



# NEGLECTED NO MORE – RESEARCH ON NEGLECTED INFECTIOUS DISEASES

## The challenge

It is estimated that more than one billion people of the world's poorest people are infected with parasitic, bacterial or viral Neglected Infectious Diseases (NIDs) such as leishmaniasis, schistosomiasis, Chagas disease, helminth diseases, childhood diarrhoeal diseases, rabies, leprosy or trachoma. These diseases, even if long forgotten in the world's wealthiest countries, impact people and societies by causing poverty, stigmatisation, disability, and inhibit individuals from

caring for themselves or their families. Urgent action is needed to develop new or improved treatments, tests and prophylactics that are adapted to combat NIDs in resource-poor settings, and to make them available at affordable prices.

Additionally, increasingly often humanity is faced with the (re)-emergence of serious viral NIDs, that give rise to epidemics (e.g. dengue, Chikungunya) or pandemics (e.g. Ebola, Zika), driven by factors like climate change and changes in human demographics and behaviour, but also driven by the insufficient research and development of medical countermeasures for such diseases. Epidemics have repeatedly changed the course of human history, by sweeping through human societies, causing suffering and death, political and social disorder, and economic disruption.

## The European Commission is supporting a wide range of research activities in NIDs

- Under the 7th Framework Programme (FP7; 2007-2013): More than €160m was spent by the EU to support 74 research projects addressing NIDs. The objective of this funding has been to support the research and development (R&D) of new or improved approaches for preventing, diagnosing, treating, and controlling NIDs, with several important projects still ongoing.
  - HOOKVAC is developing a novel, low-cost, effective vaccine against human hookworm infection, and is testing it in endemic
    countries.
  - **STOPENTERICS** pursues the development of novel, efficient, multivalent vaccines against *Shigella and E. coli for childhood diarrhoeal diseases in low- and middle-income countries.*
  - **HERACLES** is establishing registries and is exploring the incidence of human cystic echinococcosis in central and eastern European countries, along with basic and translational research on the disease.
- *Under Horizon 2020 (H2020, 2014-2020)* the Commission continues to support research, primarily R&D on vaccines and treatments against NIDs. Furthermore, it has significantly supported research in response to the Ebola and Zika pandemics, and further supports preparedness research to safeguard Europe against emerging infectious threats.

In response to the Ebola outbreak the European Commission has mobilised €155 m in funding from Horizon 2020, with a further €115 m being leveraged from the European pharmaceutical industry under the Innovative Medicines Initiative. When the Zika virus outbreak struck in Latin America and the Caribbean, an accelerated call on urgent Zika research was launched, resulting in three funded projects, i.e. **ZikaPLAN**, **ZIKAction** and **ZIKAlliance**, that address epidemiological, basic and translational research, as well as risk modelling of Zika disease. Additional research on Zika vaccines and vector research infrastructures was funded through the regular calls, amounting to a total of €45m of Horizon 2020 funding for Zika-related research.

- TRACVAC is developing and testing a novel vaccine against trachoma.
- **CCHFVaccine** is developing a vaccine against *Crimea-Congo Haemorrhagic Fever*, one of the priority emerging infectious threats.
- **RABYD-VAX** is developing a novel, combined vaccine against *rabies and yellow fever*.
- **Ebola vaccines:** EU-funding (EU contribution of €120 m that has leveraged an additional contribution of €101 m from industry) has supported the development of all 3 leading Ebola vaccine candidates, including the manufacturing of 2 million doses of the J&J vaccine, currently stockpiled for future use if needed.
- **Zika Vaccines: ZIKAVAX** is developing a vaccine against Zika. Another Zika vaccine is developed by the European mid-size biotech company Valneva, which received € 25 million under the 'InnovFin EU Finance for Innovators' financial instrument, codeveloped by the Commission under Horizon 2020 and the European Investment Bank Group.

#### Other Key Initiatives

The **European & Developing Countries Clinical Trials Partnership (EDCTP)** was launched in 2003 by 16 European countries and the Commission to support clinical trials and capacity building to fight HIV/AIDS, malaria and tuberculosis in Africa. The first EDCTP programme (2003-2013) supported 254 projects with €383m, involving 190 African and 70 European research institutions and where 49% of the trials were led by African researchers. The EU's commitment has been extended to cover NIDs and has an increased budget of **€1.3bn** for the second programme (2014-2024).

**InnovFin Infectious Diseases (ID)**, a new finance facility, launched jointly by the EC and European Investment Bank, will ensure that new drugs, vaccines and medical and diagnostic devices or research infrastructures for ID are made available faster: http://www.eib.org/products/blending/innovfin/products/infectious-diseases.htm.

#### **Additional information**

 $Horizon\ 2020:\ \underline{www.ec.europa.eu/programmes/horizon2020/}\ Health\ research: \underline{www.ec.europa.eu/research/health}$ 

### **Contact**

European Commission, DG Research and Innovation, Health Directorate, Fighting Infectious diseases and Advancing Public Health Email: RTD-INFECTIOUS-DISEASES-PUBLIC-HEALTH@ec.europa.eu