copenhagen.

2. Universities with activities in international health which are currently participating in the Platform for Human Health

- [Aalborg University](#)
- [Aarhus University](#)
- [Roskilde University](#)
- [Technical University of Denmark](#)
- [University of Copenhagen](#)
- [University of Southern Denmark](#)

c. Independent organisations

- [Knud Højgaard Fond](#)
- [Novo Nordisk Foundation](#)

Networks and capacity building initiatives

[Danish Research Network for International Health](#) (formerly ENRECA) is a Danish research network focusing on Global Health and is hosted by the University of Copenhagen. Between [1996 and 2011 core support came from Danida](#), enabling ENRECA to launch a number of calls but this is now being phased out.

Danida Research Fellowships are administered through the Danida Centre for Research Fellowships and funding is available to support individuals and large-scale long-term studies. Funding decisions are made by the Consultative Research Committee for Development Research (FFU), a programme committee under the Danish Council for Strategic Research advising the Minister for Development Cooperation. A database is available for all research funded after 2008.

Selected research activities and themes in the scope of EDCTP-II

The [Bandim Health Project](#), which is a partnership with the Ministry of Health in Guinea-Bissau, was launched in 1978 and is a founder member of the INDEPTH Network. Recent funding has enabled epidemiological surveillance of childhood vaccinations and vitamin supplementation.

The [Research Center for Vitamins and Vaccines based at SSI](#) to investigate the non-specific effects of vaccines on the immune system.

Researchers from Section for Parasitology, Health and Development at the University of Copenhagen participate in [TheSchistoVac](#), an EU funded project on new generation targeted vaccine for schistosomiasis.

The [VIBE project](#), based at the Section for Parasitology, Health and Development of the University of Copenhagen, addresses the prevention and diagnosis of Female Genital Schistosomiasis.

A number of projects relate to epidemiology and control of [lymphatic filariasis in Eastern and Southern Africa](#).

The [SCORE](#) project is a global collaboration to carry out surveillance and treatment of schistosomiasis; one project with Danish support focuses on *Schistosoma mansoni* at the Mwanza research centre in Tanzania.

The [Malaria Capacity Development Consortium](#) is a long-established partnership (previously the Gates Malaria Partnership) between the Center for Medical Parasitology, University of Copenhagen, DBL - Centre for Health Research and Development, University of Copenhagen (DBL), Liverpool School of Tropical Medicine (LSTM), London School of Hygiene & Tropical Medicine (LSHTM). The five African universities (and supporting partners) are College of Medicine, University of Malawi (CoM), and the Wellcome Trust Clinical Research Programme, Blantyre, Malawi; Kilimanjaro Christian Medical College, Moshi (KCMC), and the Joint Malaria Programme (JMP) Tanzania; Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; Faculty of Medicine and School of Public Health, Makerere University, Kampala, Uganda, and the Ministry of Health, Uganda;

Faculty of Medicine, Université Cheikh Anta Diop (University of Dakar), Senegal and the Ministry of Health, Senegal.

The TB vaccine program at the Statens Serum Institute (SSI) includes TB vaccine candidates close to or already in phase II as well as vaccine adjuvant systems applicable for vaccine development across a broad range of infectious disease targets. The program also includes targeted research into human TB immunodiagnosics intended for development of practical low tech tools for both TB diagnosis and for TB vaccine efficacy measurement.

Country collaborations on EDCTP grants

Denmark

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Austria	1	Benin	
Belgium	1	Botswana	
France	1	Burkina Faso	2
Germany	2	Cameroon	
Greece		Congo, Democratic Republic of	
Ireland		Congo, Republic of	
Italy		Cote d'Ivoire	
Luxembourg		Ethiopia	6
Netherlands	6	Gabon	1
Norway		The Gambia	4
Portugal		Ghana	3
Spain	1	Guinea	
Sweden	3	Guinea-Bissau	3
Switzerland	1	Kenya	1
United Kingdom	7	Liberia	
		Madagascar	1
		Malawi	1
		Mali	1
		Mozambique	1
		Namibia	1
		Nigeria	
		Rwanda	
		Senegal	1
		South Africa	3
		Sudan	
		Tanzania	6
		Uganda	3
		Zambia	1

Denmark - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CT.2006.33020.001	HIV	Back-up with Combivir (AZT/3TC) or single-dose Truvada (FTC/TDF) in order to avoid Non Nucleoside Reverse Transcriptase Inhibitor (NNRTI) resistance after single dose Nevirapine for the prevention of mother-to-child transmission (MTCT)
MS.2009.10800.002	Malaria	Capacity and network strengthening measures within the framework of malaria research in Tanzania
TA.2007.40200.012	Malaria	Assessment of functionality of antibodies that associate with protection from clinical malaria using the in vitro <i>P. falciparum</i> growth inhibition assay
IP.2007.32080.001	TB	Conduct of ICH-GCP level phase II TB vaccine trials in high risk populations in Africa
JP.2009.10800.006	TB	Improved diagnostic and prognostic tools to combat tuberculosis in high endemic areas from bench to clinical trials
MS.2009.10800.001	HIV	A joint initiative to sustain HIV vaccine trials and research capacity in the Republic of Guinea-Bissau, West Africa
IP.2009.32080.002	TB	Phase II Double-Blind, Randomised, Placebo-Controlled Study to Evaluate the Safety and immunogenicity of H1, an adjuvanted TB subunit vaccine in HIV-infected, BCG-vaccinated Adults with CD4+ Lymphocyte Counts Greater Than 350 Cells/mm ³
IP.2009.33011.004	HIV	Nutritional support for Africans starting antiretroviral therapy (NUSTART)
CT.2005.32080.003	TB	Capacity building for the conduct of ICH-GCP level TB vaccine trials in high risk populations in Ethiopia and East Africa
IP.2007.31100.001	Malaria	Fostering research capacity, networking and project management through phase I-II clinical trials of candidate malaria vaccine GMZ2
IP.2009.32040.011	TB	The evaluation of Mycobacterium tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic biomarkers for active TB infection
MS.2010.10800.002	TB	Collaboration and integration of Tuberculosis Vaccine Trials in Europe and Africa (TBTEA)
IP.2007.31080.003	Malaria	Optimisation of the existing dose and regimen of intermittent preventive treatment with sulfadoxine-pyrimethamine for the prevention of malaria in pregnancy in the context of high coverage of insecticide treated nets and highly seasonal malaria transmission

Denmark

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
		Zimbabwe	
Total (Europe collaborations)	23	Total (Africa collaborations)	39
Non EDCTP member state collaboration			
Australia	1		
Canada			
Finland			
Slovakia			
United States	3		
Egypt			
Total (all collaborations)			66

6. France

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The approximate value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was € 91,542,272 (\$ 127,142,044). Non-disease specific support (including funding for vaccine adjuvants and delivery technology) had a value of ~€ 1,325,968 (\$ 1,841,623).

Funding from France for research in HIV/AIDS had a total value of ~€ 56,921,551 (\$ 79,057,710) mainly to academic institutions. French support to TB was ~€ 8,836,362 (\$ 12,272,725) and funding for malaria was ~€ 10,643,018 (\$ 14,781,970).

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases (TDR) amounted to ~€ 16,186,142 (\$ 22,480,753).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€ 20,695,745 (\$ 28,744,090) for vaccines, ~€ 1,788,059 (\$ 2,483,416) for diagnostics and € 275,068 (\$ 382,039) for microbicides.

Research commissioners and partners

The French landscape for funding reflects the complexity of the research funding landscape. In addition to public funding to institutions, private foundations are also active research funders.

National strategies

1. Research and Innovation

The Ministry of Higher Education and Research has laid out a [4 year strategy](#) (2009–2012) for national health and innovation. Amongst its three priorities is the intention to build upon public health issues such as infectious diseases as well as emerging and re-emerging diseases.

2. Development Cooperation

France's commitments in health quadrupled between 2000 and 2008 and nearly two-thirds of this aid is dedicated for sub-Saharan Africa. In particular, 76% of France's development aid funds were committed to efforts to tackle HIV/AIDS, tuberculosis and malaria.

Development aid to sub-Saharan Africa continues to be a priority for France. In the [2011 strategy paper](#), the French Ministry of Foreign and European Affairs is targeting grant funding towards fourteen priority poor countries, mainly those identified from the [UN's Least Developed Countries](#) list. For the 2011-2013 budgetary period, 60% will be disbursed to Sub-Saharan Africa, with over 50% of those grants earmarked for the 14 priority poor countries.

Most of France's multilateral contributions towards global health have mainly been through organisations such as the [Global Fund](#) (€ 1.02 billion commitment between 2011 and 2013), [UNITAID](#) (€ 360 M commitment between 2011 and 2013), and [Gavi Alliance](#).

France has adopted innovative financing strategies in the face of limited budget flows for development. One of these initiatives involves a tax on airline tickets, which contributes to UNITAID's mission in lowering the cost of treatment for HIV/AIDS, tuberculosis and malaria.

Programmes

The National Agency for AIDS research ([ANRS](#)) funds activities on behalf of the Ministry of Higher Education and Research, Ministry of Health and Foreign Affairs. The agency has a three year [strategic plan](#) (last available for 2007-2009), addressing basic, clinical and social science research as well as specific areas such as [HIV vaccine research](#) and research in developing countries. The agency explicitly identifies a number of international [partners](#) concerned with research and delivery, both in Europe and globally.

[INSERM](#) is a research organisation supported by the Ministry of Health and Ministry of Research and is the only public institution that is dedicated to health. Its current [strategic plan](#) addresses the period 2010-2015. Amongst its disease portfolio is HIV/AIDS, tuberculosis and malaria.

The mission of the French Economic Development Agency ([AFD](#)) is to finance development on behalf of the French government.

The following activities in Africa are funded by the AFD:

- [Supporting the Desmond Tutu Foundation and its research activities](#)
- Fight against HIV/AIDS in Mozambique, Djibouti, Burkina Faso, Central African Republic and Zimbabwe
- [Support for workplaces in the fight against HIV/AIDS](#)
- [Fight against malaria.](#)

[Sidaction](#) is an independent funding agency which is financed mostly through public donations (95%). Their aim is to support innovation in global research on HIV/AIDS. It partners with the association of 29 developing countries.

[Fondation pour la Recherche Médicale](#) is a funding agency which is also financed through donations and corporate partners. One of their priority areas is funding infectious diseases such as HIV/AIDS, malaria and tuberculosis.

[Medecins Sans Frontières](#) is a non-profit, self-governed organisation founded in France. It has worked to lower the price of HIV/AIDS treatment and works in conjunction with [Drugs for Neglected Diseases Initiative](#), to stimulate research and development for medicines to treat malaria and neglected infectious diseases.

[The International Union Against Tuberculosis and Lung Disease](#) which aims to develop solutions to address tuberculosis and HIV/AIDS receives funding from the French Ministry of Foreign Affairs. In sub-Saharan Africa, they have offices in DR Congo, Uganda and Zimbabwe.

In addition, L'Institut de recherche pour le développement ([IRD](#)) and AFD have recently signed a [partnership charter](#) to coordinate their activities in the South. Infectious diseases are a scientific priority for IRD and the importance of all stages of research from basic research to social sciences research to addressing the burden of poverty-related diseases is recognised.

[L'Agence inter-établissements de recherche pour le développement \(AIRD\)](#) was founded by CIRAD, CNRS, Conférence des présidents d'universités, INSERM, the Institut Pasteur and the IRD in order to support collaboration between research institutions working in development. Through a programme of calls it provides funding for a number of specific research activities relating to a number of topics.

Research performers

1. State institutes (specialist e.g. vaccines, tropical medicine)

- Institut de recherche pour le développement (IRD)
- [Institut Pasteur](#)
- [INSERM](#)

ANRS has 8 partner sites in a number of countries including [Brazil](#), [Burkina Faso](#),

[Cambodia](#), [Cameroon](#), [Ivory Coast](#), [Senegal](#) and [Vietnam](#). ANRS also supports research in a number of [developing countries](#).

2. Universities with major activities in the field of international health

- [Université Montpellier](#)
- [Université Claude Bernard Lyon 1](#)
- [Université Bordeaux Segalen 2](#)

3. Independent organisations

- [Necker-Enfants malades](#)

Networks and capacity building initiatives

Through l'Institut Pasteur's international branches, institutions are coordinating their efforts to tackle HIV/AIDS, tuberculosis and malaria as well as NIDs. For example, the rabies network encompasses 11 countries, 3 of which are in sub-Saharan Africa. Their [Molecular TB](#) network is a collaboration between the Shanghai Centre for Disease Control and the University of Fundan in improving TB diagnostic and antibiotic resistance. [TB Ethics](#) is an FP5-funded project which gathers expertise in ethics, biomedical research and clinical trials – specifically related to tuberculosis research – from around the world.

Given its importance, the ADF has dedicated funds for [capacity building activities](#). The

IRD has a [bursary programme](#) for scientific exchanges with its southern partners.

ANRS has also conducted significant work in the field of ethics and produced a [Charter of Ethics Research in Developing Countries](#) in 2002, which was subsequently revised in 2008.

Selected research activities and themes in the scope of EDCTP-II

IRD has several multinational, collaborative research groups that focus on particular areas, such as:

- Investigating the origins of the HIV virus in Cameroon
- Genetic susceptibility to trypanosomiasis in Burkina Faso, Côte d'Ivoire, DRC
- Preventative treatment of malaria in children in Senegal, Mali, Mauritania, Niger and Chad
- Development of a synergetic insecticide-repellent against mosquito vectors carrying malaria (Angola, Canary Islands, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Congo, Côte d'Ivoire, Gabon, Gambia, Guinea, Equatorial Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, RD Congo, Senegal, Chad and Togo).

Research groups at the Institut Pasteur are also tackling a number of NIDs including dengue, rabies, and leprosy.

Country collaborations on EDCTP grants

France

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Austria	3	Benin	3
Belgium	8	Botswana	1
Denmark	1	Burkina Faso	8
Germany	13	Cameroon	6
Greece		Congo, Democratic Republic of	
Ireland		Congo, Republic of	1
Italy	2	Cote d'Ivoire	2
Luxembourg	2	Ethiopia	2
Netherlands	7	Gabon	5
Norway	2	The Gambia	1
Portugal		Ghana	4
Spain	7	Guinea	2
Sweden	3	Guinea-Bissau	
Switzerland	10	Kenya	2
United Kingdom	13	Liberia	
		Madagascar	1
		Malawi	3
		Mali	4
		Mozambique	6
		Namibia	
		Nigeria	3
		Rwanda	2
		Senegal	7
		South Africa	12
		Sudan	
		Tanzania	10
		Uganda	5
		Zambia	3
		Zimbabwe	1
Total (Europe collaborations)	71	Total (Africa collaborations)	94
Non EDCTP member state collaboration			
Australia			
Canada	1		
Finland			
Slovakia	1		
United States	2		
Egypt			
Total (all collaborations)			169

France - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CT.2006.3311.004	HIV	Feasibility of and capacity building for adolescent vaccine trials in South Africa
NW.2005.10400.001	Networking / HIV	Strengthening laboratory capacity and nutrition skills in the context of an ICH-GCP clinical trial for the prevention of mother-to-child transmission of HIV
TA.2005.40200.004	Malaria	Randomised trial of the acceptability and efficacy of four drug regimens for seasonal intermittent preventive treatment for malari
TA.2010.40200.0027	Malaria	Optimisation and standardisation of the new functional antibody dependant respiratory burst (ADRB) assay to evaluate anti-malarial immunity in endemic populations and merozoite based vaccine candidates
CB.2010.41302.008	Capacity Building	Strengthening the Cameroon National Ethics Review Committee
MS.2009.10800.004	Malaria	Assessment of the fixed-dose combination of Artesunate Mefloquine (ASMQ) as an alternative antimalarial treatment for children in Africa
NW.2005.10501.003	HIV	KIDS-ART-LINC: network of clinical centres treating HIV-infected children with antiretroviral therapy in Africa to inform public health care and treatment programs
TA.2005.40203.006	Malaria	Identification of <i>Plasmodium falciparum</i> parasite virulence markers for the evaluation of the impact of malaria control intervention according to the local parasite populations
CB.2005.41302.008	Capacity Building	Strengthening the capacity of research ethics committees in Africa
CB.2007.41700.006	Capacity Building	Establishment of the Central Africa Network on Tuberculosis, HIV/AIDS and Malaria for the conduct of clinical trials (CANTAM)
CT.2006.3311.0013	HIV	Capacity development and strengthening in preparation for HIV vaccine trials in Tanzania and Burkina Faso.
NW.2005.10403.001	Capacity Building	Distance learning Master course in clinical trials
NW.2005.10403.006	Capacity Building	Distance learning masters course in clinical trials
IP.2007.33011.002	HIV	International phase 2b randomised clinical trial to assess two once-daily simplified antiretroviral triple therapies among HIV infected children early treated by a twice daily triple therapy between 6 and 52 weeks of age and in virological success in Africa: the MONOD Project
IP.2007.33011.004	HIV	A multicentre phase III trial of second-line antiretroviral treatment in African adults
MS.2010.10800.001	HIV	Fozivudine in Africa trials initiative (FATI) – a stepwise drug development programme for an improved AZT treatment A cooperation with SME's from DCs and built on an initiative of the Global UNIDO Project "Strengthening the local production of essential generic drugs in DCs"
CT.2006.33020.004	HIV	A randomised controlled trial comparing the efficacy of infant peri-exposure prophylaxis with lopinavir/ritonavir (lpv/r) versus lamivudine to prevent HIV-1 transmission by breastfeeding (PROMISE-PEP trial)

France - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
IP.2008.31060.003	Malaria	Development of Fosmidomycin and Clindamycin, in a Fixed Dose Combination, for the Treatment of Acute Uncomplicated <i>Plasmodium falciparum</i> malaria
IP.2009.33011.009	HIV	A randomised controlled trial of 3 strategies for the treatment of ARV-naive HIV-infected patients with tuberculosis (RAFA)
CT.2006.33111.001	HIV	African-European HIV Vaccine Development Network
IP.2007.31060.002	Malaria	An integrated approach to clinical trials, capacity building and networking in West Africa: treatment in pregnancy (IPTp) in the context of insecticide treated nets
MS.2010.10800.002	TB	Collaboration and integration of Tuberculosis Vaccine Trials in Europe and Africa (TBTEA)
CB.2005.41300.004	Capacity Building	Training and Resources in Research Ethics Evaluation for Africa
CB.2005.41301.001	Capacity Building	Establishing an African Coordinating Office for Ethics
CB.2007.41700.009	Capacity Building	TESA - Trials of Excellence in Southern Africa
NW.2005.10401.002	Networking / TB	Workshop on Tuberculosis Immune Reactivation Inflammatory Syndrome (TB IRIS)
IP.2007.31080.002	Malaria	Evaluation of alternative antimalarial drugs to sulfadoxine-pyrimethamine for intermittent preventive treatment in pregnancy (IPTp) in the context of insecticide treated nets
NW.2005.10403.004	Capacity Building	Preparatory Consortium to initiate networking in Europe and Sub-Saharan Africa for the establishment of a joint MSc in Clinical Research
CT.2004.31060.001	Malaria	Evaluation of 4 artemisinin-based combinations for treating uncomplicated malaria in African children

7. Germany

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. However the data are of limited value since the report does not include major funding institutions and recipients for the years 2007 to 2009. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia, meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The approximate value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was € 51,655,233 (\$ 71,743,380). Non-disease specific support had a value of ~€ 9,722,332 (\$ 13,503,240).

German support to TB was ~€ 15,577,355 (\$ 21,635,216) and was principally directed to the [Max Planck](#) and [Bernard Nocht Institutes](#). Funding for research in the field of HIV/AIDS had an approximate value of ~€ 13,712,279 (\$ 19,044,832) to [IPM](#) and national institutes. Funding for malaria was ~€ 11,187,822 (\$ 15,538,641) to the Max Planck and Bernard Nocht Institutes.

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases ([TDR](#)) amounted to ~€ 19,762,337 (\$ 27,447,691).

In terms of distribution across different products related to diagnostics and prevention, funding for vaccines was ~€ 6,942,113 (\$ 9,641,823), for microbicides ~€ 2,872,061 (\$ 3,988,974) and for diagnostics ~€ 440,932 (\$ 612,405).

Research commissioners and partners

The research funding landscape of Germany is complex due to the division of funding

between the national (Länder) and federal government levels. Major research commissioners are the Federal Ministry of Health ([BMG](#)), The Federal Ministry of Education and Research ([BMBF](#)) and the Federal Ministry of Economic Cooperation and Development ([BMZ](#)). Additionally, the German Research Foundation ([DFG](#)) funds research projects in all fields, including those under the remit on an individual or collaborative basis.

Based on the G-Finder information, the Bernard Nocht Institute for Tropical Medicine (part of the Leibniz Association) (BNI), the Helmholtz Centre for Infection Research, Ludwig Maximilians University of Munich (LMU), the Borstel Research Centre and the Max Planck Society (via its Institute for Infection Biology (MPIIB) in Berlin) are principal recipient institutions in Germany. In addition the Universities of Tübingen, the Charité in Berlin and the University of Heidelberg are receiving public funds for research on poverty associated and neglected diseases.

Key research partner countries in sub-Saharan Africa include: Botswana, Burkina-Faso, Cameroon, Chad, Gabon, Ghana, Guinea, Ivory Coast, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Rwanda, Tanzania, Senegal, South Africa and Uganda.

National strategies

1. Research and Innovation

The Federal Ministry of Education and Research ([BMBF](#)) published the [Research funding concept – Neglected and poverty-related diseases](#) in July 2011 which explicitly mentions EDCTP, noting that the German participation represents the main focus of Germany's involvement in clinical research on the three poverty related diseases. The paper highlights German research priorities in this area and will form the basis for allocation of German research funds. The strategy outlines an

expansion into poverty related diseases and move from development cooperation to research funding to improve medical care in Africa.

2. Development Cooperation

The Federal Ministry for Economic Cooperation and Development ([BMZ](#)) has made financial contributions to the WHO's Special Programme for Research and Training in Tropical Diseases ([TDR](#)) in recent years. In addition, BMZ supports research activities within health related capacity building measures, for example research on infectious diseases with a focus on HIV/AIDS in German-African and German-Asian hospital partnerships as part of the ESTHER network.

Deutsche Gesellschaft für Internationale Zusammenarbeit ([GIZ](#)): The development policy mandate of GIZ is implemented via national and international organisations. The primary focus in the health sector is on the supraregional project "Strengthening the German contribution to the global AIDS response". GIZ is interested in mainstreaming the response to AIDS measures and the development of innovative approaches in the various priority areas of German development cooperation, including:

- HIV prevention programmes for specific groups
- AIDS workplace programmes in the private and public sector
- Advisory services to institutions, decision-makers and cooperation partners
- Technical support in the field of global financing.

Major international partners supported by or working with GIZ include the Global Fund to Fight AIDS, Tuberculosis and Malaria ([GFATM](#)), International Labour Organisation ([ILO](#)), World Health Organisation ([WHO](#)),

World Bank, UNAIDS, and International Parenthood Federation ([IPPF](#)). GIZ implements programmes that follow a sector-specific HIV approach in more than 15 countries, among them in Africa – Botswana, Chad, Guinea, Lesotho, Madagascar, Mozambique, Namibia, South Africa and Uganda.

Programmes

The majority of the basic, preclinical and clinical research projects funding for poverty related diseases is provided via the Federal Ministry of Education and Research ([BMBF](#)). On average BMBF's project funding for HIV/AIDS is € 5-6 M annually of which about € 500,000 are spent on research directly relevant to developing countries. For malaria this figure is approximately € 6.5 M and € 500,000 respectively and for tuberculosis this is about € 4 M and € 400,000.

As well as supporting calls for projects and grants, from 2011 the Ministry has pledged to support product development partnerships (PDPs) in order to specifically promote the development of cost-effective prevention methods, diagnostic procedures and drugs. A new PDP funding measure for the period 2011-2014 will provide financing of up to € 20 M.

In addition, BMBF plans to expand funding and options for research in neglected and poverty related diseases by way of the establishment of a German Centre for Infection Research based at the [Helmholtz Centre for Infection Research](#) in Brunswick.

The German Research Foundation ([DFG](#)) provided approximately € 6.1 M in research funding for the main three poverty-related diseases under the 6th and 7th Research Framework Programmes. DFG further supports research at the University of Heidelberg and University of Würzburg which is directly relevant to neglected and poverty-related diseases.

Prior to the PDP funding of BMBF, the Federal Ministry for Economic Cooperation and Development ([BMZ](#)) is used to be a key supporter for product development and has previously supported product development partnerships (PDPs) including Drugs for Neglected Diseases initiative ([DNDi](#)) and the International Partnership for Microbicides ([IPM](#)).

The Bernhard Nocht Institute for Tropical Medicine ([BNI](#)) receives funding from the Funded by Federal Ministry of Health ([BMG](#)) equivalent to € 1.7 M on malaria research, around € 700,000 on tuberculosis research and € 150,000 on HIV/AIDS projects.

The Federal Ministry of Economics and Technology ([BMWi](#)) provides about € 300,000 per year (as of 2009) of project funding for the development of malaria vaccines.

Research performers

1. State institutes

The Federal Ministry of Education and Research ([BMBF](#)) supports the following relevant research institutions (non-university – public funding):

- The Helmholtz Association of German Research Centres ([HGF](#))
- The Gottfried Wilhelm Leibniz Scientific Association ([WGL](#)).

The Federal Ministry of Health ([BMG](#)) has under its technical and administrative supervision:

- The [Robert Koch Institute](#) is the central federal institution responsible for disease control and prevention
- The [Paul-Ehrlich Institute](#) is the central federal institutions for vaccines and biologicals
- The Federal Centre for Health Education ([BZgA](#)).

The [Max Planck Society](#) contributes significant amounts of funding (about € 1.3 M in 2009) to the fight against tuberculosis via its Institute for Infection Biology (MPIIB) in Berlin.

2. Research on neglected and poverty-related diseases is carried out at a relatively small number of institutions in Germany with the exception of HIV/AIDS (on account of its relevance to the national health system):

- Tuberculosis
 - [Borstel Research Centre](#)
- Malaria
 - The [University of Tuebingen, Department of Parasitology](#) is in direct collaboration with the Medical Research Unit, Albert Schweitzer Hospital Lambaréné in Gabon to further research and scientific output on infectious diseases and especially Malaria.
 - Bernhard Nocht Institute for Tropical Medicine in Hamburg
- Neglected Diseases
 - [Centre for tropical medicine and international health at the University of Heidelberg](#)
 - [LMU Munich](#)
 - [University of Rostock](#) (tropical medicine)
 - [Charité – Universitätsmedizin Berlin](#) (tropical medicine)
 - [University of Greifswald](#)
 - [University of Bielefeld](#) (public health aspects).

The German Research Foundation has previously supported basic research in the field of helminths (worms & flukes) via the German University Clinic of Bonn, Universitaetsklinikum Bonn. In order to bridge the research gap BMBF is building up a total of six German Centres for Health Research including the German Centre for Infection

Research (DZI), which will have a focus on tropical infectious diseases.

3. Independent organisations

European Research and Project Office GMBH ([EURICE](#)) provides support services for the planning, initiation, and implementation of large international collaborative projects and has been participating in the EU Framework Programmes from the 4th Framework onwards. The bureau also supports research consortia with dissemination, networking, training and other capacity building activities.

Networks and capacity building initiatives

- The [Volkswagen Foundation](#) (VS) is an independent, non-profit organisation and has been funding research projects in all disciplines. It is currently leading an initiative “Knowledge for Tomorrow – Cooperative Research Projects in Sub-Saharan Africa” with the aim of fostering closer interaction with African researchers and institutions as well as building capacity and sustainable support for researchers in sub-Saharan Africa. Funding for research projects; workshops, symposia, infrastructure updates; conferences and training will contribute to the development and extension of academic networks in Africa and improve the North-South research and technology exchange. Although the thematic focus changes by call, the [2010 call](#) focused on communicable diseases and primarily neglected tropical diseases (NTDs). Ten fellowships were awarded to young African scientists to conduct research on neglected diseases, amounting to € 1.34 M
- The VS also supports the European Foundation Initiative for African Research into Neglected Tropical Diseases ([EFINTD](#)) which provides postdoctoral fellowship programs for researchers from sub-Saharan Africa. This project is jointly run and funded by four other European foundations

and has strong emphasis on north-south and south-south cooperation as well as networking

- BMBF is currently exploring the possibility of establishing Health Research Networks in sub-Saharan Africa in the near future.

Selected research activities and themes in the scope of EDCTP-II

Ensemble pour une Solidarité Thérapeutique Hospitalière En Réseau ([ESTHER](#))

The ESTHER network was launched in 2002 by France, Spain, Italy and Luxembourg with the aim to help partner organisations and hospitals in developing countries to optimise the HIV treatment, care and prevention services. The Federal Ministry for Economic Cooperation and Development (BMZ) joined in 2007 with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) coordinating the German contribution to the initiative.

The following efforts are supported by the German contribution to ESTHER:

- Producing expert reports, providing advisory services and technical backing
- Training in selected partner countries and in Germany
- Providing grants to organisations in partner countries
- Conducting joint research activities with partners (joint application and implementation).

The project is currently promoting a hospital twinning arrangement between the HIV Centre of the University of Frankfurt am Main and the Karabong Clinic of the Mafeteng District Hospital in Lesotho. During the two-year twinning the hospitals engage in experience sharing in terms of quality management, research and training, as well as technical networking with other GIZ cooperation partners.

Kreditanstalt für Wiederaufbau ([KfW](#)) and
“Prevention of HIV-AIDS in Central Africa”
(PPSAC)

The Kreditanstalt für Wiederaufbau (KfW) Bank group is the promotional bank of the Federal Republic and the federal states. They have recently awarded Organisation of Coordination for the fight against Endemic Diseases in Central Africa (OCEAC) € 23 M in support of the sub-regional programme “[Prevention of HIV-AIDS in Central Africa](#)” (PPSAC) aiming to reduce the spread of HIV and the social stigma surrounding the disease. The [implementation of the programme](#) is supported by the Tropical Public Health Institute (Swiss TPH) and OCEAC are coordinating the programme in Cameroon, Chad, Central African Republic, Congo, Gabon and Equatorial Guinea.

Country collaborations on EDCTP grants

Germany

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Austria	4	Benin	2
Belgium	4	Botswana	1
Denmark	2	Burkina Faso	4
France	13	Cameroon	5
Greece		Congo, Republic of	1
Ireland		Cote d'Ivoire	1
Italy	2	Ethiopia	3
Luxembourg		Gabon	12
Netherlands	15	The Gambia	4
Norway	1	Ghana	3
Portugal		Guinea	1
Spain	7	Guinea-Bissau	
Sweden	6	Kenya	8
Switzerland	6	Liberia	
United Kingdom	20	Madagascar	
		Malawi	2
		Mali	3
		Mozambique	10
		Namibia	1
		Nigeria	2
		Rwanda	1
		Senegal	4
		South Africa	15
		Sudan	
		Tanzania	19
		Uganda	8
		Zambia	7
		Zimbabwe	3
Total (Europe collaborations)	80	Total (Africa collaborations)	120
Non EDCTP member state collaboration			
Australia			
Canada	2		
Finland			
Slovakia			
United States	5		
Egypt			
Total (all collaborations)			200

Germany - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2010.41302.0010	Capacity Building	Network of Southern African Research Ethics Committee (REC) Chairpersons and the development of a review textbook for African REC members. (SAREN-Southern African Research Ethics Network)
TA.2005.40205.002	Capacity Building	MSc in Public Health
	HIV/TB/ Capacity Building	The effect of HIV co-infection on the immune response to Mycobacterium tuberculosis in the lung
JP.2008.10800.004	Malaria	Implementation and standardisation of in vitro <i>Plasmodium falciparum</i> culture for resistance phenotyping and immune-mediated growth inhibition testing
TA.2010.40200.0016	HIV	Pre-clinical Evaluation of Dendritic cell targeted consensus B, C, CRFO ₂ _AG and MOSAIC HIV gag protein vaccines in PBMC from chronically infected Patients in Central Africa
TA.2005.40203.006	Malaria	Identification of <i>Plasmodium falciparum</i> parasite virulence markers for the evaluation of the impact of malaria control intervention according to the local parasite populations
CB.2007.41700.006	Capacity Building	Establishment of the Central Africa Network on Tuberculosis, HIV/AIDS and Malaria for the conduct of clinical trials (CAN-TAM)
CT.2005.32030.001	TB / HIV	Optimisation of tuberculosis and HIV co-treatment in Africa: Pharmacokinetic and pharmacogenetic aspects on drug-drug interactions between rifampicin and efavirenz
CT.2006.33020.006	HIV	Improving the balance between efficacy and development of resistance in women receiving single dose nevirapine (Viramune®, NVP) for the prevention of mother-to-child transmission in Tanzania and Zambia (VITA studies)
CT.2006.33111.007	HIV	HIV vaccine trial capacity building in Tanzania and Mozambique by continued exploration of optimal DNA priming and MVA boosting strategies
IP.2007.33112.001	Capacity Building /HIV	HIV vaccine trial capacity building in Tanzania and Mozambique by continued exploration of optimal DNA and MVA boosting strategies; TaMoVac II
JC.2010.10300.009	Malaria	An evaluation of the impact of malaria clinical trials on the delivery of health care, particularly for women and children, in sub-Saharan Africa
NW.2005.10400.002	Networking	Ifakara_Lambarene_Manhiça Partnership
IP.2007.32011.0013	TB	Evaluation of a novel TB drug (SQ109) to shorten and simplify TB treatment
IP.2007.33011.004	HIV	A multicentre phase III trial of second-line antiretroviral treatment in African adults
IP.2009.33011.007	TB / HIV	Prevention of early mortality by presumptive tuberculosis treatment in HIV infected patients initiating antiretroviral therapy
MS.2010.10800.001	HIV	Fozivudine in Africa trials initiative (FATI) – a stepwise drug development programme for an improved AZT treatment A cooperation with SME's from DCs and built on an initiative of the Global UNIDO Project "Strengthening the local production of essential generic drugs in DCs"
CT.2004.31070.001	Malaria	Artesunate for severe malaria in African children

Germany - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
IP.2008.31060.003	Malaria	Development of Fosmidomycin and Clindamycin, in a Fixed Dose Combination, for the Treatment of Acute Uncomplicated <i>Plasmodium falciparum</i> Malaria
IP.2008.31100.001	Malaria	Integrating capacity building and networking in the design and conduct of phase I and II clinical trials of viral vectored candidate malaria vaccines in East and West African children and infants (Vectored Malaria Vaccines)
IP.2009.32040.007	TB	Evaluation of new and emerging diagnostics for childhood tuberculosis in high burden countries (TB CHILD)
CB.2007.41700.001	Capacity Building	The East African Clinical Trials Partnership (EACTP): A capacity building network of excellence and training for the conduct of clinical trials in Africa
CT.2004.32011.001	TB	Rapid Evaluation of Moxifloxacin in the treatment of sputum smear positive tuberculosis
CT.2006.33111.001	HIV	African-European HIV Vaccine Development Network
IP.2007.31060.002	Malaria	An integrated approach to clinical trials, capacity building and networking in West Africa: treatment in pregnancy (IPTp) in the context of insecticide treated nets
IP.2007.32011.0011	TB	Rapid Evaluation of Moxifloxacin in Tuberculosis - REMox TB
IP.2009.32040.0011	TB	The evaluation of Mycobacterium tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic biomarkers for active TB infection
MS.2010.10800.002	TB	Collaboration and integration of Tuberculosis Vaccine Trials in Europe and Africa (TBTEA)
CB.2005.41300.004		Training and Resources in Research Ethics Evaluation for Africa Training and Resources in Research Ethics Evaluation for Africa.
CB.2007.41700.009	Capacity Building	TESA - Trials of Excellence in Southern Africa
IP.2009.32040.009	TB	Evaluation of multiple novel and emerging technologies for TB diagnosis, in smear-negative and HIV-infected persons, in high burden countries (the TB-NEAT study)
IP.2007.31080.002	Malaria	Evaluation of alternative antimalarial drugs to sulfadoxine-pyrimethamine for intermittent preventive treatment in pregnancy (IPTp) in the context of insecticide treated nets.
NW.2005.10403.004	Networking	Preparatory Consortium to initiate networking in Europe and Sub-Saharan Africa for the establishment of a joint MSc in Clinical Research
CT.2004.31060.001	Malaria	Evaluation of 4 artemisinin-based combinations for treating uncomplicated malaria in African children

8. Greece

Historical trends in funding

No information is available on funding for Neglected Infectious Diseases from the G-Finder website.

Research commissioners and partners

Based on direct reporting to EDCTP, the General Secretariat for Research and Technology is the principal research commissioner and works in partnership with a number of state institutes.

National strategies

1. Research and Innovation

The Ministry of Education, Lifelong Learning and Religion funds activities through the General Secretariat for Science and Technology which is concerned with scientific research and innovation. The [National Strategic Reference Framework 2007 - 2013](#) (available in Greek only) is the reference document for the programming of EU Funds at national level in the field of research and technology. Amongst the strategic priorities for health and biomedicine, diagnostic and therapeutic methods are identified.

2 Development Cooperation

The Hellenic Ministry of Foreign Affairs implements its policies in the sphere of development assistance and humanitarian aid through Hellenic Aid. A new strategy for Hellenic Aid for the period up to 2015 was expected to be published in early 2011 but is not yet available.

Programmes

1. Research and Innovation

The General Secretariat for Science and Technology launches calls for research and administers funding directly to a number of state institutes.

2. Programmes related to research for development/development cooperation

In principle, Greece has committed to allocate 0.17% of the Gross National Income (GNI) to Official Development Assistance (ODA) to developing countries although this is currently under review. Between 2001 and 2010, Egypt and Ethiopia were focal partners in Africa. Neither health nor research, are identified as explicit priorities, although strategies seek to support the MDGs.

Research performers

1. State Institutes

A number of state institutes have been identified which are broadly of relevance to research in infectious diseases and the proposed scope of EDCTP-II.

The Foundation for Research and Technology ([FORTH](#)) is located in Heraklion, Crete and incorporates a number of institutions including the Institute of Molecular Biology and Biotechnology ([IMBB](#)) and Institute for Biomedical Research. The IMBB includes a unit on pest disease control which focuses on the anopheles mosquito.

The [Hellenic Pasteur Institute](#) has been classified as a non-profit research institute under the supervision of the Greek Secretariat for Research and Technology since 1975. Key activities of relevance to EDCTP-II potentially include work in developing new diagnostics for [Leishmaniasis](#) and the development of new vaccines, such as those against hepatitis C and leishmaniasis.

ABSRC Fleming Institute of Immunology: Although focusing on basic research, the Immunology department has previously supported research in HIV. The Molecular Virology Unit does not appear to be active at the present.

2. Universities with major activities in the field of international health

- The [University of Crete Medical School](#) includes a Unit of Tropical Medicine
- The University of Thessaloniki Medical School.

3. Independent organisations which perform research

The [Hellenic Association of Pharmaceutical Companies](#) which is affiliated with EFPIA lists a number of pharmaceutical companies active in clinical research in Greece.

Selected research activities and themes in the scope of EDCTP-II

The African Vector Control: New Tools ([AvecNet](#)) is an FP-7 funded (2010 Africa Call) collaborative project between African and European Researchers to develop and evaluate new tools for malaria control in Africa. The project started in February 2011 and involves 15 partners, 8 in Europe (including the University of Crete) and 7 in Africa.

Greece currently has no collaborations within EDCTP projects.

9. Ireland

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The total value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was ~€ 30,666,636 (\$ 42,592,551). Non-disease specific support (core support to TDR) had a value of ~€ 2,287,994 (\$ 3,177,770).

Irish research in the field of HIV/AIDS had a value of ~€ 14,571,678 (\$ 20,238,443) to the International AIDS Vaccine Initiative ([IAVI](#)) and International Partnership for Microbicides ([IPM](#)). Funding for malaria was ~€ 9,592,142 (\$ 13,322,420) from Irish Aid to European Vaccine Initiative ([EVI](#)) and to Medicines for Malaria Venture ([MMV](#)). Support to TB was ~€ 5,782,801 (\$ 8,031,668) principally to [Global TB Alliance](#).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€10,624,701 (\$ 14,756,529) for HIV and malaria vaccines and ~€ 7,756,304 (\$ 10,772,645) for microbicides.

Research commissioners and partners

The Ministry of Health funds research via the Health Research Board, although this is less relevant for the EDCTP remit. Irish Aid supports research for development and funds a number of PDPs that are currently active in the scope of EDCTP.

National strategies

1. Research and Innovation

In March 2012 the Irish Government launched its [Research Prioritisation Plan](#). This will be

implemented through the Irish Research Council. As part of the prioritisation process, the following four criteria were addressed:

- The priority area is associated with a large global market or markets in which Irish based enterprises already compete or can realistically compete
- Publicly performed R&D in Ireland is required to exploit the priority area and will complement private sector research and innovation in Ireland
- Ireland has built or is building (objectively measured) strengths in research disciplines relevant to the priority area
- The priority area represents an appropriate approach to a recognised national challenge and/or a global challenge to which Ireland should respond.

In addition to health and independent living, therapeutics, medical devices and diagnostics are among the 14 key areas identified.

The Health Research Board currently has an [HRB Strategic Plan for 2010-2014](#) which will guide funding from the Ministry of Health. Four major goals are identified:

- Driving the development of excellent clinical research, including applied biomedical research, within a coherent health research system
- Building capacity to conduct high-quality population health sciences and health services research
- Working with key partners to develop and manage high-quality national health information systems
- Generating and synthesising evidence, and promoting the application of knowledge to support decision-making by policy makers and relevant practitioners.

2. Development Cooperation

The Department of Foreign Affairs directs the activities of Irish Aid which is the division responsible for administering Ireland's development cooperation. The key principles of the Irish Aid strategy are:

- Focus on poverty reduction
- Geographical focus on sub-Saharan Africa
- Providing untied aid
- Close cooperation with bilateral, multilateral and civil society partners
- Coherence and donor coordination
- Effectiveness and accountability.

A review of the previous (2006) White Paper on Irish Aid was announced in June 2011. The National Strategy on Global Health Partnerships is currently under review but is expected to be developed by mid-2012. The previous [Irish Aid Global Health Partnerships Strategy](#) was adopted for the period 2006-2011. A programme for Strategic Cooperation between Irish Aid and Higher Education and Research Institutes was also established for the period 2006-2011.

Programmes

1. Research and Innovation

The Irish Research Council was established in March 2012 and has responsibility for administering research funding across a wide range of sectors to the total value of € 500 M annually.

Funding is available via the Health Research Board in a number of areas including projects and capacity building for research.

2. Development Cooperation

Irish Aid has previously funded a number of PDPs under funding for Global Health Partnerships between 2006 and 2011. All PDP funding comes from the Health and HIV

Budget line and is managed through funding agreements with the individual PDPs which are currently the European Vaccine Initiative, Global Alliance for TB Drug Development, International AIDS Vaccine Initiative, International Partnership for Microbicides and the Medicines for Malaria Venture.

Strategic Cooperation between Irish Aid and Higher Education and Research Institutes: Following the previous white paper, a three-phase [programme](#) to strengthen cooperation between research institutes in Ireland and developing countries was launched in 2006 with a budget of € 12.5 M. This is administered through the Higher Education Authority (HEA). It includes the following objectives:

- To facilitate the establishment of collaborative partnerships within and between HEIs and research institutes in Ireland and in countries benefiting from Irish Aid support
- To support capacity building in HEIs and research institutions in key poverty related thematic areas in Ireland and countries benefiting from Irish Aid support.

This programme supports both project and networking grants. The third phase of funding was announced in May 2012 to the total value of € 4.8 M.

Research performers

Universities with major activities in the field of international health

- [National University of Ireland at Maynooth](#)
- [National University of Ireland Galway](#)
- [Trinity College Dublin](#)

Independent Organisations

- [Royal College of Surgeons](#)

Networks and capacity building initiatives

The [Combat Diseases of Poverty Consortium](#)

is based at the National University of Ireland at Maynooth with partners including: Concern; Trócaire; Self Help Africa; Africa Alive; Trinity College Dublin; Higher Education Authority; Irish Aid; St. James's Hospital, Dublin; The Martin Ryan Institute, NUI Galway; Kimmage Development Studies Centre; Centre for Global Development Through Education, Mary Immaculate College; MS Training Centre for Development Cooperation; Makerere University, Uganda; Muhimbili University of Health and Allied Sciences; Egerton University, Kenya; Kenya Medical Research Institute; University Of Nairobi; SPW Tanzania; Tropical Diseases Research Centre; Biotrin Healthcare Company; GeneMedix; Tridelta Development Limited and Enfer Group.

Connecting health [Research in Africa and Ireland Consortium](#)

is a network which includes partners from Ireland (based at the Royal College of Surgeons), Lesotho, Malawi, Mozambique, Sierra Leone, Sudan, South Sudan and Uganda.

Selected research activities and themes in the scope of EDCTP-II

NOURISH: Nutrition and Treatment Outcome: Development of a Ugandan – Irish HIV/ Nutrition Research Cluster

The cluster will be led by Trinity College Dublin with Makerere University and the Infectious Diseases Institute at MU, Gulu University and the Joint Clinical Research Centre, University College Dublin and Kings College, London.

PUBAIDS: Public administration systems and their role in the delivery of effective HIV/AIDS policies

This project is based at the University of Limerick and aims to build capacity of Higher Education Institutes to optimise the impact of health system resources and more effectively address the HIV/AIDS epidemic, through strengthening collaborative relationships within the education sector and building human resources in public administration systems.

Country collaborations on EDCTP grants

Ireland

EDCTP European Member States		EDCTP African Partner Countries	
Austria		Benin	
Belgium	1	Botswana	
Denmark		Burkina Faso	
France		Cameroon	
Germany		Congo, Democratic Republic of	
Greece		Congo, Republic of	
Italy	2	Cote d'Ivoire	
Luxembourg		Ethiopia	
Netherlands	3	Gabon	
Norway		The Gambia	
Portugal		Ghana	
Spain	2	Guinea	
Sweden		Guinea-Bissau	
Switzerland	1	Kenya	
United Kingdom	5	Liberia	
		Madagascar	
		Malawi	1
		Mali	
		Mozambique	
		Namibia	
		Nigeria	
		Rwanda	
		Senegal	
		South Africa	4
		Sudan	
		Tanzania	
		Uganda	6
		Zambia	3
		Zimbabwe	1
Total (Europe collaborations)	14	Total (Africa collaborations)	15
Non EDCTP member state collaboration			
Australia			
Canada	1		
Finland			
Slovakia			
United States	1		
Egypt			
Total (all collaborations)			31

Ireland - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
TA.2009.40200.020	Malaria	Comparison of efficacy, safety and pharmacokinetics of intramuscular artemether and intravenous quinine followed by oral artemisinin combination therapy for severe malaria treatment in Uganda and evaluation of pharmacokinetic drug interactions of artemether, quinine, lumefantrine and piperazine with antiretroviral drugs
CB.2010.41302.013	HIV	Strengthening of TASO Institutional Review Board for HIV/AIDS Research in Uganda
NW.2005.10501.004	Networking	Networking of European and sub-Saharan African research and capacity building in pharmacology
CT.2004.32011.003	HIV/TB	Determining the optimal doses of antiretroviral and antituberculous medications when used in combination for the treatment of HIV/TB in coinfecting patients
IP.2007.33011.006	HIV	Expanding the Availability of Fixed Dose Combination Antiretroviral Formulations for First-line Treatment of HIV-infected Children - the Children with HIV in Africa Pharmacokinetics and Acceptability/Adherence of Simple Antiretroviral Regimens CHAPAS-3 Trial
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial

10. Italy

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The total value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was ~€ 12,637,583 (\$ 17,552,199). Non-disease specific support had a value of ~€ 48,000 (\$ 66,667).

Funding from the Italian Ministry of Health and the Ministry of Foreign Affairs for research on HIV/AIDS had a value of ~€ 8,472,596 (\$ 11,767,495) to the Istituto Superiore di Sanità (ISS) and the South African AIDS Vaccine Initiative (SAAVI). Support for malaria was ~€ 697,543 (\$ 968,811) from the Ministry of Education, Higher Education and Science (MIUR) to ISS and Camerino University. Funding to tuberculosis was ~€ 240,651 (\$ 334,237) principally to the National Institute of Infectious Diseases.

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases (TDR) amounted to ~€ 3,972,336 (\$ 5,517,134).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€ 8,174,860 (\$ 11,353,973) for vaccines across all three diseases and ~€ 326,619 (\$ 453,638) for diagnostics.

Research commissioners and partners

The funding landscape in Italy is relatively complex due to the availability of both regional and national funding for activities related to both health research and international cooperation.

ISS, the Istituto Superiore di Sanità receives core funding from the Ministry of Health. Additional funding to Universities is granted from the Ministry of Education, University and Research.

Further information on regional funding will be reviewed in subsequent reports.

National strategies

1. Research and Innovation

The [National Programme for Research 2011–2013](#) covers research in all sectors. Although biomedical research is addressed there is limited reference to infectious diseases.

2. Development Cooperation

The [National Programme for International Cooperation 2011–2013](#) continues to prioritise the following areas for Italian participation:

- Agriculture and food security
- Human development, with particular reference to health and education/training
- Governance and civil society, relative to aid for trade and support for e-government and information and communication technologies (ICT) as a poverty reduction tool
- Support for an endogenous, inclusive and sustainable development of the private sector
- Environment, land use and natural resource management, with special emphasis on water and on mitigation / adaptation to climate change.

Cooperation with sub-Saharan Africa is identified as a key strategic and financial priority in the context of bilateral activities. With regard to financial resources the plan states that sub-Saharan Africa will receive 42% of the grant funds available for bilateral activities during the 2011–2013 period.

Additional funding for ODA is also carried out through the local government and financed by the regions although these tend to be structured as programmes.

Programmes

The [ISS](#) has previously received funding from the Ministry of Health for areas such as AIDS research although currently there is no funding foreseen for future research activities.

Italian Cooperation has a strong emphasis on health and bilateral programmes include on capacity building and health systems strengthening through grants for project-based activities, technical assistance and general budget support. Funding is channelled through national institutions (such as ISS), registered Non-Governmental Organisations and multilateral partners. Funding is also disbursed through multilateral initiatives.

Regions such as Tuscany and the Veneto provide funding for activities and small projects in the area of international cooperation and health. This includes grants for areas such as communications, networking and [health projects](#).

[Fondazione Cariplo](#) is an independent foundation which participates in the European Research Foundation Initiative for Research in Neglected Infectious Diseases. In addition, it supports a project which aims to identify new approaches to vaccine development. In terms of capacity building, Fondazione Cariplo also supports [Project Malawi](#) which facilitates collaboration between Professional organisations in Italy and Malawi in order to train neonatal and paediatric physicians.

[Fondazione CRM](#) is an independent foundation reported as previously funding research activities related to rheumatic fever (G-Finder).

Research performers

The [ISS](#) undertakes a number of relevant research activities including HIV vaccine research.

[Università degli Studi di Camerino](#)

At the regional level, the [Meyer Hospital and Foundation](#) which specialises in paediatrics, has a number of international cooperation activities with centres in sub-Saharan Africa and has received grants from the Region of Tuscany.

The [San Raffaele Foundation](#), which receives support from the Region of Lombardy, amongst others has a [Viral Immunology Programme](#) which is focused on HIV and AIDS and which has a history of international cooperation.

The [Novartis Vaccines Institute for Global Health](#) based in Siena, collaborates with academic institutions and offers training opportunities for early-career scientists. Current institutional collaborations include The Wellcome Trust Sanger Institute, the Swiss Tropical Public Health Institute, the Kenyan Medical Research Institute, Oxford University and the Children's Hospital Oakland Research Institute. In addition to exploratory projects aimed at producing vaccines against *Neisseria meningitidis*, Nontyphoidal *Salmonella* and *Shigella*, the institute also supports technical development to facilitate manufacturing at scale and quality for clinical trials and eventually for commercial production.

Networks and capacity building initiatives

Esther Italy, which participates in the [ESTHER Alliance](#) has worked in the following countries: Burkina Faso, Cameroon, Ethiopia, Guinea Bissau, South Africa, Swaziland, Tanzania, Uganda.

[AISPO](#) – the Associazione Italiana per la Solidarietà tra i Popoli was established by staff

from the San Raffaele Hospital and is recognised by the Ministry of Foreign Affairs. It is currently active globally but a number of projects in Africa (mainly in Mozambique, Uganda and Tanzania) are of relevance to capacity building and research. These include activities in the field of paediatric diagnostics, strengthening of laboratory capacity and renovation of hospital capacity.

Other relevant NGOs implementing the programme of international cooperation include [CUAMM](#) – Medici con l’Africa; [MMI](#) – Medicus Mundi Italiani and others.

Selected research activities and themes in the scope of EDCTP-II

Further information is available from the website for [International Cooperation](#).

- Support to the ‘Chantal Biya’ Centre for Research, Training and AIDS Prevention in Cameroon through partnership with the Istituto Superiore di Sanità
- Programme to support the implementation of the National Malaria Control Plan in Burkina Faso (in conjunction with the Ministry of Health)
- The second phase of a project to mobilise the Ethiopian diaspora to support the training of health professionals in Ethiopia and upgrade of the technological capacity of the University of Addis Ababa and the Black Lion hospital
- A project to support the prevention, diagnosis and treatment of HIV/AIDS in the province of Maputo and Sofala in Mozambique. As well as addressing population health more broadly, this project aims to increase access to diagnosis, monitoring and treatment for patients affected by HIV/AIDS
- Support to the National control plan for HIV/AIDS in Swaziland to be implemented through the technical assistance of the Directorate General of Development Cooperation. This includes upgrade of

infrastructure and technical capacity as well as training of laboratory personnel and establishment of regional reference laboratories. Studies will also be conducted to support the capacity of the National Health System to address the burden of HIV/AIDS

- A project to support the strengthening for diagnosis and treatment of infectious diseases, particularly HIV, TB and malaria in the area of Dodoma and Bagamoyo. This will be carried out in partnership between the Directorate General of Development Cooperation and Ifakara Health Institute
- Support to the strategic health plan and the plan for peace, reconstruction and development in Northern Uganda. Activities of relevance include support to WHO for implementing a PMCT programme and also for the development of reference laboratories to identify MDR-TB.

Country collaborations on EDCTP grants

Italy

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Austria	3	Benin	
Belgium	3	Botswana	
Denmark		Burkina Faso	4
Finland		Cameroon	1
France	2	Congo, Democratic Republic of	
Germany	2	Congo, Republic of	
Ireland	3	Cote d'Ivoire	
Luxembourg		Ethiopia	2
Netherlands	6	Gabon	
Norway	1	The Gambia	
Slovakia	1	Ghana	
Spain	3	Guinea	
Sweden	1	Guinea-Bissau	
Switzerland	4	Kenya	4
United Kingdom	7	Liberia	
		Madagascar	
		Malawi	1
		Mali	
		Mozambique	
		Namibia	
		Nigeria	
		Rwanda	1
		Senegal	1
		South Africa	5
		Sudan	
		Tanzania	4
		Uganda	
		Zambia	3
		Zimbabwe	1
Total (Europe collaborations)	36	Total (Africa collaborations)	27
Non EDCTP member state collaboration			
Australia			
Canada			
United States	2		
Egypt			
Total (all collaborations)	65		

Italy - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2011.41302.0010	Capacity Building	Establishing and strengthening the Institutional Review Board at the School of Health Sciences, College of Health Sciences, Makerere University
TA.2005.40200.0008	Malaria	Understanding the mechanisms underlying the difference in susceptibility to malaria in an area of hyperendemic malaria in Burkina Faso: The potential role of regulatory T cells
TA.2011.40200.0026	HIV/TB	Rifabutin with lopinavir/ritonavir in patients coinfectd with tuberculosis and HIV in Burkina Faso: pilot study of pharmacokinetics for definition the minimum effective dose
CT.2004.33011.001	HIV	Children with HIV in Africa - Pharmacokinetics and Adherence of Simple Antiretroviral Regimens
CT.2005.33070.001	HIV	Preparing for phase III vaginal microbicide trials in Rwanda and Kenya: Preparedness studies, capacity building, and strengthening of medical referral systems
CT.2006.33111.0013	HIV	Capacity development and strengthening in preparation for HIV vaccine trials in Tanzania and Burkina Faso
JP.2009.10800.002	Capacity Building	Integrated training activities and IT infrastructures to improve capacities in eastern African area
CT.2005.32080.002	TB	Prospective epidemiological studies of TB in neonates and adolescents in Karemo Division, Siaya district, Western Kenya, in preparation for future clinical trials
IP.2007.33011.006	HIV	Expanding the Availability of Fixed Dose Combination Antiretroviral Formulations for First-line Treatment of HIV-infected Children - the Children with HIV in Africa Pharmacokinetics and acceptability/Adherence of Simple Antiretroviral Regimens CHAPAS-3 Trial
IP.2008.31000.001	Malaria	Integrating capacity building and networking in the design and conduct of phase I and II clinical trials of viral vectored candidate malaria vaccines in East and West African children and infants (Vectored Malaria Vaccines)
IP.2009.32040.007	TB	Evaluation of new and emerging diagnostics for childhood tuberculosis in high burden countries (TB CHILD)
NW.2005.10501.002	Networking	Identifying the common learning needs of investigators working in poverty-related diseases in African settings, and the materials to address these, notably in the areas of project and data management
CB.2005.41301.001	Capacity Building	Establishing an African Coordinating Office for Ethics
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial

11. Luxembourg

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007-2010. Non-disease specific support had a value of ~€ 4,787,296 (\$ 6,649,022) and was composed of grants to the Special Programme for Research and Training in Tropical Diseases ([WHO/TDR](#)) and to EDCTP.

Research commissioners and partners

The [Ministry for Higher Education and Research](#) defines, coordinates and implements research and development and innovation policy for the public sector. In collaboration with the Ministry of the Economy and Foreign Trade, it manages the Higher Committee for Research and Innovation which promotes entrepreneurship, technology transfer and innovation.

The following public research performers of relevance to EDCTP fall under the coordination of the Ministry:

- [CRP Santé](#)
- [CEPS/INSTEAD](#)
- National Research Fund ([FNR](#))
- Integrated Biobank of Luxembourg ([IBBL](#))
- Virtual Resource Centre for Knowledge about Europe ([CVCE](#))
- [Luxinnovation](#)

Luxembourg's National Research Fund (Fonds National de la Recherche Luxembourg ([FNR](#))) funds public scientific research institutions and researchers and private sector researchers. International scientific collaboration is fostered via FNR's [INTER Programme](#).

Luxembourg's main funding agency for international development is the Luxembourg Agency for Development Cooperation ([LuxDev](#)), a private limited company (98% state-owned and 2% Société nationale des Crédits à l'Investissement). LuxDev focuses its development cooperation with 10 'privileged

partner countries' (as defined by the government and the human development index of the UNDP): Burkina Faso, Mali, Niger, Senegal, Cape Verde, Namibia, Laos, Vietnam, Nicaragua and El Salvador.

LuxDev employs roughly 60 staff members and has 110 projects in 18 countries. LuxDev has African regional offices in Burkina Faso, Cape Verde, and Senegal and also works in Rwanda, Serbia, Kosovo, Montenegro, and Mongolia.

National strategies

1. Research and Innovation

The University of Luxembourg's [priority areas](#) of research are: international finance; secure, reliable and trustworthy information and communication technology (ICT) systems and services; systems biomedicine; European and business law and learning and development in multilingual and multicultural contexts.

2. Development cooperation

Since 2000, Luxembourg is one of the five industrialised nations devoting over 0.7% of gross national product to development cooperation; its aim is to reach 1%. LuxDev and its relationship with the state are governed by a convention which stipulates that the agency shall abide by the political commitments made by the state at the international level, including the Paris Declaration on Aid Effectiveness, the Accra Agenda for Action, the European Consensus on Development and the European Union Code of Conduct on Complementarity and the Division of Labour in Development Policy. Luxembourg's general development cooperation strategy is described in its [2010 annual report](#) (in French).

MDGs

Luxembourg's development cooperation is focused on:

- Health
- Education, including vocational training and job integration
- Integrated local development, including water and sanitation, decentralisation and microfinance.

LuxDev has developed these sectors, as well as the cross-cutting issues of gender equality, the environment and good governance.

Capacity building

[LuxDev](#) seeks to maximise ownership of development by the partner countries, therefore, capacity building is part of its development cooperation projects.

Programmes

1. Programmes related to health, medical or clinical research funded by research councils

International scientific collaboration is fostered via FNR's [INTER Programme](#). The INTER Programme is in operation for the period 2006-2014 and currently has 35 funded projects. The total budget for the period 2011-2013 is € 12 M.

2. Programmes related to research for development and development cooperation

LuxDev's African programmes are governed by multi-year Indicative Cooperation Programmes (ICPs) which define the main areas of cooperation, terms and conditions and budget for activities in the country. In Africa, these are as follows:

- [Burkina Faso](#) (rural development and technical/vocational training)
- [Cape Verde](#) (education and vocational training, health and water/sanitation)
- [Mali](#) (education and capacity building, good governance, health, water/sanitation and rural development)

- [Namibia](#) (HIV/AIDS, education and vocational training, local development and local governance, technical assistance in finance and banking systems and technical assistance in development planning)
- [Niger](#) (rural development and technical and vocational training)
- [Rwanda](#) (HIV/AIDS programme between hospitals in Luxembourg and Rwanda)
- [Senegal](#) (education, vocational training and capacity building, health, and water/sanitation).

Research performers

1. State institutes

- [CRP Santé](#) (basic pre-clinical and clinical research in life sciences)
- Competence Centre – Clinical and Epidemiological Investigations ([CIEC](#))
- Competence Centre – Luxembourg Biomedical Research Resources ([LBR2](#))
- [Department of Immunology](#)
- [Department of Public Health](#)
- [Department of Virology, Allergology and Immunity](#)
- [CEPS/INSTEAD](#) (socio-economic research and social policy analysis)
- Integrated Biobank of Luxembourg ([IBBI](#))
- [Luxinnovation](#) agency for innovation and research cooperates with [Ministry for Higher Education and Research](#) as well as the Ministry of the Economy and Foreign Trade to “promote entrepreneurship, technology transfer and innovation.”

2. Universities with activities in the field of international health

- [University of Luxembourg](#)
- [Luxembourg Centre for Systems Biomedicine](#) (LCSB).

3. Independent organisations

- [Advanced Biological Laboratories \(ABL\)/TherapyEdge INC](#) (specialised in infectious diseases and molecular biology and clinical outcome predictors of HIV, hepatitis and HPV viruses)
- [ProSciens](#) (novel drugs for treatment of cancer, diabetes, tuberculosis and malaria).

Country collaborations on EDCTP grants

Luxembourg

EDCTP European Member States and Associated Countries		EDCTP African Partner Countries	
Austria		Benin	
Belgium	1	Botswana	
Denmark		Burkina Faso	1
France	2	Cameroon	
Germany		Congo, Democratic Republic of	
Greece		Congo, Republic of	
Ireland		Cote d'Ivoire	1
Italy		Ethiopia	
Netherlands		Gabon	
Norway		The Gambia	
Portugal		Ghana	
Spain		Guinea	
Sweden		Guinea-Bissau	
Switzerland	1	Kenya	
United Kingdom		Liberia	
		Madagascar	
		Malawi	
		Mali	
		Mozambique	
		Namibia	
		Nigeria	
		Rwanda	1
		Senegal	
		South Africa	
		Sudan	
		Tanzania	1
		Uganda	
		Zambia	
		Zimbabwe	
Total (Europe collaborations)	4	Total (Africa collaborations)	4
Non EDCTP member state collaboration			
Australia			
Canada			
Finland			
Slovakia			
United States			
Egypt			
Total (all collaborations)			8

Luxembourg - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
MS.2009.10800.004	Malaria	Assessment of the fixed-dose combination of Artesunate Me-floquine (ASMQ) as an alternative antimalarial treatment for children in Africa
IP.2007.33011.002	Malaria	International phase 2b randomised clinical trial to assess two once-daily simplified antiretroviral triple therapies among HIV infected children early treated by a twice daily triple therapy between 6 and 52 weeks of age and in virological success in Africa: the MONOD Project

12. Netherlands

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia, meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The value of funding for HIV/AIDS, TB, malaria and NIDs was ~€ 57,000,864 (\$ 79,167,868). Non-disease specific support was ~€ 22,038,568 (\$ 30,609,123).

Funding from the Netherlands for research on HIV/AIDS had an approximate value of € 24,119,178 (\$ 33,498,859) to the International AIDS Vaccine Initiative (IAVI) and International Partnership for Microbicides (IPM). Dutch support to tuberculosis was ~€ 20,370,239 (\$ 28,291,999) principally to PDPs and research institutes. Funding for malaria was ~€ 10,199,153 (\$ 14,165,490) to the Royal Tropical Institute (KIT), Drugs for Neglected Diseases initiative (DNDi) and Medicines for Malaria Venture (MMV).

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases (WHO/TDR) amounted to ~€ 24,350,863 (\$ 33,820,643).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€ 32,823,056 (\$ 45,587,578) for vaccines, ~€ 2,020,649 (\$ 2,806,457) for diagnostics and ~€ 10,103,977 (\$ 14,033,302) for HIV microbicides.

Research commissioners and partners

The primary research commissioners in the Netherlands are the Ministry of Health, Welfare and Sport (MINVWS). The Ministry in

conjunction with the Netherlands Organisation for Scientific Research (NWO) commissions the Netherlands Organisation for Health Research and Development (ZonMw). ZonMw programmes enable scientific and health care institutions to conduct research or further development of innovations.

Based on the G-Finder information, the Dutch Government through the Ministry of Foreign Affairs (MinBuZA) via the Directorate General of Development Cooperation (DGIS) provides significant financial support to several PDPs and independent organisations including Aeras, the International AIDS Vaccine Initiative (IAVI), Global Alliance for TB Drug Development (TB Alliance), European Vaccine Initiative (EVI), Medicines for Malaria Venture (MMV) and Foundation for Innovative New Diagnostics (FIND). In addition MINBuZA-DGIS supports NWO.

The main funders in the Netherlands active in research in Neglected Infectious Diseases are MINBuza-DGIS, NWO, Turing Foundation, ZonMW and the Netherlands Leprosy Relief.

Key research partner countries in sub-Saharan Africa include: Botswana, Ghana, Ethiopia, Madagascar, Mali, Malawi, Mozambique, Namibia, Rwanda, Tanzania, South Africa and Uganda.

National strategies

1. Research and Innovation and Development Cooperation

Netherlands Organisation for Scientific Research (NWO)

NWO finances, coordinates and monitors scientific research at Dutch universities and institutes through nearly 120 different research programmes and grants. In addition, NWO also manages the Netherlands-African partnership for capacity development and clinical interventions against poverty-related diseases

([NACCAP](#)) which is the national programme directly contributing to EDCTP. The main aim of NACCAP is to sustain long term investments in R&D activities in sub-Saharan Africa by means of supporting EDCTP projects and other capacity building endeavours.

The research strategy implemented by NWO between 2007 and 2010 focused on the following aims:

- Opportunities for foreign researchers
- Consolidating strengths and resources for scientific research
- Science for society – strengthening technological innovations.

One of the aims of the NWO Strategy 2007-2010 was opportunities for foreign researchers whereby NWO set up special funds to attract top international researchers and talent programmes; hence also creating new networks and north-south collaboration.

The NACCAP programme consists of four programmes and multiple related projects which have strengthened networking between research institutions in the Netherlands and the counterparts in Africa. In addition, the programmes have facilitated south-south networking, especially the collaboration between Tanzania, Mali and Ethiopia through the APRIORI programme.

The *Innovation contract 2012 from the topsector: Life Sciences & Health* published in March 2012 by the Regiegroep Life Sciences & Health discusses recent road maps including one addressing neglected and poverty-related diseases in the developing world. The tenth road map entitled *Global health, emerging diseases in emerging markets* addresses the development and delivery of solutions to diseases associated with poverty in the developing world. The activities outlined include research, capacity building and furthering clinical development of

interventions. The publication explicitly mentions EDCTP support to strengthening clinical trials capacity.

Programmes

In conjunction with universities and other institutions NACCAP has formed several consortia and established with four main programmes in the field of research, capacity building and networking.

1. Infectious diseases Network for Treatment and Research in Africa ([INTERACT](#))

The NACCAP funded INTERACT programme consists of 10 projects focusing on establishing and consolidating the infrastructure for conducting clinical chemotherapeutic intervention trials spanning across all three poverty-related diseases. The projects are conducted in Rwanda and Uganda with support from several Dutch universities and non-profit organisations.

2. Malawi-Amsterdam-Liverpool partnership programme (CoMMAL)

This programme consists of 4 projects in the field of capacity building and research through intra-university knowledge exchange. The primary goal of the programme was to establish a Research Support Centre (RSC) at the University of Malawi to assist local researchers in the design and conduct of clinical research; introduce GCP-ICH quality standards; and develop a training programme in research methodology.

3. African Poverty Related Infection Oriented Research Initiative ([APRIORI](#))

The focus of APRIORI is to build capacity and research development in Tanzania through partnerships and collaborations in Mali and Ethiopia. The programme consists of 5 projects include phase I and II clinical trials of malaria vaccines.

4. The ART-A Program - Developing an affordable HIV drug resistance test for Africa
This project consists of 5 projects and ties in directly to the mapping research systems in Tanzania ([COHRED](#)).

Research performers

1. State institutes

The National Institute for Public Health and the Environment ([RIVM](#)) is the official research facility for the Ministry of Health, Welfare and Sport (MINVWS) amongst others. It is the primary public health knowledge and research institute.

2. Universities with activities in the field of international health

There are 13 government-approved research universities that receive basic funding from the Ministry of Health, Welfare and Sport (MINVWS) for research as distributed by NWO.

- [Erasmus University Rotterdam](#)
- [Radboud University Nijmegen](#)
- [Leiden University](#)
- [University of Groningen](#)
- [Delft University of Technology](#)
- [Eindhoven University of Technology](#)
- [Utrecht University](#)
- [Maastricht University](#)
- [University of Twente](#)
- [University of Amsterdam](#)
- [Tilburg University](#)
- [Vrije Universiteit Amsterdam](#)
- [Wageningen University \(and Research Centre\)](#).

3. Independent organisations

- Knowledge for Business ([TNO](#)) is an independent research organisation that has established 30 knowledge centres in conjunction with major universities for

further development of practical healthcare solutions

- The Netherlands Institute for Health Services Research ([NIVEL](#)) is the national institute for health services research. It is an independent not-for-profit foundation that researches the structure and functioning of health care. It receives in part direct funding from MINVWS and Dutch Ministry of Education, Culture and Science ([OCW](#))
- The [Turing Foundation](#) is a charitable institution focusing on four different themes including scientific research in the area of diagnostics and treatment of leprosy
- Netherlands Leprosy Relief ([Lepra Stichting](#)) is a philanthropic organisation that supports research into leprosy control as well as rehabilitation projects in leprosy affected areas around the world
- [PharmAccess Foundation](#) is a not-for-profit organisation supporting quality basic health care including HIV/AIDS treatment and care in Africa. They collaborated with NACCAP on the INTERACT programme
- [KNCV Tuberculosis Foundation](#) is a national and international research organisation that receives funding for its activities via MINVWS and MINBuZA-DGIS amongst others. The organisation focuses on the development and implementation of tuberculosis control strategies. KNCV is involved in multiple EDCTP projects with links to NACCAP
- [IATEC](#) is a mid-sized European Contract Research Organisation specialised in full service projects in early drug development, with a number of offices throughout Europe. IATEC provides Clinical Research Organisation (CRO) services and has provided support to the NACCAP INTERACT projects
- The Royal Tropical Institute ([KIT](#)) in Amsterdam is an independent centre of knowledge and expertise that conducts research and provides educational, consultancy and information services.

Selected research activities and themes in the scope of EDCTP-II

- The Dutch Foreign Ministry ([MINBUZA](#)) via the Directorate General of Development Cooperation (DGIS) and with BMGF has provided financial support to the Sabin Vaccine Institute for the Human Hookworm Vaccine Initiative (HHVI) to develop a vaccine against hookworm. As of January 2012 a phase I clinical trial of Na-GST-1 manufactured by Aeras has begun in Brazil. The intention is for this clinical trial to roll out to other areas affected by hookworm infection as well
- The Turing Foundation supports research in the field of leprosy control and has awarded financial support to universities as well as international institutions to further research in this area. Similarly the Netherlands Leprosy Relief Foundation has provided funding for basic research as well as for furthering development of diagnostics and drugs for leprosy control.

Further information

- [Ministry of Health, Welfare and Sport](#)
- [The Netherlands Organisation for Health Research and Development \(ZonMw\)](#)
- [WOTRO Subsidy Guide](#)
- [The National Institute for Public Health and the Environment \(RIVM\)](#)
- [The Netherlands Institute for Health Services Research \(NIVEL\)](#)
- [Knowledge for Business \(TNO\)](#)
- [NWO Strategy 2007-2010](#)
- [Sabin Vaccine Institute](#)
- [Netherlands Leprosy Relief](#)
- [Infectious diseases Network for Treatment and Research in Africa \(INTERACT\)](#)
- [Malawi-Amsterdam-Liverpool partnership programme](#)
- [African Poverty Related Infection Oriented Research Initiative \(APRIORI\)](#)
- [PharmAccess](#)
- [Royal Tropical Institute \(KIT\)](#)
- [Innovation contract 2012 from the top sector: Life Sciences & Health.](#)

Country collaborations on EDCTP grants

Netherlands

EDCTP European Member States		EDCTP African Partner Countries	
Austria	7	Benin	1
Belgium	14	Botswana	1
Denmark	6	Burkina Faso	3
France	7	Cameroon	
Germany	15	Congo, Democratic Republic of	1
Greece		Congo, Republic of	
Ireland	3	Cote d'Ivoire	
Italy	6	Ethiopia	4
Luxembourg		Gabon	7
Norway	1	The Gambia	3
Portugal		Ghana	1
Spain	10	Guinea	1
Sweden	6	Guinea-Bissau	1
Switzerland	9	Kenya	9
United Kingdom	30	Liberia	
		Madagascar	1
		Malawi	7
		Mali	1
		Mozambique	7
		Namibia	1
		Nigeria	
		Rwanda	3
		Senegal	1
		South Africa	26
		Sudan	
		Tanzania	15
		Uganda	20
		Zambia	12
		Zimbabwe	3
Total (Europe collaborations)	114	Total (Africa collaborations)	129
Non EDCTP member state collaboration			
Australia			
Canada	1		
Finland			
Slovakia			
United States	8		
Egypt			
Total (all collaborations)			252

Netherlands - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
TA.2011.40200.025	Malaria	Impact of schistosoma hematobium infection on immunological and clinical aspects of <i>P. falciparum</i> malaria in children
CT.2006.33020.007	HIV	Impact of HAART during Pregnancy and Breastfeeding on MTCT and Mother's Health: The Kesho Bora Study
JP.2008.10800.004	Malaria	Implementation and standardisation of in vitro <i>Plasmodium falciparum</i> culture for resistance phenotyping and immune-mediated growth inhibition testing
MS.2009.10800.002	Malaria	Capacity and network strengthening measures within the framework of malaria research in Tanzania
TA.2008.40200.016	Malaria	A randomised controlled trial of oral iron therapy for treatment of post-malaria iron deficiency anaemia in Malawian children comparing immediate post-discharge versus delayed treatment on iron uptake and haematological response
TA.2008.40200.022	HIV	Evaluating Antiretroviral Drug Resistance in HIV infected Children in Africa
TA.2010.40200.019	TB/HIV	Short and Long term clinical and immunological outcomes of patients with HIV/TB coinfections on ART
TA.2011.40200.010	TB	Inflammatory determinants of risk of tuberculosis disease
CT.2004.33011.001	HIV	Children with HIV in Africa - Pharmacokinetics and Adherence of Simple Antiretroviral Regimens
CT.2005.33070.002	HIV	Site preparation and capacity strengthening for trials of vaginal microbicides in Tanzania and Uganda
CT.2006.33111.011	HIV	Strengthening of long term clinical and laboratory research capacity, cohort development, and collection of epidemiological and social science baseline data in Uganda and Malawi to prepare for future HIV vaccine trials
IP.2007.32080.001	TB	Conduct of ICH-GCP level phase II TB vaccine trials in high risk populations in Africa
JP.2008.10800.001	Capacity Building /HIV	To develop a clinical trial management and support infrastructure at the College of Medicine, Blantyre, Malawi
NW.2005.10501.001	Networking /TB	A proposal to establish a network of sites, in sub-Saharan Africa, to conduct clinical trials in tuberculosis and to build their capacity to participate in multicentre trials
TA.2005.40203.003	Capacity Building /HIV	Patterns of HIV-1-specific cd8+ t-cell epitope recognition determining plasma viral load trajectory and set point following HIV-1 infection
CT.2005.32090.003	TB	Towards conducting phase III trials of novel TB vaccines in Ugandan infants and adolescents
CT.2005.33070.001	HIV	Preparing for phase III vaginal microbicide trials in Rwanda and Kenya: Preparedness studies, capacity building, and strengthening of medical referral systems
CT.2006.33020.006	HIV	Improving the balance between efficacy and development of resistance in women receiving single dose nevirapine (Viramune®, NVP) for the prevention of mother-to-child transmission in Tanzania and Zambia (VITA studies)
CT.2005.32080.002	TB	Prospective epidemiological studies of TB in neonates and adolescents in Karemo Division, Siaya district, Western Kenya, in preparation for future clinical trials
IP.2007.32011.012	TB	Rapid evaluation of high-dose rifamipicin and other rifamycins in tuberculosis

Netherlands - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
IP.2009.32080.002	TB / HIV	Phase II Double-Blind, Randomised, Placebo-Controlled Study to Evaluate the Safety and Immunogenicity of H1, an adjuvanted TB subunit vaccine in HIV-infected, BCG-vaccinated Adults With CD4+ Lymphocyte Counts Greater Than 350 Cells/mm ³
MS.2010.10800.004	Malaria	The Impact of retreatment with an artemisinin-based combination on malaria incidence and its potential selection of resistant strains
CT.2004.32011.003	HIV / TB	Determining the optimal doses of antiretroviral and antituberculous medications when used in combination for the treatment of HIV/TB in coinfecting patients
CT.2005.32080.003	TB	Capacity building for the conduct of ICH-GCP level TB vaccine trials in high risk populations in Ethiopia and East Africa
IP.2007.32011.013	TB	Evaluation of a novel TB drug (SQ109) to shorten and simplify TB treatment
IP.2009.33011.007	HIV / TB	Prevention of early mortality by presumptive tuberculosis treatment in HIV infected patients initiating antiretroviral therapy
IP.2007.31060.003	Malaria	Special populations and label expansion studies with the fixed dose combinations artemether-lumefantrine, amodiaquine-artesunate, and dihydroartemisinin-piperaquine in Zambia, Malawi and Mozambique
IP.2007.33011.006	HIV	Expanding the Availability of Fixed Dose Combination Antiretroviral Formulations for First-line Treatment of HIV-infected Children - the Children with HIV in Africa Pharmacokinetics and Acceptability/Adherence of Simple Antiretroviral Regimens CHAPAS-3 Trial
IP.2007.33070.001	HIV	Characterisation of novel microbicide safety biomarkers in East and South Africa
NW.2005.10501.002	Networking	Identifying the common learning needs of investigators working in poverty-related diseases in African settings, and the materials to address these, notably in the areas of project and data management
CB.2007.41700.001	Capacity Building / Networking	The East African Clinical Trials Partnership (EACTP): A capacity building network of excellence and training for the conduct of clinical trials in Africa
CT.2004.32011.001	TB	Rapid Evaluation of Moxifloxacin in the treatment of sputum smear positive tuberculosis
CT.2006.33111.001	HIV	African-European HIV Vaccine Development Network
IP.2007.31060.002	Malaria	An integrated approach to clinical trials, capacity building and networking in West Africa: treatment in pregnancy (IPTp) in the context of insecticide treated nets
IP.2007.32011.011	TB	Rapid Evaluation of Moxifloxacin in Tuberculosis - REMox TB
IP.2009.32040.011	TB	The evaluation of Mycobacterium tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic biomarkers for active TB infection
MS.2010.10800.002	TB	Collaboration and integration of Tuberculosis Vaccine Trials in Europe and Africa (TBTEA)
CB.2007.41700.009	Capacity Building	TESA - Trials of Excellence in Southern Africa
IP.2007.31080.001	Malaria	Safe and efficacious artemisinin-based combination treatments for African pregnant women with malaria

13. Norway

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The total value of funding for HIV/AIDS, tuberculosis and malaria was ~€ 28,297,602 (\$ 39,302,225). Non-disease specific support had a total value of ~€ 12,273,011 (\$ 17,045,849).

Norwegian funding for research in the field of HIV/AIDS had an approximate value of ~€ 23,322,326 (\$ 32,392,120). Support to TB was ~€ 4,654,381 (\$ 6,464,419) and for malaria was reported to be ~€ 320,893 (\$ 445,686).

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases (TDR) amounted to ~€ 11,825,611 (\$ 16,424,460).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€ 12,410,997 (\$ 17,237,496) for vaccines (HIV and TB); ~€ 11,441,997 (\$ 15,890,760) for microbicides (HIV) and ~€ 1,081,861 (\$ 1,502,585) for TB diagnostics.

Research commissioners and partners

Norway's [research system](#) is divided into three parts:

- Research policy: Norwegian national assembly, government and ministries
- Research strategy: Research Council, universities and colleges
- Research performers: Higher education, independent institutes, and industrial sector.

There are eight Norwegian universities, six specialised universities and 25 university colleges. [Universities and colleges perform roughly ¼ of Norway's research and development activities.](#) These activities are funded by the institutions, grants from the Research Council of Norway and contracts with industry, public administration and private funds.

[Independent institutes](#) make up roughly 25% of Norway's research and development spending and 60% of research and development activities. This includes around 130 institutions, 60 of which are primarily research-focused institutes. The remainder of research and development activities are performed by public administrative agencies, museums and archives and health institutions.

The main funders of health-related research in Norway are:

The [Ministry of Health and Care Services](#) which divides cooperation into the following areas: [EU & EEA](#); areas [adjacent](#) to Norway; [WHO](#) involvement and [bilateral health cooperation](#) with France and China.

The Norwegian Institute of Public Health (NIPH) operates under the Ministry of Health and Care Services and has five divisions: infectious disease control; environmental medicine; epidemiology; mental health and forensic toxicology and drug abuse research.

NIPH has a [strategy and activity plan](#) for its international collaboration for the period 2011-2013. The institute's main goals are related to:

- Preparation for acute health threats
- Advising and providing services to improve public health
- Developing an overview of the health of the population and factors influencing public health.

Priorities include diarrhoeal and respiratory diseases, meningococcal infections and vaccine-related research and development which are the responsibility of the Division of Infectious Disease Control.

NIPH is participating in roughly [80 international projects](#); an international committee coordinates these activities and is led by the International Director of NIPH.

The [Department of Research](#) operates under the [Ministry of Education and Research](#) and supervises research policy and coordination of research issues, acts as secretariat for the Cabinet Research Committee, has administrative responsibility for the [Research Council of Norway](#), Norwegian Research and Innovation Fund and is responsible for funding basic research through the agency of the Research Council. The Department is also responsible for Norwegian participation in international research collaboration, including EU framework programmes for research.

The [national budget](#) for research and development activities in Norway was NOK 23 billion (~€ 2.7 billion) in 2011. The Research Council's four priority areas for funding in 2012 are:

- Open competitive arenas for basic research and industry research/innovation
- Energy and environmental technology
- Equipment and infrastructure
- Research for tackling climate-related challenges.

The [Ministry of Foreign Affairs](#) operates a grant scheme for cultural cooperation with countries in the South. The Norwegian Agency for Development Cooperation ([NORAD](#)) falls under the Ministry of Foreign Affairs and is responsible for advising aid administration, providing funding for Norway's international development NGOs and evaluating and assuring quality of international development cooperation

activities. Development assistance contributed in 2010 equalled NOK 27.7 billion (~€ 3.6 billion), equivalent of 1.1% of Norway's gross national income. Top three country recipients of this aid were Brazil, Tanzania and Afghanistan. NORAD's thematic areas are:

- Climate change and environment
- Energy
- Macroeconomics and public administration
- Health and AIDS
- Education and research.

NORAD is active in the following African countries:

Country	Amount	
	NOK (M)	Euro (M)
Angola	79.9	10.4
Burundi	117.6	15.3
DR Congo	171.1	22.2
Eritrea	58.2	7.6
Ethiopia	196.8	25.6
Kenya	80.8	10.5
Liberia	138.1	18.0
Madagascar	78.4	10.2
Malawi	391.1	50.8
Mozambique	443.9	57.7
Nigeria	85	11.1
Somalia	191	24.8
South Africa	149.5	19.4
Sudan	705.4	91.7
Tanzania	749.2	97.4
Uganda	431.9	56.1
Zambia	326.7	42.5
Zimbabwe	147.9	19.2

*based on 2011 average OANDA exchange rate NOK to Euro (0.13)

Additional information regarding Norwegian global development aid can be found using [NORAD's statistics database](#).

Norwegian Centre for International Cooperation in Higher Education ([SIU](#)) is Norway's agency for international educational programmes, commissioned by national and international public organisations to administer programmes at all levels of education. It is funded through the Ministry of Education and Research, Ministry of Foreign Affairs, NORAD, Nordic Council of Ministers, Commission of the European Community, and Norwegian Directorate for Education and Training.

National strategies

1. Research and Innovation

[The Fund for Research and Innovation](#) is used by the Research Council to fund centres of excellence, centres for research-based innovation and portions of large-scale programmes. A large portion of the yields of the fund are earmarked to cover Norway's member fees for participating in the EU FP7. The Research Council of Norway has published an [International Strategy 2010-2020](#). The publication [Science and Technology Indicators for Norway](#) is published every two years by the Research Council of Norway, Nordic Institute on Studies in Innovation, Research and Education (NIFU) and Statistics Norway (SSB).

2. Development Cooperation

The [Directorate for Health](#) is working within six strategic areas for the period 2011-2014: public health; primary health care; specialist health care; e-health and IT; health economics and financing and administration.

The Directorate's [global health strategy](#) is in cooperation with WHO and UN and is specifically focused on three health-related MDGs:

- Reduce Child Mortality (reduce by two thirds, between 1990 and 2015, the under-five mortality rate)
- Reduce Maternal Mortality (reduce by three quarters the maternal mortality ratio and achieve universal access to reproductive health)
- Combat HIV/AIDS, malaria and other diseases (have halted by 2015 and begun to reverse the spread of HIV/AIDS; achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it and have halted by 2015 and begun to reverse the incidence of malaria and other major diseases).

Norway has bilateral agreements with five countries to target mothers and children with particular emphasis on India and Pakistan. During 2008-2009, Norway contributed NOK 431 million in voluntary contributions to WHO's development-related activities, including assistance to global health research as outlined in the [Norwegian WHO Strategy 2012-2013](#). The Ministry of Health and Care Services currently has a [National HIV Strategy 2009-2014](#).

Programmes

Research Council of Norway programmes:

- South Africa-Norway Programme for Research Co-operation ([SOUTHAFRICA](#))
- [NORGLOBAL](#)
- Development Paths in the South ([UTISOR](#))
- Global Health and Vaccination Research ([GLOBVAC](#)).

The Department of Biotechnology ([DBT](#)) of the Ministry of Science & Technology supports a human vaccination research partnership with India and the Research Council of Norway.

Research performers

1. State institutes

The Norwegian Institute of Public Health ([NIPH](#)) has outlined global public health priorities for [2011-2013](#): international projects, vaccines and infectious diseases.

2. Universities with activities in the field of international health

University of Bergen Centre for International health ([CIH](#))

University of Oslo/[University Hospital](#) (more than 50% of all biomedical research in Norway is published by researchers affiliated with the hospital).

Norwegian University of Science and Technology ([NTNU](#)) Department of Public Health and General Practice.

Norwegian University of Life Sciences ([UMB](#)), which currently has [NUFU projects](#) in Africa:

- Makerere University, Uganda
- Mekelle University, Ethiopia
- Hawassa University, Ethiopia
- University of KwaZulu-Natal, South Africa
- Eduardo Mondlane University, Mozambique
- Bunda College of Agriculture, University of Malawi
- University of Juba, Sudan
- Sokoine University of Agriculture, Tanzania
- University of Dar es Salaam, Tanzania.

Networks and capacity building initiatives

1. Research and Innovation

The Director's Office of the Norwegian Institute of Public Health is responsible for fostering international research networks and works with NORAD on international collaborations.

The Current Research Information System in Norway ([CRIStin](#)) is a research information system collecting registration and reporting of research activities of hospitals, research institutes and universities.

[Norwegian Forum for Global Health Research](#) (see [database](#) on global health research in Norway)

[Africa Network Norway](#) (network of researchers by topic area)

[Nordic Africa Institute](#)

SIU programmes:

- [Joint international degrees](#)
- [NORAD Master Studies](#) for developing countries
- [NORHED capacity building in higher education and research programme](#)
- [NUFU partner-based academic cooperation programme](#)
- [NUCOOP](#) Norway-Sudan educational institution cooperation
- [Quota scheme](#) for students from developing countries to study in Norway
- [Tanzania Agreement](#) with University of Dar es Salaam (UDSM).

Selected research activities and themes in the scope of EDCTP-II

- [Four-year TB/HIV research grant](#) from NUFU to Stellenbosch University for improve delivery of diagnostic tools.

Country collaborations on EDCTP grants

Norway

EDCTP European Member States		EDCTP African Partner Countries	
Austria	1	Benin	
Belgium	1	Botswana	
Denmark		Burkina Faso	1
France	2	Cameroon	1
Germany	1	Congo, Democratic Republic of	
Greece		Congo, Republic of	
Ireland		Cote d'Ivoire	
Italy	1	Ethiopia	1
Luxembourg		Gabon	
Netherlands	1	The Gambia	
Portugal		Ghana	
Spain		Guinea	
Sweden	2	Guinea-Bissau	
Switzerland	1	Kenya	1
United Kingdom	1	Liberia	
		Madagascar	
		Malawi	3
		Mali	
		Mozambique	
		Namibia	
		Nigeria	
		Rwanda	
		Senegal	
		South Africa	1
		Sudan	
		Tanzania	2
		Uganda	2
		Zambia	1
		Zimbabwe	3
Total (Europe collaborations)	11	Total (Africa collaborations)	16
Non EDCTP member state collaboration			
Australia			
Canada			
Finland			
Slovakia	1		
United States	1		
Egypt			
Total (all collaborations)		29	

Norway - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2005.41300.001	Capacity Building	Proposal for Building National Capacities in Health Research Ethics, Ethical Review and Clinical Trial Monitoring in Zimbabwe
CB.2005.41300.007	Capacity Building	Proposal for Building and Strengthening National Capacities in Ethical Review and Clinical Trial Monitoring in Malawi
CB.2005.41302.0011	Capacity Building	Proposal to Strengthen the National health Sciences Committee and College of Medicine Ethics Committee
CT.2006.33020.004	HIV	A randomised controlled trial comparing the efficacy of infant peri-exposure prophylaxis with lopinavir/ritonavir (lpv/r) versus lamivudine to prevent HIV-1 transmission by breastfeeding (PROMISE-PEP trial)
CB.2007.41700.001	Capacity Building	The East African Clinical Trials Partnership (EACTP): A capacity building network of excellence and training for the conduct of clinical trials in Africa
CB.2005.41301.001	Capacity Building	Establishing an African Coordinating Office for Ethics

14. Portugal

Historical trends in funding

The approximate value of funding found through the G-Finder database was € 93,726 (\$ 130,175) allocated by Calouste Gulbenkian Foundation in 2010 for TB Vaccine Development (to the Tuberculosis Vaccine Initiative [TBVI](#)).

In 2011 funding has been reported to EDCTP by the Portuguese Foundation for Science and Technology ([FCT](#)) together with supplementary information on research activities in the scope of EDCTP.

Research Commissioners and partners

Portuguese research in the field of clinical research in the expected remit of EDCTP-II is funded and conducted mainly by the Foundation for Science and Technology ([FCT](#)) managed by the Ministry of Education and Science.

FCT's mission is to promote the scientific and technological development in Portugal, in particular through different types of financing schemes. The allocation of financing is based on an evaluation of merit established by public calls. The Department of Human Resources Capacity ([DFRH](#)) support fellowships and the Department of Programmes and Projects ([DPP](#)) supports Scientific and Technological Research Projects.

Portugal's research partner countries are principally the Community of Portuguese Language Countries (CPLP): Angola, Brazil, Cape Verde, Guinea Bissau, Mozambique, Sao Tome and Principe and East Timor.

National strategies

1. Research and Innovation

To promote its innovation strategy Portugal has created the Innovation Agency ([AdI](#)), a state-owned agency funded by the Ministry of Education and Science and the Ministry of

the Economy and Employment that promotes innovation and technological development. The strategic objectives of the AdI are:

- Promotion and economic valorisation of R&D activities
- Support and promotion of technology based innovation
- Promotion and support of recruitment of highly qualified human resources by enterprises
- Support of technology transfer activities.

Portugal aims to promote collaboration between universities, scientific institutions and private companies in order to contribute to economic and social development based on innovation; invest in training for support of scientific and technological activities in the public and private sector as well as to reinforce and develop national scientific infrastructures and their participation in the international arena.

FCT has established a collaboration protocol with the National Coordination for HIV/AIDS for funding of HIV/AIDS research.

2. Development Cooperation

Portugal has a particular interest in supporting African CPLP development; aligning and harmonising national strategies with international strategies related to the Millennium Development Goals; strengthening the response capacity of CPLP to globalisation challenges and in particular challenges related to MDGs.

Portugal's development cooperation is guided by the 2005 strategy paper *A strategic vision for Portuguese cooperation*. The strategy includes the following five guiding principles:

- Commitment to the MDGs
- Support to human security, in particular in fragile states or in countries in a post-conflict situation
- Support to education and training;
- Sustainable economic and social development
- Active involvement in international debates.

Programmes

The Portuguese Innovation Agency (AdI) has several funding programmes in place divided by the following areas: consortia for research and development; Master's and PhD placement; networks of competency and scholarships for traineeships in international scientific organisations.

The Portuguese Institute for Development Support ([IPAD](#)) is responsible for co-coordinating Portugal's aid programme. The role of the IPAD includes promoting projects proposed by other public institutions and ensuring relations with and co-financing NGOs. IPAD supported the creation of research centres in Angola, Cape Verde, Guinea Bissau, Mozambique, Sao Tome and Principe and East Timor (CPLP).

Research performers

1. State institutes

Research is responsibility of private companies and also public institutions. The majority of Portuguese scientific research takes place in R&D Units financed and evaluated by FCT such as the Centre for Malaria and other Tropical Diseases ([CMDT](#)) one of the centres of the Institute of Hygiene and Medical Medicine.

CMDT is the only Portuguese Research Centre devoted to tropical diseases and public health, which aims to enhance scientific cooperation with and between the CPLP partners.

2. Universities with major activities in the field of international research

University of Lisbon

- [Malaria Unit, Institute of Molecular Medicine, Faculty of Medicine](#)
- [Faculty of Pharmaceutical Sciences](#)

Nova University of Lisbon

- [Institute of Hygiene and Molecular Medicine, Faculty of Medicine](#)
- [Faculty of Sciences and Technology](#)

University of Coimbra

- [Centre for Neurosciences and Cellular Biology](#)

University of Porto

- [Institute for Science and Technology](#)
- [University of Minho](#)
- [Institute of Scientific Tropical Research](#)
- [Health National Institute Ricardo Jorge](#)
- [ADEIM](#) – Association for Development of Molecular Research and Education

3. Independent Organisations

[Calouste Gulbenkian Foundation](#), a Portuguese private institution working in the fields of science, arts, education and charity has worked through direct actions, subsidies and grants. It promotes international conferences, training, seminars; works with national and international researchers and support publishing; awards study grants for specialisations and doctorates and supports scientific and educational programmes and projects. The foundation has set up and is running several programmes of interest to EDCTP-II:

- [Programme to Reinforce Scientific Capacity \(Mid-career Fellowships\)](#) a cross cutting

programme with impact in education and science. The objective of the programme is to strengthen collaboration between Portuguese university departments and to attract talent and experience to Portuguese Universities

- Calouste Gulbenkian Foundation also has in place several programmes promoting research related to neglected infectious diseases
- [Gulbenkian Programme for Development Aid](#) gives grants for scientific and technical assistance related projects to the CPLP
- Under the scope of [EFINDT](#) (The European Foundations Initiative for African Research into Neglected Tropical Diseases), that counts with the participation of five European Foundations - Cariplo, Gulbenkian, Merieux, Nuffield and Volkswagen, the Gulbenkian supports fellowship programmes in the field of NIDs for African researchers
- The Luso-American Foundation ([FLAD](#)) provides a forum for researchers in the areas of diagnostics, treatment, and prevention of HIV/AIDS, malaria, and tuberculosis working in Lusophone Africa, Portugal is involved in some of the ongoing projects.

Networks and capacity building initiatives

Portugal participates in [CYTED](#), Ibero-American Programme for Science, Technology and Development. CYTED network is funding projects in the field of malaria and tuberculosis and has health research as one of the research thematic areas.

The Faculty of Medicine, University of Porto and the Centre for Medical Education lead the [NAME](#) network – Network Approach in Medical Education for the pursuit of Quality of Higher Education Institutions and Health systems. NAME aims to consolidate collaboration between Porto Medical University, Luanda and Maputo Universities and Nampula in order to improve capacity building in areas related

to infectious diseases (and also paediatrics and obstetrics).

Selected research activities and themes in the scope of EDCTP-II

- Several projects on malaria epidemiology are being developed by the Institute of Molecular Medicine ([IMM/FM/UL](#)) and by the Faculty of Sciences of Porto University ([FC/UP](#)). A project on BCG vaccination is being developed by the team of researchers of Minho University ([UM](#)) – “BCG vaccination: a tool to identify new correlates of protection and pathology in experimental infection with *Mycobacterium tuberculosis*”
- The Association for Development of Molecular Research and Education (ADEIM) is currently performing research in the field of HIV/AIDS vaccine development – “Development and pre-clinical evaluation of a new HIV-1 vaccine concept”
- The Angolan Health Research Centre ([CISA](#)) is a partnership by the Portuguese (MNE-IPAD) and Angolan governments (MINSA Angolan Health Ministry and Bengo Municipality) with support from the Calouste Gulbenkian Foundation. The project started in 2007 and since then Portugal has been annually supporting the consolidation of the centre. With different sources of financing the project mobilises existing scientific skills in the area of infectious diseases (HIV/AIDS, tuberculosis and malaria) and promotes the creation of networks between Portuguese, Angolan and international researchers. CISA governance explains that the project was developed due to inspiration by EDCTP, INDEPTH, ECDC and the work of other foundations.

Further information

- [Calouste Gulbenkian Foundation – Gulbenkian Science Institute Research](#)
- [Calouste Gulbenkian Foundation main actions and projects](#)
- [FCT database of funded research projects](#)
- [IPAD Strategy for Development and Cooperation](#)
- [Ministry of Education and Science](#)
- [Science and Technology in Portugal \(Overview\)](#)

Portugal currently has no collaborations within EDCTP projects.

15. Spain

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The value of funding for HIV/AIDS, TB, malaria and NIDs was ~€ 35,343,954 (\$ 49,088,825). Non-disease specific support had a value of ~€ 18,209,876 (\$ 25,291,495).

Funding from Spain for research in the field of HIV/AIDS had an approximate value of ~14,928,626 € (\$ 20,734,203). Spanish support to TB was ~€ 923,795 (\$ 1,283,049) (principally to Fundació Privada Clínic per a la Recerca Biomèdica ([FCRB](#))). Funding for malaria was ~€ 12,286,868 (\$ 17,065,095).

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases ([TDR](#)) and Drugs for Neglected Diseases initiative ([DNDi](#)) amounted to ~€ 25,414,540 (\$ 35,297,973).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€ 14,154,711 (\$ 19,659,321) for vaccines; ~€ 3,109,154 (\$ 4,318,270) for microbicides and ~€ 302,343 (\$ 419,922) for diagnostics.

Research commissioners and partners

The main funders of neglected diseases (WHO Type II and II) are the Ministry of International Affairs and Cooperation either directly or through Spanish Agency of Cooperation (55%), followed by the Ministry of Science and Innovation (33%), the Governments of the Autonomous Regions (7%), the Ministry

of Education (2%) and funding from philanthropic sources (3%).

National strategies

1. Research and Innovation

The National Science and Technology Strategy ([ENCYT](#)) provides established principles, strategic objectives (supported by indicators) and research pathways based on these targets. The three basic principles are:

- Putting research, development and innovation in the service of civil society, social welfare and sustainable development, with full and equal inclusion of women
- Making research, development and innovation a tool for improved competitiveness in business
- Recognising and promoting research and development as an essential element for the generation of new knowledge.

The Spanish Law on Science from June 2011 established R&D as a key instrument to fight poverty.

The [National Plan on Research, Innovation and Technology 2008-2011](#)

(Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica 2008-2011. Comisión Interministerial de Ciencia y Tecnología, Fundación Española para la Ciencia y la Tecnología (FECYT), 2007)

ENCYT and the National Plan on Research, Innovation and Technology are based on the Science Law that was endorsed in June 2011. This legislation establishes R&D as the instrument to combat poverty.

The main instrument of Spain's research policy is the *Spanish National Plan for Scientific Research, Development and Technological Innovation (2008-2011)*. In 2009 the budget plan was € 4.7 M. The Spanish national plan

consists of six budget lines (% of the budget for 2009):

- Human resources (9.2%)
- R&D and innovation projects (33.2%)
- Building institutional capacity (0.2%)
- Scientific and technological infrastructure (9.9%)
- Use of knowledge and technology transfer (1.1%)
- Strengthening of the research system (7.6%).

Each of these lines has one or more national programmes with sub-programmes. This also includes four specific sectoral programmes: health (5.0%); biotechnology (0.1%); energy and climate change (1.3%) and ICT and knowledge society (32.3%).

The health programme includes research in public, environmental and occupational health.

2. Development Cooperation

The [Ministry of Foreign Affairs and Cooperation](#) defines the international development cooperation policy. The Secretariat of State for International Cooperation (SECI) - which sits within the Ministry of Foreign Affairs and Cooperation - has the primary responsibility for Spanish aid policy and implementation. SECI also houses the Spanish Agency for International Development Cooperation ([AECID](#)). This agency is currently undergoing reform aiming at increasing aid delivery through bilateral measures. In 2009, the Spanish Council of Ministers adopted the *Third Master Plan of Spanish Development Cooperation for 2009-2012* which aims at focusing on the effectiveness of development cooperation. AECID has recently endorsed a roadmap for R&D on Global Health that defines priorities and criteria in this field.

Science, technology and innovation and health are among the thematic priorities of Spanish development. Spain's priority countries in sub-Saharan Africa include Senegal and CPLP countries such as Cape Verde and Mozambique. Spain is no longer active in Sao Tome and Principe and South Africa⁵.

Programmes

1. Research and Innovation

The State Secretary of Science and Innovation (under the Ministry of Economy and Competitiveness) under the frame of the National Plan on Research, Innovation and Technology 2008-2011, supports health research with calls announced through the Institute of Health Carlos III ([ISCIII](#)). The annual calls include thematic research in health (which includes research in public health, support to scientific infrastructures). Funding programmes include:

- PFIS: pre-doctoral training grants in health research
- FGIN: pre-doctoral training grants in management of health research
- Health research projects
- Researchers' stabilisation programme and intensification of research at national level to support the contribution of high potential research groups to the national health system.

2. Independent research funding organisations

Philanthropic contribution to research in the field of neglected diseases is 3% of the total national funding on health research for development.

The Cellex Foundation currently funds 16 research projects at Catalan centres of excellence. Their portfolio includes significant projects such as those at the Institute of

⁵ www.euroresources.org/guide/donor_profiles/es_spain.html

Photonic Sciences (€ 16 M), August Pi i Sunyer Biomedical Research Institute (€ 10 M) and the Vall d'Hebron Institute of Oncology.

The [Esther Koplowitz Centre](#) is a major sponsor of biomedical research in Europe and has been donated to the Barcelona Clinic Foundation to be managed by the August Pi i Sunyer Biomedical Research Institute (IDIBAPS). This centre will support the development of over 400 researchers at Hospital Clínic de Barcelona, Barcelona University Medical School and the Barcelona Institute of Biomedical Research.

The [BBVA Foundation](#) engages in the promotion of research, advanced training and the transmission of scientific knowledge to society. It focuses on the analysis of emerging issues in five strategic areas:

- Environment
- Biomedicine and health
- Economy and society
- Basic sciences and technology
- Arts and humanities.

Although the research on biomedicine and health area is mainly focused on cancer research the foundation provides support for capacity building initiatives in the field of infectious diseases.

The [La Caixa Foundation](#) promotes medical research in different fields. La Caixa supports research centres to plan their research, and facilitates synergies between different centres.

The IrsiCaixa Foundation is the institute focus on the fight against AIDS and funds the [HIVACAT AIDS Vaccine Research](#) and development programme.

The Foundation for the Research and Prevention of AIDS in Spain ([FIPSE](#)) is a private initiative established by the Ministry of Health with funding support from the principle

companies active in the field of the ARV drug development. FIPSE aims to scale up innovation in AIDS research at each stage by unifying public and private effort to support Spanish research on all aspects of HIV/AIDS (basic, clinical, epidemiological, preventive, economic, and social) and to strengthen the link between research and evaluation with health-care policy. In 2007, FIPSE planned to invest € 2.4 M in research and prevention activities related to HIV/AIDS in Spain.

Research Performers

1. Public Research Organisations

The [Spanish National Research Council](#) (CSIC, Consejo Superior de Investigaciones Científicas) is the largest public institution devoted to research in Spain, and is represented in all the autonomous communities through 126 centres and 145 associated units. It is attached to the Ministry for Science and Innovation, through the Secretary of State of Research. The CSIC plays a central role in science and technology policy, covering all stages from basic research to knowledge transfer to the manufacturing sector. Its activities are focused around eight scientific and technologic areas:

- Humanities and social sciences
- Biology and biomedicine
- Natural resources
- Agrarian sciences
- Physics
- Materials sciences
- Food sciences
- Technology and chemistry.

CSIC runs two centres that focus on biomedical preclinical research in the field of tropical infectious diseases:

- Institute of Parasitology and Biomedicine Lopez Neira, Granada
- Biological Research Centre, Madrid

Since 2012, the ISCIII is the main Public Research Organism (PRO) that finances, manages and carries out biomedical research in Spain. ISCIII is the organisation that manages the Strategic Action in Health Research of the National Plan of Research, Development and Innovation (R&D+ i) 2008-2011. As a research organisation, the functions of ISCIII include research, scientific and technical services, training, evaluation, accreditation, guidance and providing information for making decisions based on scientific evidence by the Spanish General State Administration and of the National Healthcare System. In order to reach all areas of society, ISCIII promotes and coordinates research in biomedicine and health sciences in collaboration with all representatives of the Spanish System of Science and Technology including autonomous communities, Universities, hospitals in the national health system, PROs, PPP and PDPs, non-profit foundations and companies.

For a faster translation of clinical research, the ISCII manages and finances a series of structures:

- Physical: Health Care Research Centres, Institutes and Foundations
- Virtual Thematic Networks for Cooperative Research in Health and Networks of Biomedical Research Centres
- Horizontal research-supporting platforms: CAIBER, Bio banks, and Network of Innovation in Health.

The Centers under ISCIII responsibility which could collaborate closely with EDCTP are:

- [Epidemiology National Centre](#)
- [Microbiology National Centre](#)
- [Tropical Medicine National Centre](#)
- National School of Public Health.

ISCIII has established four new foundations which have their own legal entity and which

address areas of research including cancer, cardiovascular disease and neurodegenerative diseases. Currently, around 1232 staff (civil servants, working staff and temporary staff associated to research projects) are employed by ISCIII.

2. Mixed organisations

The Barcelona Institute for Global Health ([ISGlobal](#)) is a public private partnership with longstanding commitment to global health that builds on the existing research, training and health activities of its founders. The Barcelona Centre for International Health Research ([CRESIB](#)) takes part of the ISGLOBAL consortium and is in charge of the production of scientific knowledge related to main diseases affecting excluded population.

In Spain, CRESIB is the main recipient of the Spanish funding contribution to EDCTP Programme.

3. Spanish research centres of relevance to EDCTP research:

Universities:

- [Autónoma de Madrid: Centro de Biología Molecular y Parasitos Tropicales Severo Ochoa](#)
- [La Laguna \(Tenerife\): Instituto Universitario de Enfermedades Tropicales](#)
- [León: Departamento de Farmacología y Toxicología](#)
- [Salamanca: Centro de Investigación en Enfermedades Tropicales CIETUS](#)
- [Zaragoza: Grupo de genética y Mico bacterias](#)
- [Valencia: Department de Parasitological](#)
- [Barcelona: Institute de Investigation Biomédica August Pi i Sunyer.](#)

Hospitals:

- Hospital Ramón y Cajal de Madrid: Grupo Medicina Tropical y Parasitología Clínica
- Hospital Clinic de Barcelona: Centro de Investigación en Salud Internacional
- Hospital Universitario de Murcia: Unidad Regional de Medicina Tropical
- Hospital Carlos III de Madrid: Unidad de Medicina Tropical
- Hospital de Getafe: Unidad de Medicina Tropical.

Health Research Centres in Africa linked with Spanish Research Institutions:

- Centro de Investigação em Saúde de Manhiça (CISM), Mozambique in partnership with CRESIB.
- Centre of References for Epidemic Control (Guinea Equatorial) in partnership with national Centre of Tropical Medicine (ISCIII).

4. Independent Organisations

The Tres Cantos Development Campus includes the Tres Cantos Open Lab Foundation which has a € 5 M initial investment from GSK but supports collaborations with a number of academic and non-profit organisations to accelerate the discovery of treatments for diseases of the developing world⁶.

Networks and capacity building initiatives

Virtual Thematic Networks for Cooperative Research in Health and Networks of Biomedical Research Centres (CIBER and RETICS) funded by and run under ISCIII.

They are composed by research groups known for their excellence, implementing a scientific programme on different priority scopes and of strategic interest for the national health system.

The **RETICS** are organisational structures formed by several centres and research groups performing multidisciplinary and biomedical research and the aim of the network is to promote collaboration between research groups in the national health system. RETICS are supported by public authorities, private sector and part of at least four autonomous regions. They carry out research projects of general interest.

A number of networks including RETICS are of relevance to EDCTP:

- **RICET** is a collaborative research network on tropical diseases. It seeks to research these diseases traditionally linked to low-income countries, and which have also begun to be present in the Spanish National Health System as a result of increased international mobility. RICET's main objective is to support the SNS in the diagnostics, treatment and control of neglected and tropical diseases, by means of research and training. The network comprises more than twenty research groups from all over Spain. To achieve its goals, RICET is structured in two major areas, namely basic/applied research, clinical research, teaching programme, affiliated clinical groups, databases, biobanks and platforms and programmes that correspond to each disease, group of diseases or clinical research
- La Red de Investigación en SIDA (AidsRN) aims to establish AIDS research networks in Spain. It is composed by more than thirty research groups and has produced more than 200 peer reviewed publications of high impact in the period 2003-2010.

Centres for Biomedical Research Network (CIBER) are autonomous consortia with a greater flexibility and efficiency in the decision making and execution of scientific activity. There are nine CIBERs performing research on specific disease areas.

⁶ www.openlabfoundation.org

- In the scope of EDCTP, the most relevant is the Biomedical Research Consortium of Epidemiology and Public Health ([CIBERESP](#)).
- The Spanish Clinical Research Network ([CAIBER](#)) adopts a biomedical research model based on cooperation that assures the quality and aims to make results of clinical research for patients. This consortium, which is supported by the Spanish Ministry of Science and Innovation via the Instituto de Salud Carlos III (ISCIII), includes representation from 40 public and private hospitals in 16 autonomous communities to coordinate and finance national and international clinical trials.

of the HIV, Mycobacterium and parasitology. Other centres performing relevant research in the scope of EDCTP are mentioned under ‘Spanish research centres of relevance to EDCTP research’ in this country profile.

All these projects are mainly funded by the Spanish Strategic Action in Health Research of the National Plan of Research, Development and Innovation (R&D+I) 2008-2011.

Selected research activities and themes in the scope of EDCTP-II

RICET includes a malaria programme and research in other neglected infectious diseases as well as units working on clinical research and epidemiology. A list of on-going projects can be found online⁷.

[HIVACAT](#) is the Catalan project to develop a vaccine against the HIV virus. The organisation is a joint public and private sector consortium composed of Catalonia’s two longest established AIDS research centres, the IrsiCaixa Institute for AIDS Research, and the AIDS and Infectious Diseases Service at Barcelona’s Hospital Clinic. HIVACAT conducts research into the development of a new HIV vaccine, in conjunction with the international pharmaceutical company ESTEVE, and with the support of the La Caixa Bank Foundation, the Department of Health and the Department of Innovation, Universities and Companies of the autonomous Catalan government plus the Clinic Foundation of Barcelona Hospital.

The National Centre of Microbiology at Instituto Carlos III is conducting comprehensive basic and preclinical research in the field

⁷ www.openlabfoundation.org

Country collaborations on EDCTP grants

Spain

EDCTP European Member States		EDCTP African Partner Countries	
Austria	4	Benin	2
Belgium	6	Botswana	
Denmark	1	Burkina Faso	1
France	7	Cameroon	
Germany	7	Congo, Democratic Republic of	
Greece		Congo, Republic of	
Ireland	2	Cote d'Ivoire	
Italy	3	Ethiopia	1
Luxembourg		Gabon	6
Netherlands	10	The Gambia	2
Norway		Ghana	1
Portugal		Guinea	
Sweden	3	Guinea-Bissau	
Switzerland	6	Kenya	4
United Kingdom	13	Liberia	
		Madagascar	
		Malawi	2
		Mali	
		Mozambique	12
		Namibia	
		Nigeria	1
		Rwanda	1
		Senegal	1
		South Africa	9
		Sudan	
		Tanzania	7
		Uganda	7
		Zambia	4
		Zimbabwe	1
Total (Europe collaborations)	62	Total (Africa collaborations)	62
Non EDCTP member state collaboration			
Australia			
Canada			
Finland			
Slovakia			
United States	3		
Egypt			
Total (all collaborations)		127	

Spain - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2008.41302.019	Capacity Building	Consolidation of a National Ethic Committees network in Mozambique by promoting training collaboration with African and European networks
TA.2005.40203.007	Malaria	Intensive safety monitoring of antimalarial and antiretroviral drugs in pregnancy
CT.2005.33070.003	HIV	Establishing HIV microbicide clinical trial capacity in Mozambique and expanding an existing site in South Africa
JC.2010.10300.005	Monitoring and Evaluation	Evaluating the impact of clinical trials on health services delivered to women and children in 3 countries of sub-Saharan Africa
NW.2005.10401.001	Networking / Malaria	A North-South working group to support the design integrated research proposals for malaria in pregnancy
CT.2006.33111.002	HIV	Building capacity of Infant HIV-1 Vaccine Clinical Trial Centres in Nairobi, Kenya and Fajara, The Gambia
NW.2005.10400.002	Networking	Ifakara_Lambarene_Manhiça Partnership
IP.2007.31060.003	Malaria	Special populations and label expansion studies with the fixed dose combinations artemether-lumefantrine, amodiaquine-artesunate, and dihydroartemisinin-piperaquine in Zambia, Malawi and Mozambique
IP.2007.33011.006	HIV	Expanding the Availability of Fixed Dose Combination Antiretroviral Formulations for First-line Treatment of HIV-infected Children - the Children with HIV in Africa Pharmacokinetics and Acceptability/Adherence of Simple Antiretroviral Regimens CHAPAS-3 Trial
IP.2008.31060.003	Malaria	Development of Fosmidomycin and Clindamycin, in a Fixed Dose Combination, for the Treatment of Acute Uncomplicated <i>Plasmodium falciparum</i> Malaria
NW.2005.10501.002	Networking	Identifying the common learning needs of investigators working in poverty-related diseases in African settings, and the materials to address these, notably in the areas of project and data management
CT.2006.33111.001	HIV	African-European HIV Vaccine Development Network
MS.2010.10800.002	TB	Collaboration and integration of Tuberculosis Vaccine Trials in Europe and Africa (TBTEA)
NW.2005.10401.002	Networking /TB	Workshop on Tuberculosis Immune Reactivation Inflammatory Syndrome (TB IRIS)
IP.2007.31080.002	Malaria	Evaluation of alternative antimalarial drugs to sulfadoxine-pyrimethamine for intermittent preventive treatment in pregnancy (IPTp) in the context of insecticide treated nets
IP.2007.32080.003	TB	A Multicentre phase II Trial of a New TB Vaccine in African Infants
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial
NW.2005.10403.004	Networking /Capacity Building	Preparatory Consortium to initiate networking in Europe and Sub-Saharan Africa for the establishment of a joint MSc in Clinical Research
CT.2004.31060.001	Malaria	Evaluation of 4 artemisinin-based combinations for treating uncomplicated malaria in African children

16. Sweden

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The total value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was ~€ 34,350,993 (\$ 47,709,712). Non-disease specific support had a value of ~€ 28,470,293 (\$ 39,542,074).

Funding from Sweden for research in the field of HIV/AIDS had an approximate value of ~€ 22,371,670 (\$ 31,071,765) to PDPs and academic recipients. Swedish support to TB was ~€ 5,297,362 (\$ 7,357,448). Funding for malaria was at least ~€ 5,294,399 (\$ 7,353,332).

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases (TDR) amounted to ~€ 29,641,853 (\$ 41,169,241).

In terms of distribution across different products related to diagnostics and prevention, funding for vaccines (across all three diseases) was ~€ 10,595,531 (\$ 14,716,016); ~€ 9,166,168 (\$ 12,730,790) for microbicides (HIV) and ~€ 43,413 (\$ 60,296) for TB diagnostics.

Research commissioners and partners

1. Research and Innovation

The [Swedish Research Council](#) is an authority within the Ministry of Education and Research. It is the largest Swedish funding agency for basic research at Swedish universities, colleges and institutes, allocating approximately SEK 4 billion (~ € 440 M) annually. The Research

Council provides support for research within research infrastructures, medicine, humanities and social science, natural and engineering sciences, and also educational sciences and artistic research and development. The Council also advises the government on analysis, strategy and monitoring of research and research financing.

2. Development Cooperation

The [Swedish Ministry of Foreign Affairs](#) supports foreign policy and international cooperation through the Swedish International Development Cooperation Agency ([Sida](#)). Sida administers approximately half of Sweden's budget for development aid; its mission is to reduce poverty in the world by implementing Swedish development policy that will enable poor people to improve their lives.

According to G-Finder, Sida has also supported: African Economics Research Consortia ([AERC](#)); EU Water Initiative Research Area Network ([SPLASH](#)); Lake Victoria Research Initiative ([VicRes](#)); Swedish Institute for Communicable Disease Control ([SMI](#)); International AIDS Vaccine Initiative ([IAVI](#)); International Vaccine Institute ([IVI](#)); European Vaccine Initiative ([EVI](#)); Multilateral Initiative on Malaria ([MIM](#)); Muhimbili University of Health and Allied Sciences ([MUHAS](#)) and International Partnership for Microbicides ([IPM](#)).

National strategies

1. Research and Innovation

The Swedish Research Council has published [The Swedish Research Council's research strategy for the period 2009-2012](#). The strategy includes increasing international collaboration funding to a total of SEK 320 M (~ € 35 M) for the period and a desire to help realise the European Research Area ([ERA](#)) and promote Nordic and global cooperation.

[Strategic research areas](#) were recommended and agreed upon for funding from 2012.

A list of medicine and health [grants for 2011](#) is available in Excel format (in Swedish).

The following steps were identified to realise the Research Council's post-2012 ambitions:

- Increase resources for basic research, infrastructure and European, Nordic and global cooperation and integration
- Support for research environments should continue during the period 2013-2016 with evaluation as a key part of the process.

In total, 43 research environments within 20 strategic research areas will be financed during the period 2010-2014. This investment in strategic areas means an increase in research grants, which will rise to SEK 1,315 M (~ € 145 M) annually from 2012.

3. Development Cooperation

In the context of research for development cooperation, [Sida operations](#) are governed by guidelines that include information on which organisations to cooperate with, how to assist the government, and how to organise its work in partner countries. Through cooperation with other countries Sida contributes to implementing [Sweden's Policy for Global Development \(PGU\)](#).

In 2003, the Swedish Parliament adopted the government bill *Shared Responsibility – Sweden's Policy for Global Development*, with its emphasis on the need for coherent action to achieve equitable and sustainable global development. As part of [Sweden's global development policy](#) a number of thematic priorities of Sweden's development cooperation have been identified:

- Democracy and human rights
- Gender equality and the role of women in development

- Climate and environment.

Programmes

1. Research and Innovation

The Swedish Research Council offers various forms of support in order to promote Swedish research:

- Project support
- Support for academic positions and fellowships
- Support for research tools and infrastructure
- Support for research environments
- Research collaboration and research schools
- International collaboration.

The Swedish Research Council for Research Infrastructure administers Sweden's collaboration with a number of international organisations and institutions for research infrastructure. Collaborations are divided as follows:

- [Nordic](#)
- [European](#)
- [Global](#)
- [Bilateral agreements](#)
- Research infrastructures.

2. Development Cooperation

Annual objectives and an activities budget for development cooperation are set forth in an annual letter of appropriation by the government. In 2011 Sweden's development aid totalled SEK 35.2 billion (~€ 3.8 billion). SEK 17.5 billion (~€ 1.9 billion) is allocated to Sida. The Swedish National Audit Office and the Swedish Agency for Development Evaluation ([SADEV](#)) evaluate Sida's operations annually. Sida completes an annual report regarding costs, revenues and results, as well as a results supplement to exemplify how Swedish development aid has contributed towards reducing poverty. The annual report together with the government agency budget, inform the

government budget and letter of appropriation for the next year.

Sida supports development cooperation in the context of regional cooperation among African countries:

- African Union (AU)
- East African Community (EAC)
- Economic Community of West African States (ECOWAS)
- Southern African Development Community (SADC)
- African Development Bank (AfDB).

Sida also supports projects in a number of relevant sectors in the following countries:

Botswana; Burkina Faso; Burundi; DR Congo; Ethiopia; Kenya; Liberia; Mali; Mozambique; Namibia; Rwanda; Sierra Leone; Somalia; South Africa; Sudan; Tanzania; Uganda; Zambia and Zimbabwe.

Sweden's aid to African countries and regions can be searched via www.openaid.se. Contributions to the 'South Sahara' region for 2011 totalled \$ 40.1 M (~€ 28.8 M); 98% of this went towards health.

Sida's support for research for development is overseen by the [Sida Unit for Research Cooperation \(FORSK\)](#). FORSK has the overall responsibility for the implementation of the Policy and Strategy for Research Cooperation 2010-2014. In addition to supporting organisations and initiatives they also support international training programmes in/with Africa (2012). Sida works in collaboration with Norway and SADC effort to slow HIV/AIDS epidemic.

Research performers

1. State institutes

- Karolinska Institute ([KI](#))
More than 40% of the medical academic

research conducted in Sweden is done within the Karolinska Institute. It has several strategic research programme areas including Epidemiology and Molecular Bioscience - [SciLifeLab](#). [Theme Centres](#) promote transfer of basic research to clinical application. Other relevant centres include the Centre for Infectious Disease Research ([CID](#)), the Centre for Infectious Medicine ([CIM](#)), the Centre for Global Health ([KICGH](#)) and the Swedish Institute for Communicable Disease Control ([SMI](#)). The Karolinska Institute is currently performing research in stem cells, diabetes, neuroscience, cancer, epidemiology and health research. The Strategic Research Programme for Molecular Biosciences (SciLifeLab) is a collaboration between four universities in Stockholm and Uppsala. The Centre combines advanced technical know-how and state-of-the-art equipment with a broad knowledge in translational medicine and molecular bioscience.

2. Universities with activities in the field of international health

- Gothenburg University has a strong [international strategic and partner universities network](#), including six universities in Africa: University of Dar Es Salaam, Tanzania; University of Cape Coast, Ghana; National University of Rwanda; University of KwaZulu-Natal, South Africa; Nelson Mandela Metropolitan University, South Africa and University of Stellenbosch, South Africa. Other relevant centres under the Institute of Biomedicine include the Mucosal Immunobiology and Vaccine Center ([MIVAC](#)) and Vaccine Research Institute ([GUVAX](#))
- Lund University ([LU](#)) has strong [International networks](#) and agreements with [African universities](#), including: Stellenbosch University, South Africa; University of Cape Town, South Africa; Rand Afrikaans

University, South Africa; University of Zimbabwe and University of Nairobi, Kenya

- Linköping University ([LiU](#)) has a number of relevant departments and divisions working in areas related to the scope of EDCTP. The [Faculty of Health Sciences](#) at Linköping University Hospital includes the Department of Clinical and Experimental Medicine ([IKE](#)) with divisions in [Clinical Microbiology](#); Maria Lerm's [M. tuberculosis](#) research group; [Infectious Diseases](#) and [Virology](#). The Department of Medical and Health Sciences ([IMH](#)) include a [Health and Society](#) division involving the [Nordic Network Philosophy of Medicine and Medical Ethics](#); [Forum for Medical Ethics](#) and [Research network for gender and health](#). Although not within the expected scope of EDCTP II, Linköping University also has a Diarrhoeal Disease Research Centre (DDRC)
- [Umeå University](#) has designated 14 strong research environments, including global health and infection biology. The [Umeå University](#) has a global health programme, focused on five areas: Epidemiological transition; life-long perspective; strengthening primary care; gender, social inequality and health; climate change and its effects on health. The Umeå Centre for Microbial Research ([UCMR](#)), is a research environment based on a consortium of researchers with common interests within infection biology that, together with [Umeå University](#) host MIMS, The Laboratory for Molecular Infection Medicine Sweden
- Uppsala University ([UU](#)) was granted SEK 226 M (~ € 24.8 M) from the Swedish Research Council for the period 2010-2014. Strategic research development areas for the university are energy and marine environment although the University also undertakes relevant activities for EDCTP, namely by the [Faculty of Medicine's Departments and Centres](#): the [Department of Public Health and Clinical Medicine](#) and the

[Department of Medical Sciences \(Clinical Microbiology and Infectious Medicine\)](#).

The Swedish Foundation for Strategic Research ([SSF](#)) funded approximately SEK 550 M (~ € 60.5 M) in grants to strategic research centres, framework/group grants and individual researchers in 2010. Mobility and product realisation programmes are also funded. Priority funding areas include: biotechnology, pharmaceutical and medical technology; system, information and communication technologies; materials development and process and product development technology. Within its framework grants in the biosciences, SEK 400 M (~ € 44 M) will go to: design, development and validation of new predictive models and new biomarkers necessary for development of new drugs; parasite resistance trees and crop plants; epigenetic mechanisms in disease and new antimicrobial agents (the role of innate immunity). Funding of strategic research centres is SEK 7-10M (~ € 700,000-€ 1 M) per year for 5-6 years.

Networks and capacity building initiatives

- Sida and Karolinska Institute are partners of the Network for Research and Training in Tropical Diseases in Central America ([NeTropica](#)). NeTropica's mission is to promote collaborative biomedical research among various scientific groups working in Central America. The five priorities of the network are: snake toxin envenomation, infectious diarrheas, blood and arthropod transmitted viral diseases, chagas disease and bacterial and viral zoonosis
- [NordForsk is an organisation working under the Nordic Council of Ministers that provides funding for Nordic research cooperation as well as advise and input on Nordic research policy](#). NordForsk received core funding of NOK 117 M (~€ 15 M) in 2011, in addition to other funding for specific projects

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- Karolinska Institute's [Research Networks](#) include [Public and International Health](#) and [Inflammation and Immunology networks](#). The Public and International Health Research Network (KI-PIH) aims to strengthen research by fostering interdepartmental and interdisciplinary cooperation and exchange of information. KI Inflammation and Immunology (KiIM) aims to bring together researchers in the fields of inflammation and immunology.
 - The South African-Nordic Centre ([SANORD](#)) is a non-profit, membership organisation of institutions from Nordic countries and southern Africa regions partnering to address new local and global challenges related to innovation and development. SANORD research includes HIV/AIDS and capacity building as one of the themes.
 - [Karolinska Institute Innovations AB is specialised in commercialising findings from life science research by fostering collaboration between academia and business.](#)

Selected research activities and themes in the scope of EDCTP-II

- The Swedish Governmental Agency for Innovation Systems ([VINNOVA](#)) funds two [VINN Excellence Centres](#) at Lund University. The [Advanced International Training Programme](#) is funded by Sida and VINNOVA and focuses on how to promote an innovation-led sustainable growth
- The Bio-resources Innovations Network for Eastern Africa Development ([Bio-Innovate](#)) [Program was established in 2010 to finances multi-disciplinary biosciences and](#) product-oriented innovation activities in Eastern African countries of Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda, supported with a SEK 80 M (~€ 8.8 M) grant from Sida
- UMINOVA Innovation's [Biotech Umeå](#) and Biotech Umeå Incubator ([UBI](#)): [Biotech Umeå is a fast-growing cluster of life science companies and academic research groups in Northern Sweden](#)

Country collaborations on EDCTP grants

Sweden

EDCTP European Member States		EDCTP African Partner Countries	
Austria	1	Benin	
Belgium	3	Botswana	
Denmark	3	Burkina Faso	2
France	3	Cameroon	
Germany	6	Congo, Democratic Republic of	
Greece		Congo, Republic of	
Ireland		Cote d'Ivoire	
Italy	1	Ethiopia	4
Luxembourg		Gabon	
Netherlands	6	The Gambia	2
Norway	2	Ghana	1
Portugal		Guinea	1
Spain	3	Guinea-Bissau	1
Switzerland		Kenya	5
United Kingdom	8	Liberia	
		Madagascar	
		Malawi	
		Mali	2
		Mozambique	3
		Namibia	
		Nigeria	
		Rwanda	
		Senegal	1
		South Africa	6
		Sudan	
		Tanzania	8
		Uganda	6
		Zambia	3
		Zimbabwe	2
Total (Europe collaborations)	40	Total (Africa collaborations)	47
Non EDCTP member state collaboration			
Australia			
Canada	1		
Finland			
Slovakia			
United States	3		
Egypt			
Total (all collaborations)			91

Sweden - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
TA.2005.40204.003	Malaria	Host immunogenetic factors involved in the susceptibility to malaria in sympatric ethnic groups (Dogon and Fulani) in Mali
TA.2005.40204.005	TB	Anti tuberculosis-anti retroviral drugs induced Hepatotoxicity and interaction of these drugs at the level of CYP 450 metabolism
CT.2006.33020.001	HIV	Back-up with Combivir (AZT/3TC) or single dose Truvada (FTC/TDF) in order to avoid Non Nucleoside Reverse Transcriptase Inhibitor (NNRTI) resistance after single dose Nevirapine for the prevention of mother-to-child transmission (MTCT)
TA.2007.40200.012	Malaria	Assessment of functionality of antibodies that associate with protection from clinical malaria using the invitro <i>P. falciparum</i> growth inhibition assay
JP.2009.10800.006	TB	Improved diagnostic and prognostic tools to combat tuberculosis in high endemic areas from bench to clinical trials
CT.2005.32030.001	HIV / TB	Optimisation of tuberculosis and HIV co-treatment in Africa: Pharmacokinetic and pharmacogenetic aspects on drug-drug interactions between rifampicin and efavirenz
CT.2005.32090.003	TB	Towards conducting phase III trials of novel TB vaccines in Ugandan infants and adolescents
CT.2006.33111.007	HIV	HIV vaccine trial capacity building in Tanzania and Mozambique by continued exploration of optimal DNA priming and MVA boosting strategies
IP.2007.33112.001	HIV	HIV vaccine trial capacity building in Tanzania and Mozambique by continued exploration of optimal DNA and MVA boosting strategies; TaMoVac II
JP.2009.10800.002	Capacity Building	Integrated training activities and IT infrastructures to improve capacities in eastern African area
CT.2006.33111.002	HIV	Building capacity of Infant HIV-1 Vaccine Clinical Trial Centres in Nairobi, Kenya and Fajara, The Gambia
CT.2006.33020.004	HIV	A randomised controlled trial comparing the efficacy of infant peri-exposure prophylaxis with lopinavir/ritonavir (lpv/r) versus lamivudine to prevent HIV-1 transmission by breastfeeding (PROMISE-PEP trial)
IP.2009.33011.003	HIV	Reduction of early mortality among HIV-infected subjects starting antiretroviral therapy: a randomised trial (The REMSTART trial)
CB.2007.41700.001	Capacity Building	The East African Clinical Trials Partnership (EACTP): A capacity building network of excellence and training for the conduct of clinical trials in Africa
IP.2007.31060.002	Malaria	An integrated approach to clinical trials, capacity building and networking in West Africa: treatment in pregnancy (IPTp) in the context of insecticide treated nets
IP.2009.32040.009	TB	Evaluation of multiple novel and emerging technologies for TB diagnosis, in smear-negative and HIV-infected persons, in high burden countries (the TB-NEAT study)
NW.2005.10401.002	Networking /TB	Workshop on Tuberculosis Immune Reactivation Inflammatory Syndrome (TB IRIS)
IP.2007.32080.003	TB	A Multicentre phase II Trial of a New TB Vaccine in African Infants

17. Switzerland

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The approximate value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was € 43,850,640 (\$ 60,903,668). Non-disease specific support (including support to diagnostic and delivery platforms) had a value of ~€ 13,548,083 (\$ 18,816,783).

Swiss funding from [SNSF](#) for research in the field of HIV/AIDS had a value of ~€ 2,498,302 (\$ 3,469,865). Support to TB was ~€ 4,197,488 (\$ 5,829,845) and funding for malaria was ~€ 5,994,185 (\$ 8,325,257). Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases ([TDR](#)) amounted to ~€ 32,817,209 (\$ 45,579,457).

In terms of distribution across different products related to diagnostics and prevention, funding for diagnostics was ~€ 1,177,689 (\$ 1,635,680); ~€ 882,354 (\$ 1,225,493) for biological control products for malaria and dengue; ~€ 828,455 (\$ 1,150,633) for vaccines (across all three diseases).

Research Commissioners and partners

The main funders were the Swiss State Secretariat for Education and Research (SER), the Swiss National Science Foundation (SNSF), UBS Optimus Foundation, and the Swiss Tropical and Public Health Institute. The Swiss National Science Foundation (SNSF) has a mandate from the Swiss Federal government regarding research and offers a wide range of

funding schemes for researchers working in Switzerland.

SNSF is responsible for carrying out the National Research Programmes (NRP) and the National Centres of Competence in Research (NCCR). National Centres of Competence in Research within SNSF promote long-term research projects in areas of strategic importance for the development of science in Switzerland. NCCRs improve the research structures in Switzerland. The NCCRs are mainly financed through federal funds budgeted by parliament. This is complemented by funds from the institutions and third-party funds. Launched in 2001, the programme presently includes 27 NCCRs. The National Research Programmes (NRPs) generate scientific knowledge aimed at solving Switzerland's most pressing problems. The topics are specified by the Federal Council. National Research Programmes are: problem-oriented; inter- and transdisciplinary; dedicated to achieving a defined, overall goal through co-ordination of individual research projects and groups; focussed on practical research results.

Based on publicly available information key research partners include Tanzania, Uganda, Congo and Cote d'Ivoire.

National strategies

1. Research and innovation

The State Secretariat for Education and Research ([SER](#)) within the Federal Department of Home Affairs is the federal government's specialised agency for national and international matters concerning general and university education, research and space. In the area of science and research the SER finances the Swiss National Science Foundation ([SNSF](#)) and the scientific academies and promotes at least 20 research institutes across Switzerland outside the university sphere.

With the exception of research cooperation in and with developing countries previously supported by the Swiss Agency for Development and Cooperation within the Federal Department of Foreign Affairs in the past the federal research policy was strongly directed towards research cooperation with Europe (European research organisations, EU Framework Programmes for Research and Technological Development). Research cooperation ties were also established with the United States, Canada and Singapore.

The State Secretariat for Education and Research now intends to focus on a new priority. The Federal Council's *Dispatch on the Promotion of Education, Research and Innovation for 2008-2011* mentions China, India, Russia, South Africa (including the Swiss-affiliated research centres of Abidjan in Côte d'Ivoire (CSRS) and Ifakara in Tanzania), Japan, South Korea, Brazil, and Chile as well as eight other non-European countries with whom Switzerland would like to establish broader and deeper bilateral research cooperation ties. Each partnership is led on the Swiss side by a "leading house", i.e. ETH Zurich (China), EPFL (India), University of Geneva (Russia), and University of Basel (South Africa).

In the [*Dispatch on the Promotion of Education, Research and Innovation for 2013-2016*](#) (ERI Dispatch for 2013-2016), the Federal Council has formulated its policy guidelines and measures for the various areas of the ERI system that fall under the constitutional and legislative authority of the Confederation.

The Federal Council considers education, research and innovation to be of strategic importance. The ERI system is essential for societal and social change and economic prosperity in Switzerland. For this reason, greater importance has been given to ERI in each successive federal budget period. The Confederation has allocated roughly 10% of its

total budget to the policy areas education and research. According to the Federal Council's Financial Plan, the ERI system will once again increase at a higher than average rate with respect to other policy areas for the period 2013-2016.

On research and innovation for 2013-2016, the Swiss National Science Foundation (SNSF) and the Commission for Technology and Innovation (CTI) award grant funding on a competitive basis. It is likely that these two agencies will maintain or slightly increase current high levels of grant funding. Emphasis will also be placed on investment in research infrastructures deemed a priority for Switzerland.

3. Development Cooperation

The overarching goal of development cooperation as outlined in the new message on International Cooperation 2013-2016 is the promotion of global sustainable development as a means to reduce poverty and global risks. In particular, Switzerland's International Cooperation aims to prevent crises, conflicts, and disasters and to overcome their negative effects on human populations; to improve access for all to resources and services; to promote sustainable economic growth; support the transition to democratic and market systems, as well as to assist in shaping a more inclusive approach to globalisation that is both environmentally friendly and socially responsible and encourages development.

Based on its legal mandate, through the Swiss Agency for Cooperation and Development (SDC), Switzerland has been promoting research in and with developing countries for over thirty years. Support for research is based on development policy considerations. Official Development Assistance financed research must be in line with the strategic objectives and thematic priorities of Swiss development cooperation.

The main research objective is the production of new knowledge, innovative approaches and practical application of scientific knowledge for solving development, transitional and global problems, for evidence-based policy and thematic political dialogue or via mandates to directly support the policy and program work of SDC and to enhance the quality of Swiss international cooperation.

Apart from commissioned research the Swiss Agency for Development and Cooperation (SDC) makes contributions to international organisations, research networks and partnership programmes as well as contributions in the context of global programmes or priority themes.

Improving reproductive health and the control of major communicable diseases (including HIV/AIDS) constitute two of the five strategic priorities of SDC's Health policy 2003-2010. The SDC has adopted the strategy of internally mainstreaming HIV/AIDS thereby making it a development theme. Switzerland's commitment to the HIV/AIDS epidemic is based on the UNGASS AIDS 2001 and 2006 Declarations of Commitment on HIV/AIDS.

3. Commission on Research Partnership with Developing Countries

- The Commission on Research Partnership with Developing Countries (KFPE) has developed a [New Guide for Transboundary Research Partnerships](#).

Programmes

1. Programmes related to research for development/development cooperation

The State Secretariat for Education and Research (SER) within the Federal Department of Home Affairs is the federal government's specialised agency for national and international matters concerning general and

university education, research and space. In the area of science and research the SER finances the Swiss National Science Foundation (SNSF) and the scientific academies and promotes at least 20 research institutes across Switzerland outside the university sphere.

SNSF is running the following programmes related to research and development:

- [Research partnerships with developing countries](#): This programme is the result of collaboration between the SNSF and the Swiss Agency for Development and Co-operation (SDC). It aims at supporting high-quality research projects concerning problems relevant to developing countries. It will end by 2012
- The [SCOPES](#) programme (Scientific co-operation between Eastern Europe and Switzerland), which is financed by the Swiss National Science Foundation (SNSF) and the Swiss Agency for Development and Co-operation (SDC), promotes scientific co-operation between research groups and institutions in Switzerland and Eastern Europe
- As of 1998, École Polytechnique Fédérale de Lausanne (EPFL) and SDC (Swiss Agency for Development and Cooperation) set up a [scientific cooperation fund](#) enabling to finance research development projects. The projects were to be undertaken in partnership with an institution of the South and guided by a vision of sustainable development fostering technological innovation, preservation of the environment, social equity and economic efficiency. The programme is coming to an end in 2012
- SDC and SNSF have developed a common research programme, the Swiss Programme for Research on Global Issues for Development (www.r4d.ch): The joint SNSF-SDC programme for research on global issues in and with developing and emerging countries supports projects

generating knowledge and innovative solutions in Africa, Asia and Latin America as of 2012.

2. Programmes related to international cooperation in sub-Saharan Africa which is specifically of relevance to health research more generally and clinical research in particular

SNSF is running the following programmes that include funding of projects in sub-Saharan Africa:

- National Research Programmes ([NRPs](#)) to generate scientific knowledge in priority areas of most relevance to pressing issues
- [North-South – Research Partnerships for Mitigating Syndromes of Global Change](#) is one of the National Centres of Competence in Research co-financed by SNSF and SDS. The centre focuses its research on the challenges of global change and sustainable development. The programme network includes 350 researchers, active in over 40 countries. Of central importance is the partnership between participants in the industrialised “North” and in developing and transition countries (“South”). The University of Bern, the host institution, has designated north-south research as one of its main focuses
- [Special Programme University Medicine](#) focuses on building clinical research capacities
- Although Doctoral programmes have previously been funded, they will soon be discontinued
- As part of its clinical research funding tools, SNSF finances projects aiming at reinforcing clinical research. Since 2006, SNSF has funded 8 multicentric cohort studies (includes Swiss HIV Cohort Study (SHCS, P.B. Francioli); clinical trial units: infrastructure costs of Clinical Trial Units (CTU) in 5 University Hospitals and in the Hospital of St-Gallen.

3. Independent/other Organisations

- [TDR](#), the Special Programme for Research and Training in Tropical Diseases, is a global programme of scientific collaboration that helps coordinate, support and influence global efforts to combat a portfolio of major diseases of the poor and disadvantaged. Established in 1975 TDR is based in Switzerland and executed by the World Health Organisation
- Drugs for Neglected Diseases initiative ([DNDi](#)) is a Swiss based collaboration driven by patients’ needs to support non-profit drug research and development (R&D) to develop new treatments for Neglected Diseases
- The [UBS Optimus Foundation](#) support innovative, needs-based approaches and projects to advance the protection, education and health of children in need, including global health research – improving child health and the fight against neglected tropical diseases. The Foundation is currently funding NIDs research projects in South Africa, Tanzania, Uganda and Ethiopia.

Research performers

- There are two academies of sciences that perform health research, namely the [Swiss Academy of Medical Sciences](#) and [Swiss Academy of Sciences](#)
- The National Centres of Competence in Research ([NCCRs](#)) promote long-term research projects on issues of strategic importance for the future of Swiss society
- The Swiss Tropical and Public Health Institute ([Swiss TPH](#)) is a public organisation founded in 1943 that has become a well-established institution for teaching, research and services in the field of International Health Development.

These kinds of research organisations are also extensively funded by the federal government, through the State Secretariat for Education and

Research. The conduct research on specific topics important for the Swiss society and to some extent they are providing services to other scientific institutions. The latter institutions are also autonomous.

Switzerland has 12 universities, 2 federal institutes of technology (Lausanne and Zurich) and 9 universities of applied sciences.

Universities with research in the field of international health:

- [Berner Fachhochschule, BFH \(Bern University of Applied Sciences\)](#)
- [Fachhochschule Nordwestschweiz, FHNW \(University of Applied Sciences and Arts\)](#)
- [Haute école spécialisée de Suisse occidentale, HES-SO, \(University of Applied Sciences Western Switzerland\)](#)
- [Hochschule Luzern, HSLU \(Lucerne University of Applied Sciences and Arts\)](#)
- [Zürcher Fachhochschule \(ZFH\) Zurich University of Applied Sciences \(ZHAW\)](#)
- [Fachhochschule Les Roches-Gruyères, HES-LRG \(LRG University of Applied Sciences\)](#)
- [Kalaidos Fachhochschule \(Kalaidos University of Applied Sciences\)](#)

Institutes:

- [Istituto di Ricerca in Biomedicina in Bellinzona](#)
- [Institut Suisse pour la Recherche sur le Vaccin](#) in Lausanne

Networks and capacity building initiatives

- [ARCEAU](#) – “Alliance for clinical research & clinical epidemiology in the DR Congo Alliance pour la recherche clinique et l'épidémiologie clinique au Congo (République Démocratique du Congo)” aims to strengthen research in Congo. ARCEAU was initiated by the Swiss Tropical and Public Health Institute and two partner institutions in the Democratic Republic of

Congo: the School of Public Health (ESP Kin), Faculty of Medicine, University of Kinshasa, Democratic Republic of Congo (DRC) that focus on malaria, tuberculosis & HIV/AIDS: the Biamba Marie Mutombo Hospital (BMMH), Kinshasa, focusing on other disease areas

- DNDi contributed to the establishment of three regional [disease-specific platforms](#) in Africa and Latin America
- [Sinergia](#) is a platform that enables researchers from all disciplines to conduct disciplinary and interdisciplinary research in small networks
- The l'institut de droit de la santé ([IDS](#)) which is part of the law school of the University of Neuchâtel has a number of projects relating to access to medicines and ethics at the national and international level, including training activities (TRREE) supported by EDCTP.

Selected research activities and themes in the scope of EDCTP-II

The Swiss Tropical and Public Health Institute (Swiss TPH) has a number of programmes and projects of interest to EDCTP-II:

- Since 2002 the Institute supports the Tanzanian National Insecticide Treated Net Programme ([NATNETS](#)), a unit within the National Malaria Control Programme (NMCP)
- Through the [IMPAMEL III programme](#) (2006-2009) Swiss TPH has conducted research in two trial centres in Uganda and Tanzania
- Its [Malaria Interventions Unit](#) has provided core support to the ITN cell located within the National Malaria Control Programme in Tanzania (SDC-supported NETCELL project). A work programme on malaria epidemiology and control is ongoing in the Democratic Republic of Congo (DRC)
- The [Malaria Vaccines Unit](#) has been researching on the RTS,S vaccine candidate

produced by GlaxoSmithKline (GSK). Biologicals was tested in a phase 2 trial completed by Ifakara Health Institute (IHI) and Swiss TPH in 2008

- On [Clinical Epidemiology](#) the ALIVE project assessed the impact of artemether/lumefantrine (ALu) introduction as first-line treatment on malaria transmission and child mortality in two rural districts of Tanzania
- Since 2010 the Pharmaceutical Medicine Unit ([PMU](#)) is the contract research organisation of the Swiss Tropical & Public Health Institute (Swiss TPH-PMU). The Unit is specialised in the conduct of clinical trials on poverty related and tropical diseases.

Further information

- [ARCEAU](#) - “Alliance for clinical research & clinical epidemiology in the DR Congo Alliance pour la recherche clinique et l'épidémiologie clinique au Congo (République Démocratique du Congo)”
- [Drugs for Neglected Diseases initiative \(DNDi\)](#)
- [Swiss State Secretariat for Education and Research \(SER\)](#)
- [Swiss National Science Foundation \(SNSF\)](#)
- [World Health Organisation, TDR](#) (Special Programme for Research and Training in Tropical Diseases).

Country collaborations on EDCTP grants

Switzerland

EDCTP European Member States		EDCTP African Partner Countries	
Austria	3	Benin	
Belgium	6	Botswana	
Denmark	1	Burkina Faso	1
France	10	Cameroon	4
Germany	6	Congo, Democratic Republic of	
Greece		Congo, Republic of	
Ireland	1	Cote d'Ivoire	
Italy	4	Ethiopia	1
Luxembourg	1	Gabon	2
Netherlands	9	The Gambia	
Norway	1	Ghana	1
Portugal		Guinea	
Spain	6	Guinea-Bissau	
Sweden	4	Kenya	2
United Kingdom	9	Liberia	
		Madagascar	
		Malawi	3
		Mali	2
		Mozambique	3
		Namibia	
		Nigeria	4
		Rwanda	
		Senegal	4
		South Africa	15
		Sudan	
		Tanzania	12
		Uganda	8
		Zambia	4
		Zimbabwe	2
Total (Europe collaborations)	62	Total (Africa collaborations)	68
Non EDCTP member state collaboration			
Australia			
Canada	2		
Finland			
Slovakia	1		
United States	4		
Egypt			
Total (all collaborations)			136

Switzerland - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2005.41302.012	Capacity Building	Establishment and support of a National Ethics Committee in Gabon
CB.2010.41302.027	Capacity Building	Establishment of RECs and Capacity building of Human Resources and Infrastructure in Nigeria
CT.2006.3311.004	HIV	Feasibility of and capacity building for adolescent vaccine trials in South Africa
CB.2010.41302.008	Capacity Building	Strengthening the Cameroon National Ethics Review Committee
MS.2009.10800.004	Malaria	Assessment of the fixed-dose combination of Artesunate Mefloquine (ASMQ) as an alternative antimalarial treatment for children in Africa
NW.2005.10501.001	Networking /TB	A proposal to establish a network of sites, in sub-Saharan Africa, to conduct clinical trials in tuberculosis and to build their capacity to participate in multicentre trials
NW.2005.10501.003	Networking / TB	KIDS-ART-LINC: network of clinical centres treating HIV-infected children with antiretroviral therapy in Africa to inform public health care and treatment programs
CB.2005.41302.008	Capacity Building	Strengthening the capacity of research ethics committees in Africa
IP.2007.32011.012	TB	Rapid evaluation of high-dose rifamipicin and other rifamycins in tuberculosis
IP.2009.32080.002	TB/HIV	Phase II Double-Blind, Randomised, Placebo-Controlled Study to Evaluate the Safety and Immunogenicity of H1, an adjuvanted TB subunit vaccine in HIV-infected, BCG-vaccinated Adults With CD4+ Lymphocyte Counts Greater Than 350 Cells/mm ³
NW.2005.10400.002	Networking	Ifakara_Lambarene_Manhiça Partnership
CB.2005.41300.002	Capacity Building	Creating web-based research training courses in biomedical research ethics for Africans
IP.2007.33011.004	HIV	A multicentre phase III trial of second-line antiretroviral treatment in African adults
IP.2009.32040.007	TB	Evaluation of new and emerging diagnostics for childhood tuberculosis in high burden countries (TB CHILD)
IP.2009.33011.003	HIV	Reduction of early mortality among HIV-infected subjects starting antiretroviral therapy: a randomised trial (The REMSTART trial)
NW.2005.10501.002	Networking	Identifying the common learning needs of investigators working in poverty-related diseases in African settings, and the materials to address these, notably in the areas of project and data management
CT.2006.3311.001	HIV	African-European HIV Vaccine Development Network
CB.2005.41300.004	Capacity Building	Training and Resources in Research Ethics Evaluation for Africa
CB.2005.41301.001	Capacity Building	Establishing an African Coordinating Office for Ethics
IP.2009.32040.009	TB/HIV	Evaluation of multiple novel and emerging technologies for TB diagnosis, in smear-negative and HIV-infected persons, in high burden countries (the TB-NEAT study)
NW.2005.10401.002	Networking	Workshop on Tuberculosis Immune Reactivation Inflammatory Syndrome (TB IRIS)
IP.2007.32080.003	TB	A Multicentre phase II Trial of a New TB Vaccine in African Infants

Switzerland - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial
IP.2007.32080.003	TB	A Multicentre phase II Trial of a New TB Vaccine in African Infants
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial

18. United Kingdom

Historical trends in funding

Information on funding is based on information accessed from the G-Finder database for the years 2007 to 2010 inclusive. Although neglected infectious diseases (NIDs) were included in this overview, bacterial pneumonia and meningitis, diarrhoeal diseases, salmonella and rheumatic fever have been excluded in this analysis.

The total value of funding for HIV/AIDS, tuberculosis, malaria and NIDs was ~€ 507,035,592 (\$ 704,216,101). Non-disease specific support had an approximate value of ~€ 32,728,626 (\$ 45,456,425).

Funding from the UK for research in the field of HIV/AIDS had a value of ~€ 147,418,242 (\$ 204,747,559). Support to TB was ~€ 104,544,998 (\$ 145,201,387) and funding for malaria was at least ~€ 168,928 (\$ 234,623,403).

Other funding of relevance for selected neglected diseases, including core funding to organisations such as the Special Programme for Research and Training in Tropical Diseases ([TDR](#)) amounted to ~€ 117,991,704 (\$ 163,877,368).

In terms of distribution across different products related to diagnostics and prevention, funding was ~€ 93,735,226 (\$ 130,187,814) for vaccines; ~€ 60,104,640 (\$ 83,478,668) for HIV microbicides; ~€ 2,577,844 (\$ 3,580,340) for diagnostics and ~€ 1,721,273 (\$ 2,390,658) for biological control products.

The United Kingdom has the largest number of developers participating in neglected disease product development followed by the Netherlands, Switzerland, Germany, and France⁸.

⁸ www.bvgh.org/LinkClick.aspx?fileticket=h6aocJK9drg%3D&tabid=39

Research commissioners and partners

There are seven UK Research Councils which are publicly funded agencies responsible for coordinating and funding particular areas of research.

The Medical Research Council ([MRC](#)) is a publicly funded organisation dedicated to improving human health. MRC supports research across the entire spectrum of medical sciences, in universities and hospitals, has its own units, centres and institutes in the UK and Africa.

MRC's mission is to:

- Encourage and support research to improve human health
- Produce skilled researchers
- Advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness of the UK
- Promote dialogue with the public about medical research.

The [Medical Research Foundation](#) is the Medical Research Council's independently managed charity. It receives funds from the giving public to support medical research, training, public engagement and dissemination of knowledge.

The Biotechnology and Biological Sciences Research Council ([BBSRC](#)) is the largest UK public funder of non-medical bioscience. It predominantly funds scientific research institutes and university research departments in the UK.

The Engineering and Physical Sciences Research Council ([EPSRC](#)) is the Research Council providing government funding for research and postgraduate degrees in engineering and physical sciences, mainly to universities in the United Kingdom.

The Department for International Development ([DfID](#)) is the largest bilateral donor of development-focused research. DfID

aims to tackle important health problems such as malaria, HIV and AIDS, and TB as well as the so-called ‘neglected diseases’ that threaten the lives of millions of people around the world. For many of the diseases that disproportionately affect people in poor countries there are few drugs available, and many of those are old and may themselves be toxic. Global policies and national health practices need to be based on the best possible information, and the most robust evidence. DfID research investigates new solutions to existing health problems as well as smarter ways of delivering existing solutions to more people. DfID’s main programme areas are education, health, social services, water supply and sanitation, government and civil society, economic sector (including infrastructure, production sectors and developing planning), environmental protection, research, and humanitarian assistance. As well as responding to disasters and emergencies, DFID works to support the MDGs. DfID supports a number of initiatives related to neglected infectious diseases including the Drugs for Neglected Diseases initiative ([DNDi](#)) to develop new drugs for a range of major neglected tropical diseases as well the Special Programme for Research and Training in Tropical Diseases ([TDR](#)) based at the World Health Organisation.

Strategies

1. Research and Innovation

The MRC aims to build on its existing strengths to carry out world-class research and deliver its benefits to global communities. The MRC aims to help governments improve the ability of their health systems to deliver effective interventions and care, to ensure that the outputs of research can influence policy and practice, and to determine how health systems can best cope with the already overwhelmingly burden of infections and the additional burden of non-communicable diseases that are yet to come. MRC aims to respond quickly to new

and emerging infections such as new strains of influenza and the emergence of extremely drug resistant tuberculosis.

The MRC aims to continue its leading role in tackling diseases such as HIV, TB, malaria, and neglected tropical diseases such as leishmaniasis which impact so heavily on the health and wellbeing of populations in resource poor settings.

[Research changes lives is the MRC’s strategic plan for 2009–2014](#). Strategic aim three ‘Going global: Accelerating progress in international health research’ makes explicit reference to EDCTP (“Through the European and Developing Countries Clinical Trials Partnership (EDCTP), the MRC and Department for International Development have also supported European and African collaboration on drug and vaccine trials for HIV, TB and malaria”). Strategic aim three includes two objectives:

- Partnerships and shaping the agenda - To provide international leadership in partnerships which enhance the competitiveness of the UK knowledge and health base
- Global health - To support global health research that addresses the inequalities in health which arise particularly in developing countries.

2. Development Cooperation

DfID’s [Strategy from April 2008](#) outlines the UK commitment to funding high quality research that aims to find solutions and ways of reducing global poverty. The strategy identifies six priorities: growth, health, sustainable agriculture, climate change, governance in challenging environments, and future challenges and opportunities. The strategy also highlights three cross-cutting areas, where DfID will invest more funding: capacity building,

research communication and uptake as well as stimulating demand for research.

Under [Research for Development](#), DfID uses evidence generated from commissioned research in relevant areas of interest to develop policies to inform its own activities. Research may be commissioned in partnership with other expert organisations, such as the Medical Research Council. More information on DfID priorities is available online⁹.

Programmes

1. Research programmes funded by Research Councils related to health, medical or clinical research

The Medical Research Council (MRC) as the central research funding body for the United Kingdom with a remit including global health has a range of funding programmes that include:

- [Methodology research programme](#) – the programme includes research on methods development to underpin the biomedical sciences, experimental medicine, clinical trials, population health sciences, health services research and health policy
- [Programme grants](#) provide larger, longer term (five years) and renewable programme funding to the medical scientific community
- [Partnership Grants](#) programme provides support for collaborative activities that add value to existing research and address issues that cannot be addressed through other funding schemes
- [Research Grants](#) support a wide range of research needs and is the main programme for supporting biomedical science in UK universities and NHS Trusts
- [Global Health Trials Programme](#) - The MRC funds clinical trials in Global Health through the Global Health trials programme.

The MRC Infection and Immunity Board (IIB) have highlighted interest in receiving innovative, high quality, investigator-initiated research applications in the field of NIDs over the last year. The MRC and DfID work together under a concordat to support an agreed portfolio of global health research.

The Joint Global Health Trials Scheme is a joint UK funder, DFID-Wellcome Trust-MRC initiative which aims to provide funding to generate new knowledge about interventions that will contribute to the improvement of health in low and middle income countries. This scheme is primarily focused on late stage (phase III and IV) clinical and health intervention trials evaluating efficacy and effectiveness.

The Development Pathway Funding Scheme/ Development Clinical Studies Scheme ([DPFS/DCS](#)) supports projects targeting significant health needs by improving prevention, diagnosis, prognosis, or treatment of disease, or by developing research tools that increase the efficiency of the development of interventions.

2. Programmes related to research for development/development cooperation

The [Africa Regional Programme](#) is run by DFID which has a number of country offices in sub-Saharan Africa. The regional programme focuses on economic growth, trade and investment; resilient livelihoods and peace and security. The Africa Regional Programme aims to improve practices on monitoring and evaluation and transparency.

The [African Research Leadership](#) scheme supported jointly by MRC/DFID is a programme that attracts and retains excellent researchers.

⁹ www.dfid.gov.uk/What-we-do/Research-and-evidence/Research-themes/health-research/

Research performers

1. State Institutes

The National Institute for Medical Research ([NIMR](#)), is a medical research facility mainly funded by the MRC. NIMR mission is:

- To carry out innovative high quality bio-medical research
- To be a major contributor to the MRC's commitments in the training of scientists
- Technology transfer, and the presentation of its science to the public.

[The Medical Research Council Clinical Trials Unit](#) undertakes [clinical trials](#), [meta-analyses](#) and [epidemiological studies](#).

[MRC Gambia](#) - Established in The Gambia in 1947, the Unit's research focuses on infectious diseases of immediate concern to The Gambia and the continent of Africa, with the aim of reducing the burden of illness and death in the country and the developing world as a whole.

[MRC Uganda](#) - The MRC/UVRI Uganda research Unit on AIDS was established following a request in 1988 from the Ugandan Government to the British Government for collaboration on the research of HIV/AIDS. The Unit is an institution of the UK Medical Research Council (MRC), integrated into the Uganda Virus Research Institute (UVRI).

2. Universities with major activities in the field of international health

Edinburgh University:

- [Royal School of Veterinary Studies](#), Animal Health and Zoonoses
- [Edinburgh Global Health Academy](#)
- [Centre of Infectious Diseases](#)

Imperial College

- [Centre for Clinical Tropical Medicine](#) (part of a Wellcome Trust initiative)
- [Schistosomiasis Control Initiative](#)

University of Aberystwyth

- [Institute of Biological, Environmental and Rural Sciences – Parasitology and Epidemiology Group](#)

University of Cambridge

- [School of Biological Sciences](#)
- [School of Medicine](#)
- Department of Pathology – [Parasitology – Schistosomiasis Research Group](#)

University of Dundee

- College of Life Sciences

University of Glasgow

- [Wellcome Trust Centre for Molecular Parasitology](#)

University of Leeds

- [Centre for Global Development](#)
- [Leeds Institute of Health Sciences](#)
- [Nuffield Centre for International Health and Development](#)

University of London

- Queen Mary, University of London – Barts and the London School of Medicine and Dentistry - [Infection, Inflammation and Repair](#)
- St George's University Medical School – [Infection and Immunity](#)
- [UCL Centre for International Health and Development](#)

- [UCL School of Pharmacy](#)
- [London School of Hygiene and Tropical Medicine](#)

University of Liverpool

- [Liverpool School of Tropical Medicine](#)
- [Centre for Neglected Tropical Diseases](#)

University of Oxford

- Institute for Science, Innovation and Society
- Tropical Medicine, Nuffield Department of Clinical Medicine
- [Oxford Vaccine Group](#)
- [Ethox Centre - The Global Health Bioethics Network](#)

The [Wellcome Trust Centres for Research in Clinical Tropical Medicine](#) were established in 1995 to focus support for the Trust's Public Health and Tropical Medicine fellowship schemes, in order to maintain the UK's strength in clinical tropical medicine.

The [Wellcome Trust Sanger Institute](#) is a charitably funded genomic research centre focusing on understanding the roles of genetics in health and disease.

3. Independent organisations which fund research

A recent [review](#) of global grant-making by UK Foundations conducted in conjunction with the centre for Charitable Giving and Philanthropy (CGAP) shows that UK Foundations provide £292 M (~€ 347.4 M) annually, of which 37% is disbursed to Africa, particularly East Africa.

- The [Wellcome Trust](#) is an independent charitable foundation funding research to improve human and animal health. The Wellcome Trust strategy in global health research focuses on supporting research

and training in developing and restructuring countries

- The Wellcome Trust [Major Overseas Programmes](#) are implemented in Kenya, Malawi, South Africa, Thailand and Laos, Vietnam. These research programmes address HIV, tuberculosis and malaria and other diseases that cause high levels of morbidity and mortality in low-income countries
 - The [KEMRI-Wellcome Trust Research Programme](#) performs research on malaria and other infectious diseases, particularly bacterial and viral childhood infections. The Programme was formally established in 1989 as a partnership between KEMRI, Oxford University and the Wellcome Trust
 - The [Malawi-Liverpool-Wellcome Trust Clinical Research Programme](#) started in 1995, with the mission of conducting biomedical research and providing research training for clinical and laboratory scientists from Malawi and abroad
 - The [Malaria programme \(Kwiatkowski group\)](#) by the [Wellcome Trust Sanger Institute](#) uses genomic and genetic approaches to discover molecular mechanisms of host-parasite interactions that may lead to new biological insights and result in improved strategies for disease prevention.
- The [Royal Society of Tropical Medicine and Hygiene \(RSTMH\)](#) aims to promote and advance the study, control and prevention of diseases in the tropics and sub-tropics and to facilitate discussion and exchange of information among those who are interested in tropical diseases and international health. RSTMH has conducted research about the role of product development partnerships in research and development for neglected

diseases. RSTMH runs educational grants programmes and a range of bursaries

- The Tropical Health and Education Trust ([THET](#)) is an international development organisation working in Asia and Africa. Its own programme work is currently focused in [Ethiopia](#) (with the Ministry of Health), [Somaliland](#) (in partnership with King's College Hospital) and [Zambia](#) (Ministry of Health) although previous work has been carried out in Ghana, Malawi and Uganda. In addition, the [International Health Links Funding Scheme](#) is a collaborative scheme managed in conjunction with the British Council. This makes £2.5 M (~€ 2.9 M) available to support health worker capacity building projects in Africa and Asia. The scheme is funded by the UK Department for International Development (DFID) and the Department of Health (DH)
- The [Children's Investment Fund Foundation](#) (CIFF) has a portfolio of projects which seek to benefit children in resource-poor settings, primarily in sub-Saharan Africa and India. The programmes mainly include projects on paediatric HIV/AIDS diagnosis, care and treatment; nutrition and food. CIFF is currently supporting initiatives in: Angola, Benin, Botswana, Burkina Faso, Burundi, Côte d'Ivoire, Cameroon, Democratic Republic of Congo, Ethiopia, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe
- The [Nuffield Foundation](#), through its Africa programme, supports the development of professional technical capacity in Africa. Previous projects supported include partnerships activities in Ethiopia (between the University of Gondar and the University of Leicester) and Malawi (between the University of Malawi and the University of Liverpool to encourage medical students to pursue a career in academic medicine). They also participate in the [European](#)

[Foundations Initiative for Neglected Tropical Diseases](#) to support African Fellows working in neglected Tropical Diseases

- The [Sainsbury Family Charitable Trusts](#) includes 18 grant-making trusts some of which provide support for activities and capacity building in both health and education in sub-Saharan Africa.

Research and capacity building enablers

Most of the programmes described above include a strong capacity building component. A number of UK institutions and universities also run online courses in clinical trials, public health, and other relevant studies and many provide funding opportunities.

- The Hubs for Trials Methodology Research ([HTMR](#)) were established by the MRC to create a UK-wide regionally distributed research resource to improve the design, conduct, analysis, interpretation, and reporting of clinical trials
- The [Commonwealth Scholarships Commission](#) receives funding from DfID, the Foreign and Commonwealth Office, the Department for Business, Innovation and Skills and the Scottish Government and provides funding for postgraduate education, including distance learning programmes, and professional fellowships. Up to 700 awards are made annually in a range of subjects including science, social sciences and medicine
- The [Royal Society](#) provides analysis on the [global landscape for scientific research](#) and supports capacity building at multiple levels. The Society is also partners in a number of international [schemes](#) to make scientific journal articles freely available. The Leverhulme-Royal Society Africa Award is a scheme funded by the [Leverhulme Trust](#) for scientists who want to develop a collaborative research project between the UK and research institutions in either Ghana or Tanzania. The [Royal Society Pfizer Award](#)

supports scientists working in the biological sciences to promote capacity building in Africa and the [Royal Society Pfizer African Academies Programme](#) provided funding to strengthen national academics of science in Ghana, Tanzania and Ethiopia

- The Wellcome Trust [Health Research Capacity Strengthening initiative \(Kenya, Malawi\)](#) aims to strengthen the capacity for generating new health research knowledge within Kenya and Malawi, and to improve its use in evidence-based decision making, policy formulation and implementation. The [Platform for research - African Institutions Initiative](#) aims to build a critical mass of sustainable local research capacity across Africa, through strengthening African universities and research institutions. The [Human Heredity and Health in Africa \(H3Africa\)](#) is an initiative supported by The Wellcome Trust as part of their continuing research portfolio in Africa. H3 Africa aims to facilitate a contemporary research approach to the study of genomics and environmental determinants of common diseases with the goal of improving the health of African populations
- [MalariaGEN is the Malaria Genomic Epidemiology Network](#) which brings together researchers in more than 20 countries to understand how genome variation in human, *Plasmodium* and *Anopheles* populations affects the biology and epidemiology of malaria, and to use this knowledge to develop improved tools for controlling malaria. This work draws on studies funded by a number of organisations including the Wellcome Trust, Bill and Melinda Gates Foundation, Foundation for the National Institutes of Health (FNIH) and the Medical Research Council (MRC)
- The University of Cambridge and Makerere University in Uganda run the [THRiVE Programme: Training Health Researchers into Vocational Excellence in East Africa](#). The programme aims to strengthen

institutional research capacity in East Africa, and to support the next generation of East African researchers to become internationally competitive and self-sustaining scientific leaders, seeding a regional research community with the critical mass to address African health priorities

- The Nuffield Council on Bioethics is an independent body which receives funding from the Nuffield Foundation, the Wellcome Trust and the MRC. It examines and reports on important ethical questions related to biology and medicine. It has previously produced a number of important reports related to [healthcare research in developing countries](#) (in 2002, and a follow-up paper in 2005) and it continues to support related activities, most recently a [symposium](#) in June 2011
- The Wellcome Trust also has provided a Strategic Award for 2012-2016 to support the [Global Health Bioethics Network](#), a programme to carry out ethics research and build ethics capacity within institutions across the Wellcome Trust's Major Overseas Programmes in Kenya, Malawi, South Africa, Thailand-Laos, and Viet Nam.

Selected research activities and themes in the scope of EDCTP-II

MRC Gambia is performing research in the scope of [S.A.N.T.E. \(Spraying And Nets Towards malaria Elimination\)](#) study which was developed in partnership with the Gambian National Malaria Control Programme (NMCP). Additionally MRC Gambia is running the Partnership for the Rapid Elimination of Trachoma ([PRET](#)) is a cluster randomised control trial taking place in three countries: The Gambia, Tanzania and Niger. The data gathered will be used to better manage the scarce resources that are available for trachoma control.

The [University of Dundee](#), GSK and Wellcome Trust have established a five-year collaboration

for neglected diseases which aims to develop safe and affordable treatments for Chagas disease, leishmaniasis and African sleeping sickness.

[EVIMalaR](#) is a joint research FP7 Network of Excellence, funded by the European Commission and currently involving 62 partners from 51 institutes, it seeks to integrate malaria research directed towards a better understanding of the basic knowledge of the disease.

A collaboration between The Lancet and Imperial College has led to a [Commission on Technologies for Global Health](#) that explores how medical technology can most effectively be utilized to improve health outcomes in low and middle income countries.

Country collaborations on EDCTP grants

United Kingdom

EDCTP European Member States		EDCTP African Partner Countries	
Austria	7	Benin	2
Belgium	11	Botswana	2
Denmark	7	Burkina Faso	10
France	13	Cameroon	
Germany	20	Congo, Democratic Republic of	
Greece		Congo, Republic of	
Ireland	5	Cote d'Ivoire	
Italy	7	Ethiopia	4
Luxembourg		Gabon	7
Netherlands	30	The Gambia	12
Norway	1	Ghana	7
Portugal		Guinea	2
Spain	13	Guinea-Bissau	1
Sweden	8	Kenya	14
Switzerland	9	Liberia	
		Madagascar	1
		Malawi	10
		Mali	2
		Mozambique	11
		Namibia	1
		Nigeria	1
		Rwanda	3
		Senegal	7
		South Africa	33
		Sudan	
		Tanzania	26
		Uganda	23
		Zambia	18
		Zimbabwe	4
Total (Europe collaborations)	131	Total (Africa collaborations)	201
Non EDCTP member state collaboration			
Australia	1		
Canada	2		
Finland	1		
Slovakia			
United States	12		
Egypt			
Total (all collaborations)			348

United Kingdom - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CB.2007.41302.018	Capacity Building	Establishment of a local Institutional Review Board (IRB) in Mwanza, Tanzania and strengthen collaboration between the local and national IRBs
CB.2011.41302.016	Capacity Building	Strengthening research ethics capacity of the Mbale Regional Hospital Institutional Review Committee
TA.2005.40204.011	Malaria	Understanding the mechanism of resistance to lumefantrine by <i>Plasmodium falciparum</i>
TA.2005.40204.018	Malaria	Investigating the effects of inactive CYP2C19 alleles on chlor-proguanil pharmacokinetics in adults and in children with mild malaria following Lapdap® treatment
TA.2005.40204.025	TB/HIV	Reconstitution of TB antigen specific IFN- γ responses in TB-HIV co-infected participants
TA.2005.40204.026	HIV	An assessment of the understanding of the informed consent process by participants in microbicide intervention trials in Zambia (Understanding participants' consent undertaken by in an Enterotoxigenic vaccines trial in Misisi Township in Lusaka, Zambia)
TA.2005.40205.001	Capacity Building	Masters in Reproductive and Sexual Health Research
TA.2007.40200.010	TB	Human lung innate immune pathways regulating the stasis and killing of <i>M. tuberculosis</i> in a high burden setting
TA.2010.40200.032	Malaria	Intermittent Preventive Treatment in children combined with Home management of malaria in area with persisting high malaria prevalence in Senegal
CB.2005.41300.005	Capacity Building	Developing a distance learning research ethics course for East Africa
CT.2004.32040.001	TB	Surrogate markers to predict the outcome of antituberculosis therapy
CT.2004.70100.001	PACTR	HIV/AIDS, Tuberculosis and Malaria Clinical Trials Registry in sub-Saharan Africa
TA.2004.40200.004	TB	BCG-induced immune correlates of protection against tuberculosis
TA.2004.40200.006	Malaria	Understanding the mechanisms of piperaquine resistance
TA.2005.40200.004	Malaria	Randomised trial of the acceptability and efficacy of four drug regimens for seasonal intermittent preventive treatment for malaria
TA.2008.40200.016	Malaria	A randomised controlled trial of oral iron therapy for treatment of post-malaria iron deficiency anaemia in Malawian children comparing immediate post-discharge versus delayed treatment on iron uptake and haematological response
TA.2008.40200.022	HIV	Evaluating Antiretroviral Drug Resistance in HIV infected Children in Africa
CB.2010.41302.013	HIV/ Capacity Building	Strengthening of TASO Institutional Review Board for HIV/AIDS Research in Uganda
CT.2004.33011.001	HIV	Children with HIV in Africa - Pharmacokinetics and Adherence of Simple Antiretroviral Regimens
CT.2005.33070.002	HIV	Site preparation and capacity strengthening for trials of vaginal microbicides in Tanzania and Uganda
CT.2005.33070.003	HIV	Establishing HIV microbicide clinical trial capacity in Mozambique and expanding an existing site in South Africa

United Kingdom - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
CT.2006.33111.011	HIV	Strengthening of long term clinical and laboratory research capacity, cohort development, and collection of epidemiological and social science baseline data in Uganda and Malawi to prepare for future HIV vaccine trials
JP.2008.10800.001	Capacity Building	To develop a clinical trial management and support infrastructure at the College of Medicine, Blantyre, Malawi
NW.2005.10401.001	Networking	A North-South working group to support the design integrated research proposals for malaria in pregnancy
NW.2005.10501.001	Networking / TB	A proposal to establish a network of sites, in sub-Saharan Africa, to conduct clinical trials in tuberculosis and to build their capacity to participate in multicentre trials
TA.2005.40203.003	HIV	Patterns of HIV-1-specific cd8+ t-cell epitope recognition determining plasma viral load trajectory and set point following HIV-1 infection
CT.2006.33020.006	HIV	Improving the balance between efficacy and development of resistance in women receiving single dose nevirapine (Viramune®, NVP) for the prevention of mother-to-child transmission in Tanzania and Zambia (VITA studies)
CT.2006.33111.013	HIV	Capacity development and strengthening in preparation for HIV vaccine trials in Tanzania and Burkina Faso
CT.2006.33111.007	HIV	HIV vaccine trial capacity building in Tanzania and Mozambique by continued exploration of optimal DNA priming and MVA boosting strategies
IP.2007.32080.002	TB	A proof-of-concept phase IIb clinical trial to evaluate the protective efficacy of a booster MVA85A vaccination administered to healthy, HIV-infected adults in South Africa, Senegal and The Gambia
IP.2007.33112.001	HIV	HIV vaccine trial capacity building in Tanzania and Mozambique by continued exploration of optimal DNA and MVA boosting strategies; TaMoVac II
MS.2009.10800.001	HIV	A joint initiative to sustain HIV vaccine trials and research capacity in the Republic of Guinea-Bissau, West Africa
NW.2005.10403.001	Capacity Building	Distance learning Master course in Clinical Trials
NW.2005.10403.006	Capacity Building	Distance learning masters course in clinical trials
NW.2005.10501.004	Networking / Capacity Building	Networking of European and sub-Saharan African research and capacity building in pharmacology
TA.2007.40200.011	HIV	Frequency and determinants of dual infection with different strains of HIV-1 in low and high risk populations in Uganda risk populations in Uganda
CT.2006.33111.002	HIV	Building capacity of Infant HIV-1 Vaccine Clinical Trial Centres in Nairobi, Kenya and Fajara, The Gambia
IP.2007.32011.012	TB	Rapid evaluation of high-dose rifampicin and other rifamycins in tuberculosis
IP.2009.33011.004	HIV	Nutritional support for Africans starting antiretroviral therapy (NUSTART)

United Kingdom - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
JC.2010.10300.009	Malaria	An evaluation of the impact of malaria clinical trials on the delivery of health care, particularly for women and children, in sub-Saharan Africa
CT.2004.32011.002	TB	A controlled clinical trial to evaluate high dose rifapentine and moxifloxacin in the treatment of pulmonary tuberculosis
CT.2004.32011.003	HIV/TB	Determining the optimal doses of antiretroviral and antituberculous medications when used in combination for the treatment of HIV/TB in coinfecting patients
CT.2005.32080.003	TB /Capacity Building	Capacity building for the conduct of ICH-GCP level TB vaccine trials in high risk populations in Ethiopia and East Africa
IP.2007.32011.013	TB	Evaluation of a novel TB drug (SQ109) to shorten and simplify TB treatment
CT.2004.31070.001	Malaria	Artesunate for severe malaria in African children
IP.2007.31060.003	Malaria	Special populations and label expansion studies with the fixed dose combinations artemether-lumefantrine, amodiaquine-artesunate, and dihydroartemisinin-piperaquine in Zambia, Malawi and Mozambique
IP.2007.33011.006	HIV	Expanding the Availability of Fixed Dose Combination Antiretroviral Formulations for First-line Treatment of HIV-infected Children - the Children with HIV in Africa Pharmacokinetics and Acceptability/Adherence of Simple Antiretroviral Regimens CHAPAS-3 Trial
IP.2007.33070.001	HIV	Characterisation of novel microbicide safety biomarkers in East and South Africa
IP.2008.31060.003	Malaria	Development of Fosmidomycin and Clindamycin, in a Fixed Dose Combination, for the Treatment of Acute Uncomplicated <i>Plasmodium falciparum</i> Malaria
IP.2008.31000.001	Malaria	Integrating capacity building and networking in the design and conduct of phase I and II clinical trials of viral vectored candidate malaria vaccines in East and West African children and infants (Vectored Malaria Vaccines)
IP.2009.32040.007	TB	Evaluation of new and emerging diagnostics for childhood tuberculosis in high burden countries (TB CHILD)
IP.2009.33011.003	HIV	Reduction of early mortality among HIV-infected subjects starting antiretroviral therapy: a randomised trial (The REMSTART trial)
IP.2009.33011.009	HIV	A randomised controlled trial of 3 strategies for the treatment of ARV-naive HIV-infected patients with tuberculosis (RAFA)
NW.2005.10501.002	Networking	Identifying the common learning needs of investigators working in poverty-related diseases in African settings, and the materials to address these, notably in the areas of project and data management
CB.2007.41700.001	Capacity Building	The East African Clinical Trials Partnership (EACTP): A capacity building network of excellence and training for the conduct of clinical trials in Africa
CT.2004.32011.001	TB	Rapid Evaluation of Moxifloxacin in the treatment of sputum smear positive tuberculosis
CT.2006.33111.001	HIV	African-European HIV Vaccine Development Network
IP.2007.31060.002	Malaria	An integrated approach to clinical trials, capacity building and networking in West Africa: treatment in pregnancy (IPTp) in the context of insecticide treated nets

United Kingdom - EDCTP projects in which national researchers collaborate

EDCTP Project Code	Disease Area	Project Title
IP.2007.31100.001	Malaria	Fostering research capacity, networking and project management through phase I-IIb clinical trials of candidate malaria vaccine GMZ2
IP.2007.32011.011	TB	Rapid Evaluation of Moxifloxacin in Tuberculosis - REMox TB
IP.2009.32040.0011	TB	The evaluation of Mycobacterium tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic biomarkers for active TB infection
MS.2010.10800.002	TB	Collaboration and integration of Tuberculosis Vaccine Trials in Europe and Africa (TBTEA)
CB.2007.41700.009	Capacity Building	TESA - Trials of Excellence in Southern Africa
IP.2007.31080.001	Malaria	Safe and efficacious artemisinin-based combination treatments for African pregnant women with malaria
IP.2009.32040.009	TB	Evaluation of multiple novel and emerging technologies for TB diagnosis, in smear-negative and HIV-infected persons, in high burden countries (the TB-NEAT study)
NW.2005.10401.002	TB / Networking	Workshop on Tuberculosis Immune Reactivation Inflammatory Syndrome (TB IRIS)
IP.2007.31080.003	Malaria	Optimisation of the existing dose and regimen of intermittent preventive treatment with sulfadoxine-pyrimethamine for the prevention of malaria in pregnancy in the context of high coverage of insecticide treated nets and highly seasonal malaria transmission
IP.2007.33011.003	HIV	The Eastern and southern Africa Research Network for Evaluation of Second Line Therapy in HIV infection: The EARNEST Trial
NW.2005.10403.004	Networking / Capacity Building	Preparatory Consortium to initiate networking in Europe and Sub-Saharan Africa for the establishment of a joint MSc in Clinical Research
CT.2004.31060.001	Malaria	Evaluation of 4 artemisinin-based combinations for treating uncomplicated malaria in African children

Acknowledgements and further information

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Further information

Further information on EDCTP activities is available via the EDCTP website www.edctp.org. For information on projects, please refer to the [EDCTP Project Profiles](#), a database accessible through the EDCTP website. Alternatively, the [EDCTP Project Portfolio](#) is a compendium of all EDCTP funded activities and is updated regularly.

This is a living document; and the EDCTP Secretariat would be happy to receive any further comments and suggestions. The EDCTP Secretariat can be contacted at via email info@edctp.org.

Colophon

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Clinical Trials Partnership

Author: EDCTP Secretariat
Editors: EDCTP Secretariat
Design: Sam Gobin, www.samgobin.nl

Europe Office

Postal address
P.O. Box 93015
2509 AA The Hague
The Netherlands

Visiting address
Laan van Nieuw Oost Indië 334
The Hague, The Netherlands

Phone +31 70 344 0880/0897
Fax +31 70 344 0899
E-mail info@edctp.org
Internet www.edctp.org

Africa Office

Postal address
P.O. Box 19070
Tygerberg 7505, Cape Town
South Africa

Visiting address
Francie van Zijl Drive, Parowvallei
Cape Town, South Africa
Phone +27 21 938 0819
Fax +27 21 938 0569

