

## Call open for Shigellosis drug discovery

### In addition to TB, Malaria and Kinetoplastids infections

Diarrhoeal infections are the second leading cause of death in children under five years old worldwide. This is due to insufficient access to safe-drinking water and sanitation and the high prevalence of bacterial infections in the developing world. To date, only limited efforts have been dedicated to the discovery and development of new small molecule treatments to treat severe diarrhoeal infections.

### The scientific opportunity

**Background:** An estimated 165 million *Shigella* infection episodes occur globally, the majority of which occur in the developing world where, depending on the estimates, *Shigella* could account for > 60 % of the most severe dysentery diarrhoea cases and deaths in the most affected population, that is < 5 year olds in the developing world. While further epidemiological confirmation remains to be established, this new data could mean that the death toll attributable to a severe diarrheal episode/s caused by a *Shigella* infection could be anything between 300.000 to >1M per year. Over 95 % of these deaths take place in the developing world and >70 % of these affect children aged less than 5 years.



**The challenge:** Rates of resistance to *Shigella* have evolved rapidly over last 10 years, reaching 45 to 100% to certain compounds including cephalosporins, fluoroquinolones and other first-line agents. This situation increases the difficulty and costs of treating shigellosis. Drug-resistant *Shigella* is highly likely to spread further and could pose a major therapeutic challenge unless adequate preventive measures are implemented to contain its spread. *Shigella*-specific treatments could facilitate quick intervention to avoid progression to severe diseases, related mortality and long term side effects.

### Key areas of interest of TCOLF

- Exploitation of HTS amenable screening approaches to identify hits and leads (extra- and intracellular).
- Target based approaches on genetically and chemically validated targets.
- Medicinal chemistry optimisation of hits or leads towards drug candidates.
- Animal models that allow evaluation, ranking and establishment of PK/PD relationships of leads against Shigellosis.

## The TCOLF mission:

*To enable translation of innovative research in Diseases of the Developing World through collaborations where the complementary expertise and capacity currently residing in the Pharmaceutical Industry is made accessible to Academic, Biotech and other Pharmaceutical Industry scientists*

## DEADLINE

FOR SUBMISSION  
OF  
APPLICATIONS  
TO THIS CALL

31st Jan 2017

# About the Tres Cantos Open Lab Foundation

The Tres Cantos Open Lab Foundation (TCOLF) supports drug discovery for Malaria, Tuberculosis and Kinetoplastid diseases. The Foundation has selected 60 projects for funding since 2011, out of which 30 are already completed.

TCOLF supports collaborative projects between a "Home institution", i.e. public or private research institutes, high education institutions or pharmaceutical companies working in the research areas supported by TCOLF, and the "Host institution", which is GSK DDW. Projects can be implemented entirely at the GSK DDW site in Tres Cantos (Spain), or at both the Home and the Host Institution facilities; respective timelines must be consistent with the expertise and resources available at each site.

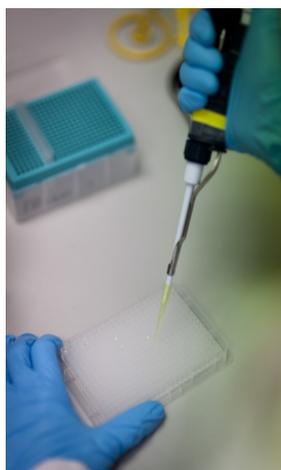
## About this call

In addition to its traditional areas of interest (TB, Malaria and kinetoplastid infections), TCOLF is launching the second call that includes drug discovery for Shigellosis to evaluate the potential of supporting this infectious disease in the long term. The deadline for submission of applications to this call is the 31st January 2017. At least two additional calls for proposals (June and October) are envisaged during 2017.

- Project proposals must be aligned with the TCOLF key areas of interest (described in the former section).
- Typically, the Foundation expects that the project duration will range from 6 to 24 months.
- Mobility rule: The project visiting scientist(s) must not have resided or carried out their main activity in the country of their longer stay (Home or Host Institution) for more than 12 months in the 3 years immediately prior to the application date.

## Additional information

*Please refer to the Guide for Applicants & FAQs in the TCOLF website for complete information on the application and evaluation process*



**Intellectual Property Rights (IPR):** TCOLF is willing to make IPR in the results generated along the proposed projects available to third parties in accordance with the [Guiding Principles of WIPO Re: Search](#), so that IP output is made available royalty free for neglected diseases treatment/research in the least developed countries.

The Principles will be part of the Agreement to be signed in case of selection.

### Financial regime:

- TCOLF funding will cover the personnel costs of the visiting scientist(s) and the travel expenses. Other costs such as lab consumables, research services, conference fees, etc. will be covered according to the project needs.
- Total personnel costs funded will be of £50.870/year. For PhD holders with over 10 years postdoctoral experience, the personnel costs funded will be of £76.087/year. Salary will be calculated deducting employer costs (social security contributions, life insurance if provided, etc) from this amount.
- Accommodation will be available from day of arrival and directly paid by TCOLF during the visiting scientists' stay in GSK DDW, provided that they relocate to one of the flats administered by TCOLF in Tres Cantos (near Madrid).

<http://www.openlabfoundation.org/collaborate/tcolProposal.html>

Contact: [info@openlabfoundation.org](mailto:info@openlabfoundation.org)