

TCOLF Project Portfolio (Nov 2015) – 45 projects, 11 rounds of evaluation

	Completed	Currently active
New models 8 projects 11 visiting scientists	Malaria <ul style="list-style-type: none"> Upstate Medical University (US) – liver stage in vivo model Barcelona Centre for International Health Research (Spain)– P. vivax in vitro culture CIC bioGUNE (Spain) – Ubiquitination characterisation Kinetoplastids <ul style="list-style-type: none"> London School of Hygiene and Tropical Medicine (UK) – Rates of kill in Leishmania and T. cruzi Tuberculosis <ul style="list-style-type: none"> Cornell University (US) – Metabolomic intracellular accumulation 	Malaria <ul style="list-style-type: none"> Mahidol University (Thailand) – Artemisin resistance Consortio de Investigación Científica Cauceseco (Colombia) – P. vivax screening Kinetoplastids <ul style="list-style-type: none"> CEU San Pablo University (Spain)/University of Glasgow (UK) – Metabolomic markers in vivo
MedChem 14 projects 24 visiting scientists	Malaria <ul style="list-style-type: none"> University of Liverpool (UK) – Optimisation of triazole hits University of Helsinki (Finland)– Optimisation of benzimidazole hits Tuberculosis <ul style="list-style-type: none"> iThemba Pharm.(South Africa) – Optimisation Gyrase hits ^[1] Sapienza, Rome University(Italy) – Optimisation BM212 Univ. Of Sydney (Australia) – Open source optimisation whole cell hits Institut Pasteur Korea (Korea)– Intracellular hit optimisation TeagueMedChem (UK) – Optimisation Rifamycin analogs University Of Birmingham (UK) – Optimisation AspRS hits Kinetoplastids <ul style="list-style-type: none"> Boston University(US) – Optimisation Leishmania hits ^[1] The University of Georgia (US) – Optimisation T. cruzi hits NorthEastern University (US)/Consejo Superior de Investigaciones Científicas (Spain) – Kinase inhibitors for HAT (HTS and MedChem) 	Tuberculosis <ul style="list-style-type: none"> Martin Luther University Halle-Wittenberg (Germany)– MedChem Cyclopeptide hits University of Dundee(UK) – MedChem InhA hits Kinetoplastids <ul style="list-style-type: none"> Monash University (Canada) – MedChem hits
HTS 23 projects 28 visiting scientists	Malaria <ul style="list-style-type: none"> Harvard School of Public Health (US) – DHODH mutant HTS screening Imperial College (UK) – CDPKs (screening of TCAMS) ^[1] MRC/Leicester (UK) – PfCLK screening Inbiomed - HTS to assess the effect of antimalarial compounds on the pool of ubiquitylated proteins in Plasmodium falciparum ^[1] Kinetoplastids <ul style="list-style-type: none"> Durham University(UK) – IPC synthase screening New York University (US) – T. cruzi screening Swiss Tropical Institute (Switzerland) - Drug induced differentiation of trypanosomes leads ^[1] McGill University (Canada)/Edinburgh University - Targeting the trypanosome editosome University of Glasgow (UK) – PDE HTS Tuberculosis <ul style="list-style-type: none"> Center for Infectious Diseases Research (US) – DHFR screening Omnia Molecular (Spain) – t-RNA synthetase screening Cornell University (US) – Non-replication HTS ^[1] Florida International University (US) – Topoisomerase I HTS University of British Columbia (Canada)- Macrophage HTS 	Malaria <ul style="list-style-type: none"> INSERM/INTS (France)– Gametocyte deformability Center for Infectious Diseases Research (US) – NMT screening LSHTM (UK) – PfPKG screening Tuberculosis <ul style="list-style-type: none"> Harvard Medical School (US) – Clp protease HTS Cornell University (US)– TB conditional mutants HTS Cornell University (US)– Betalactam hyper-susceptibility screening University of British Columbia (Canada) - Synergistic combinations of rifampicin and cephalosporins Univ. Of Minnesota – BirA screening Kinetoplastids <ul style="list-style-type: none"> Calibr (US) – Phenotypic screen of Leish and T cruzi

Figure 1. Current project portfolio of the Tres Cantos Open Lab Foundation. DHODH: Dihydroorotate dehydrogenase, CDPK: Calcium-Dependent Protein Kinases, PfCLK: Plasmodium falciparum cyclin-dependent kinase-like kinase, IPC: Inositol phosphorylceramide, BirA: Biotin Protein Ligase, InhA: enoyl acyl carrier protein reductase, NMT: N-myristoyltransferases, PDE: Phosphodiesterase.

^[1] Projects not funded by TCOLF