

2013-2014
Annual
report

TROPICAL DISEASE FOUNDATION, INC.



Our Vision

Equitable universal access to health for economic prosperity

Our Mission

National and local community development through research, training, service, and healthcare delivery in the prevention and control of infectious diseases of public health importance.

Our Thrusts

To conduct research, training and service in infectious diseases of public health importance

To enter into partnership with public and private agencies in the implementation of programs in the control of infectious diseases

To enter into partnership with national and international institutions involved in research to ensure technology transfer

To enter into a multi-sectoral partnership with other disciplines to ensure that cured patients are socio-economically productive;

To serve as a national and international training center for infectious diseases



Introduction



L to R: Dr. Thelma Tupasi, Atty. Joselin C. Fragada, Dr. Constantino P. Manahan, Dr. Romeo H. Gustillo, and Dr. Raul G. Fores presented the Far East Bank and Trust Endowment to TDF (1988)

For the past three decades, Tropical Disease Foundation (TDF) continues its commitment to provide equitable universal access to health for national prosperity. In keeping its vision, the Foundation continues to undertake research, provide trainings, and services in the control of tropical infectious diseases of public health importance. Tuberculosis has been the principal topic of its activities since the establishment of its research laboratory at the Makati Medical Center in 1988, Dr. Constantino P. Manahan as the Chairman of the Board of Trustees. Consistent with Dr. Manahan's concept of the Makati Medical Center as a Hospital with a Heart,



the Tropical Disease Foundation, Inc. (TDF) in partnership with the National TB Program (NTP) and the local government, Brgy. San Lorenzo established one of the first DOTS Clinic in the Philippines which was the first facility approved by the Green Light Committee for Programmatic Management of Multidrug-Resistant Tuberculosis (PMDT). This became the research site on the studies on tuberculosis which were published in peer reviewed journals as follows:

- Lee J, Tupasi TE, Park YK. "Use of the VNTR typing technique to determine the origin of Mycobacterium tuberculosis strains isolated from Filipino patients in Korea. "World J MicrobiolBiotechnol. 2014 Jan 11. [Epub ahead of print]
- Sia IG, Buckwalter SP, Doerr KA, Lugos S, Kramer R, Orillaza-Chi R, Quelapio MI, Tupasi TE, Wengenack NL. Genotypic characteristics of Mycobacterium tuberculosis isolated from household contacts of tuberculosis patients in the Philippines. BMC Infect Dis. 2013 Dec 5;13:571. doi: 10.1186/1471-2334-13-571.
- Gler MT, Guilatco R, Caoili JC, Ershova J, Cegielski P, Johnson JL. "Weight gain and response to treatment for multidrug-resistant tuberculosis." Am J. Trop Hyg. 2013 Nov;89(5)943-9
- Falzon D, Gandhi N, Migliori GB, Sotgiu G, Cox HS, Holtz TH, Hollm-Delgado MG, Keshavjee S, DeRiemer K, Centis R, D'Ambrosio L, Lange CG, Bauer M, Menzies D; Collaborative Group for Meta-Analysis of Individual Patient Data in MDR-TB." Resistance to fluoroquinolones and second-line injectable drugs: impact on multidrug-resistant TB outcomes. "EurRespir J. 2013 Jul;42(1):156-68. doi: 10.1183/09031936.00134712. Epub 2012 Oct 25.
- Podewils, LJ, Gler MT, Quelapio M I, Chen MP. " Patterns of treatment interruption among patients with multidrug-resistant TB (MDR TB) and association with interim and final treatment outcomes." PLoS ONE. July 2013; 8(7) e70064.

- Ahuja SD, Ashkin D, Avendano M, Banerjee R, Bauer M, Bayona JN, Becerra MC, Benedetti A, Burgos M, Centis R, Chan ED, Chiang CY, Cox H, D'Ambrosio L, DeRiemer K, Dung NH, Enarson D, Falzon D, Flanagan K, Flood J, Garcia-Garcia ML, Gandhi N, Granich RM, Hollm-Delgado MG, Holtz TH, Iseman MD, Jarlsberg LG, Keshavjee S, Kim HR, Koh WJ, Lancaster J, Lange C, de Lange WC, Leimane V, Leung CC, Li J, Menzies D, Migliori GB, Mishustin SP, Mitnick CD, Narita M, O'Riordan P, Pai M, Palmero D, Park SK, Pasvol G, Peña J, Pérez-Guzmán C, Quelapio MI, Ponce-de-Leon A, Riekstina V, Robert J, Royce S, Schaaf HS, Seung KJ, Shah L, Shim TS, Shin SS, Shiraishi Y, Sifuentes-Osornio J, Sotgiu G, Strand MJ, Tabarsi P, Tupasi TE, van Altena R, Van der Walt M, Van der Werf TS, Vargas MH, Viiklepp P, Westenhouse J, Yew WW, Yim JJ; Collaborative Group for Meta-Analysis of Individual Patient Data in MDR-TB. "Multidrug resistant pulmonary tuberculosis treatment regimens and patient outcomes: an individual patient data meta-analysis of 9,153 patients." PLoS Med. 2012;9(8):e1001300. Epub 2012 Aug 28.
- Dalton T, Cegielski P, Akksilp S, Asencios L, Campos Caoili J, Cho SN, Erokhin VV, Ershova J, Gler MT, Kazenny BY, Kim HJ, Kliiman K, Kurbatova E, Kvasnovsky C, Leimane V, van der Walt M, Via LE, Volchenkov GV, Yagui MA, Kang H; Global PETTS Investigators, Akksilp R, Sitti W, Wattanaamornkiet W, Andreevskaya SN, Chernousova LN, Demikhova OV, Larionova EE, Smirnova TG, Vasilieva IA, Vorobyeva AV, Barry CE 3rd, Cai Y, Shamputa IC, Bayona J, Contreras C, Bonilla C, Jave O, Brand J, Lancaster J, Odendaal R, Chen MP, Diem L, Metchock B, Tan K, Taylor A, Wolfgang M, Cho E, Eum SY, Kwak HK, Lee J, Lee J, Min S, Degtyareva I, Nemtsova ES, Khorosheva T, Kyryanova EV, Egos G, Perez MT, Tupasi T, Hwang SH, Kim CK, Kim SY, Lee HJ, Kuksa L, Norvaisha I, Skenders G, Sture I, Kummik T, Kuznetsova T, Somova T, Levina K, Pariona G, Yale G, Suarez C, Valencia E, Viiklepp P. "Prevalence of and risk factors for resistance to second-line drugs in people with multidrug-resistant tuberculosis in eight countries: a prospective cohort study." Lancet. 2012 Oct 20;380(9851):1386-1406-17. doi: 10.1016/S0140-6736(12)60734-X. Epub 2012 Aug 30.
- Dalton T., Cegielski P., Kurbatova E., Ershova J., Caoilii JC. "Resistance to second-line drugs in multidrug-resistant tuberculosis-Authors' reply." Lancet 2013 Feb. 23;38(9867):626.



- Kurbatova EV, Gammino VM, Bayona J., Becerra MC, Danilovitz M, Falzon D, Gelmanova I, Keshavjee S, Leimane V, Mitnick CD, Quelapio MI, Riekstina V, Taylor A, Viikleapp P, Zignol M, Cegielski P. "Predictors of sputum culture conversions among patients treated for multidrug-resistant tuberculosis." *Int J Tuberc Lung Dis.* 2012 Oct;16(10):1335-43.
- Gler MT, Guilatco RS, Guray CV, Tupasi TE. "Screening outcomes from patients with suspected multidrug-resistant tuberculosis: lessons learned in the Philippines." *Int J Tuberc Lung Dis.* 2012 Oct;16(10):1326-30. doi: 10.5588/ijtld.12.0038. Epub 2012 Aug 3.
- Kurbatova EV, Taylor A, Gammino VM, Bayona J, Becerra M, Danilovitz M, Falzon D, Gelmanova I, Keshavjee S, Leimane V, Mitnick CD, Quelapio MI, Riekstina V, Viikleapp P, Zignol M, Cegielski JP. "Predictors of poor outcomes among patients treated for multidrug-resistant tuberculosis at DOTS-plus projects." *Tuberculosis (Edinb).* 2012 Sep;92(5):397-403. doi: 10.1016/j.tube.2012.06.003. Epub 2012 Jul 10.
- Gler MT, Podewils LJ, Munez N, Galipot M, Quelapio MI, Tupasi TE. "Impact of patient and program factors on default during treatment of multidrug-resistant tuberculosis." *Int J Tuberc Lung Dis.* 2012 Jul;16(7):955-60. doi: 10.5588/ijtld.11.0502. Epub 2012 May 7.
- Gler MT, Skripconoka V, Sanchez-Garavito E, Xiao H, Cabrera-Rivero JL, Vargas-Vasquez DE, Gao M, Awad M, Park SK, Shim TS, Suh GY, Danilovits M, Ogata H, Kurve A, Chang J, Suzuki K, Tupasi T, Koh WJ, Seaworth B, Geiter LJ, Wells CD. "Delamanid for multidrug-resistant pulmonary tuberculosis." *N Engl J Med.* 2012 Jun 7;366(23):2151-60. doi: 10.1056/NEJMoa1112433. PMID:
- Gler MT, Podewils LJ, Munez N, Galipo, Quelapio MI, Tupasi TE. "Impact of patient and program factors on default during treatment of multidrug-resistant tuberculosis." *Int J Tuberc Lung Dis* 7 May 2012, 16(7); 955-960.

- Kurbatova EV, Gammino VM, Bayona J, Becerra M, Danilovitz M, Falzon D, Gelmanova I, Keshavjee S, Leimane V, Mitnick CD, Quelapio MI, Riekstina V, Taylor A, Viiklepp P, Zignol M, Cegielski JP. "Frequency and type of microbiological monitoring of multidrug-resistant tuberculosis treatment." *Int J Tuberc Lung Dis*. 2011 Nov;15(11):1553-5.
- Vassall A, van Kampen S, Sohn H, Michael JS, John KR, den Boon S, Davis JL, Whitelaw A, Nicol MP, Gler MT, MT, Khaligov A, Zamudio C, Perkins MD, Hoehme CC, Cobelens F. "Rapid diagnosis of tuberculosis with the Xpert MTB/RIF assay in high burden countries: a cost-effectiveness analysis." *PLoS Med* 2011, Nov;8(11):e1001120.
- Gammino VM, Taylor AB, Rich ML, Bayona J, Becerra MC, Bonilla C, Gelmanova I, Hollo V, Jaramillo E, Keshavjee S, Leimane V, Mitnick CD, Quelapio MI, Riekstina V, Tupasi TE, Wells CD, Zignol M, Cegielski PJ. "Bacteriologic monitoring of multidrug-resistant tuberculosis patients in five DOTS-Plus pilot projects" *Int J Tuberc Lung Dis*. 2011 Oct;15(10):1315-22. doi: 10.5588/ijtld.10.0221.
- Gler MT, Macalintal LE, Raymond L, Guilatco R, Quelapio MI, Tupasi TE. "Multidrug-resistant tuberculosis among previously treated patients in the Philippines." *Int J Tuberc Lung Dis*. 2011 May;15(5):652-6. doi: 10.5588/ijtld.10.0400.
- Boehme CC, Nicol MP, Nabeta P, Michael JS, Gotuzzo E, Tahirli R, Gler MT, Blakemore R, Worodria W, Gray C, Huang L, Caceres T, Mdhciyev R, Raymond L, Whitelaw A, Sagadevan K, Alexander H, Albert H, Cobelens F, Cox H, Alland D, Perkins MD. "Feasibility, diagnostic accuracy, and effectiveness of decentralized use of the Xpert MTB/RIF test for diagnosis of tuberculosis and multidrug-resistance: a multicentre implementation study." *Lancet* 2011 Apr 30; 377(9776): 1495-505.
- Quelapio MI, Mira NR, Orillaza-Chi RB, Belen V, Muñoz N, Belchez R, Egos GE, Evangelista M, Vianzon R, Tupasi TE. "Responding to the multidrug-resistant tuberculosis crisis: mainstreaming programmatic management to the Philippine National Tuberculosis Programme." *Int J Tuberc Lung Dis*. 2010 Jun;14(6):751-7.



- Sia IG, Orillaza RB, St Sauver JL, Quelapio MI, Lahr BD, Alcañeses RS, Wilson WR, Cockerill FR, Balane GI, Mangubat NV, Wengenack NL, Tupasi TE. "Tuberculosis attributed to household contacts in the Philippines." *Int J Tuberc Lung Dis.* 2010 Jan;14(1):122-5.
- Tupasi TE, Radhakrishna S, Chua JA, Mangubat NV, Guilatco R, Galipot M, Ramos G, Quelapio MI, Beltran G, Legaspi J, Vianzon RG, Lagahid J. "Significant decline in the tuberculosis burden in the Philippines ten years after initiating DOTS." *Int J Tuberc Lung Dis.* 2009 Oct;13(10):1224-30.
- Johnson JL, Hadad DJ, Dietze R, Maciel EL, Sewali B, Gitta P, Okwera A, Mugerwa RD, Alcaneses MR, Quelapio MI, Tupasi TE, Horter L, Debanne SM, Eisenach KD, Boom WH. "Shortening treatment in adults with noncavitary tuberculosis and 2-month culture conversion." *Am J RespirCrit Care Med.* 2009 Sep 15;180(6):558-63. doi: 10.1164/rccm.200904-0536OC. Epub 2009 Jun 19.
- Lönnroth K, Holtz TH, Cobelens F, Chua J, van Leth F, Tupasi T, Williams B. "Inclusion of information on risk factors, socio-economic status and health seeking in a tuberculosis prevalence survey." *Int J Tuberc Lung Dis.* 2009 Feb;13(2):171-6.
- Gler MT, Guilatco RS, Guray CV, Tupasi TE. "Screening outcomes from patients with suspected multidrug-resistant tuberculosis: lessons learned in the Philippines." *Int J Tuberc Lung Dis.* 2012 Oct;16(10):1326-30. doi: 10.5588/ijtld.12.0038. Epub 2012 Aug 3.
- Gler MT, Podewils LJ, Munez N, Galipot M, Quelapio MI, Tupasi TE. "Impact of patient and program factors on default during treatment of multidrug-resistant tuberculosis." *Int J Tuberc Lung Dis.* 2012 Jul;16(7):955-60. doi: 10.5588/ijtld.11.0502. Epub 2012 May 7.
- Gammino VM, Taylor AB, Rich ML, Bayona J, Becerra MC, Bonilla C, Gelmanova I, Hollo V, Jaramillo E, Keshavjee S, Leimane V, Mitnick CD, Quelapio MI, Rieksina V, Tupasi TE, Wells CD, Zignol M, Cegielski PJ. "Bacteriologic monitoring of multidrug-resistant tuberculosis patients in five DOTS-Plus pilot projects." *Int J Tuberc Lung Dis.* 2011 Oct;15(10):1315-22. doi: 10.5588/ijtld.10.0221.

- Gler MT, Macalintal LE, Raymond L, Guilatco R, Quelapio MI, Tupasi TE. "Multidrug-resistant tuberculosis among previously treated patients in the Philippines" *Int J Tuberc Lung Dis.* 2011 May;15(5):652-6. doi: 10.5588/ijtld.10.0400.
- Quelapio MI, Mira NR, Orillaza-Chi RB, Belen V, Muñoz N, Belchez R, Egos GE, Evangelista M, Vianzon R, Tupasi TE. "Responding to the multidrug-resistant tuberculosis crisis: mainstreaming programmatic management to the Philippine National Tuberculosis Programme." *Int J Tuberc Lung Dis.* 2010 Jun;14(6):751-7.
- Sia IG, Orillaza RB, St Sauver JL, Quelapio MI, Lahr BD, Alcañeses RS, Wilson WR, Cockerill FR, Balane GI, Mangubat NV, Wengenack NL, Tupasi TE. "Tuberculosis attributed to household contacts in the Philippines." *Int J Tuberc Lung Dis.* 2010 Jan;14(1):122-5.
- Tupasi TE, Radhakrishna S, Chua JA, Mangubat NV, Guilatco R, Galipot M, Ramos G, Quelapio MI, Beltran G, Legaspi J, Vianzon RG, Lagahid J. "Significant decline in the tuberculosis burden in the Philippines ten years after initiating DOTS." *Int J Tuberc Lung Dis.* 2009 Oct;13(10):1224-30.
- Nathanson E, Lambregts-van Weezenbeek C, Rich ML, Gupta R, Bayona J, Blöndal K, Caminero JA, Cegielski JP, Danilovits M, Espinal MA, Hollo V, Jaramillo E, Leimane V, Mitnick CD, Mukherjee JS, Nunn P, Pasechnikov A, Tupasi T, Wells C, Raviglione MC. "Multidrug-resistant tuberculosis management in resource-limited settings" *Emerg Infect Dis.* 2006 Sep;12(9):1389-97.
- Tupasi TE, Gupta R, Quelapio MI, Orillaza RB, Mira NR, Mangubat NV, Belen V, Arnisto N, Macalintal L, Arabit M, Lagahid JY, Espinal M, Floyd K. "Feasibility and cost-effectiveness of treating multidrug-resistant tuberculosis: a cohort study in the Philippines." *PLoS Med.* 2006 Sep;3(9):e352.
- Nathanson E, Gupta R, Huamani P, Leimane V, Pasechnikov AD, Tupasi TE, Vink K, Jaramillo E, Espinal MA. "Adverse events in the treatment of multidrug-resistant tuberculosis: results from the DOTS-Plus initiative." *Int J Tuberc Lung Dis.* 2004 Nov;8(11):1382-4.

- Salazar-Vergara RM, Sia IG, Tupasi TE, Alcañeses MR, Orillaza RB, Co V, Quelapio MI, Beltran G, Legaspi JD, Rostrata MP, Tecson ME, Corpuz ML. "Tuberculosis infection and disease in children living in households of Filipino patients with tuberculosis: a preliminary report." *Int J Tuberc Lung Dis.* 2003 Dec;7(12 Suppl 3):S494-500.
- Tupasi TE, Quelapio MI, Orillaza RB, Alcantara C, Mira NR, Abeleda MR, Belen VT, Arnisto NM, Rivera AB, Grimaldo ER, Derilo JO, Dimarucut W, Arabit M, Urboda D. "DOTS-Plus for multidrug-resistant tuberculosis in the Philippines: global assistance urgently needed." *Tuberculosis (Edinb).* 2003;83(1-3):52-8.
- Santos-Ocampo AS, Tupasi TE, Villanueva F, Roxas FK, Ramos CP. "Mycobacterium tuberculosis infection of a tophaceous pseudogout nodule." *J Rheumatol.* 2002 May;29(5):1093-6.
- Grimaldo ER, Tupasi TE, Rivera AB, Quelapio MI, Cardaño RC, Derilo JO, Belen VA. "Increased resistance to ciprofloxacin and ofloxacin in multidrug-resistant mycobacterium tuberculosis isolates from patients seen at a tertiary hospital in the Philippines." *Int J Tuberc Lung Dis.* 2001 Jun;5(6):546-50.
- Tupasi TE, Radhakrishna S, Co VM, Villa ML, Quelapio MI, Mangubat NV, Sarol JN, Rivera AB, Pascual ML, Reyes AC, Sarmiento A, Solon M, Solon FS, Burton L, Mantala MJ. "Bacillary disease and health seeking behavior among Filipinos with symptoms of tuberculosis: implications for control." *Int J Tuberc Lung Dis.* 2000 Dec;4(12):1126-32.
- Tupasi TE. "The power of knowledge to effect change: the 1997 Philippines nationwide tuberculosis prevalence survey." *Int J Tuberc Lung Dis.* 2000 Oct;4(10):990. No abstract available.

- Tupasi TE, Radhakrishna S, Pascual ML, Quelapio MI, Villa ML, Co VM, Sarol J, Mangubat N, Reyes AC, Sarmiento A, Solon M, Solon F, Burton L, Lofranco VS, Rostrata MP, Mantala MJ. "BCG coverage and the annual risk of tuberculosis infection over a 14-year period in the Philippines assessed from the Nationwide Prevalence Surveys." *Int J Tuberc Lung Dis.* 2000 Mar;4(3):216-22.
- Tupasi TE, Radhakrishna S, Quelapio MI, Villa ML, Pascual ML, Rivera AB, Sarmiento A, Co VM, Sarol JN, Beltran G, Legaspi JD, Mangubat NV, Reyes AC, Solon M, Solon FS, Burton L, Mantala MJ. "Tuberculosis in the urban poor settlements in the Philippines." *Int J Tuberc Lung Dis.* 2000 Jan;4(1):4-11.
- Rivera AB, Tupasi TE, Balagtas ED, Cardano RC, Baello BQ, Quelapio ID, Villa LA, Pascual LG, Co VM, Mantala MJ. "Drug-resistant tuberculosis in the Philippines." *Int J Tuberc Lung Dis.* 1999 Jul;3(7):639.
- Tupasi TE, Radhakrishna S, Rivera AB, Pascual ML, Quelapio MI, Co VM, Villa ML, Beltran G, Legaspi JD, Mangubat NV, Sarol JN Jr, Reyes AC, Sarmiento A, Solon M, Solon FS, Mantala MJ. "The 1997 Nationwide Tuberculosis Prevalence Survey in the Philippines." *Int J Tuberc Lung Dis.* 1999 Jun;3(6):471-7.
- Rivera AB, Tupasi TE, Grimaldo ER, Cardano RC, Co VM. "Rapid and improved recovery rate of Mycobacterium tuberculosis in Mycobacteria Growth Indicator Tube combined with solid Löwenstein Jensen medium." *Int J Tuberc Lung Dis.* 1997 Oct;1(5):454-9.

History

Looking Back:

TDF's History in Research, Service and Training.

The Tropical Disease Foundation (TDF) is a private, non-stock, non-profit, non-government organization founded in 1984 by a group of physicians in the Research Institute for Tropical Medicine. The founding chairman was Dr. Jesus Azurin, then the Secretary of Health. It was then that the Tropical Disease Foundation began a legacy of quality research, service, and training in major infectious diseases.

Our Vision:

Universal Access to health for economic prosperity

The mission of the TDF is national and local community development through research, training, service, and healthcare delivery in the prevention and control of infectious diseases of public health importance. The TDF's thrusts are:

1. to conduct research, training and service in infectious diseases of public health importance;
2. to enter into partnership with public and private agencies in the implementation of programs in the control of infectious diseases;
3. to enter into partnership with national and international institutions involved in research to ensure technology transfer;
4. to enter into a multi-sectoral partnership with other disciplines to ensure that cured patients are socio-economically productive;
5. to serve as a national and international training center for infectious diseases

TDF Today:

Leader in research, particularly in tuberculosis.

From 2003 to present, the Foundation has been involved in Clinical Trials which was sponsored by the Case Western University, Otsuka Pharmaceutical Development and Commercialization Inc., and the Global TB Alliance. It has also been one of the organizations involved with the US CDC's Preserving Effective TB Treatment Study (PETTS) and in terms of innovation in TB diagnostic, TDF was also involved as an evaluation site for FIND's new diagnostic method using GeneXpert.



Services

Directly Observed Treatment Short Course Clinic

The TDF clinic on TB-Directly-Observed Treatment Short-Course (DOTS) is a Philhealth accredited facility that delivers quality care service to TB patients residing nearby Makati City. This is in cooperation with the Makati City Health Department and the Center for Health Development – Metro Manila (CHD-MM) of the Department of Health.

The TDF-DOTS Clinic aims to improve the continuum of effective and quality care of TB symptomatic and TB patients, make treatment and quality services accessible to TB patients, and issue timely results for prompt initiation of treatment. TB patients who are in the working sector are accommodated in the DOTS clinic until 7:00 PM.

TDFI – Satellite Treatment Center (MDR-TB)

A Satellite Treatment Center (STC) has been installed in the TDF DOTS Clinic by Philippine Business for Social Progress (PBSP) since June 2013. This is covered in the Memorandum of Agreement (MOA) with PBSP under GFATM - New Funding Model Grant.

The STC provides the services of trained clinic nurses to cater to the needs of patients. MDR-TB and ancillary drugs are provided in the clinic. Patient enablers are provided to support the transportation requirement of patients visiting the clinic.



TDF Laboratory

The TDF, as a leader in TB research, has an enhanced Biosafety Level 2 facility (BSL-2) laboratory supporting its research activities. TDF laboratory provides quality assured diagnostic services. The staff were trained at international research institution such as:

- The Korean Institute of Tuberculosis,
- Universidad Peruana Cayetano Heredia
- California Department of Public Health
- Harvard School of Public Health

The TDF laboratory regularly participates in External Quality Assurance (EQA) provided by the National TB Program thru the City Health Department of Makati and the Bangkok National TB Reference Laboratory for microscopy test using ZN and Auramine O respectively. In addition, the TDF laboratory has participated in the EQA provided by Integrated Quality Laboratory Services (IQLS), based in Lyon, France since December 2011. The IQLS provides quality assurance for AFB smear microscopy using Auramine O, TB culture identification, and DST on MGIT both for 1st and 2nd line drugs.

As seen in the table below, TDF's laboratory has performed successfully in the standard diagnostic testing for TB, confirming its adherence to international standards.

TEST	Round 5 (September 2013- January 2014)	Round 6 (May - July 2014)
Microscopy (Fluorescent)	87.50%	92.50%
TB culture identification	100%	100%
DST- 1st Line Drugs (MGIT)	100%	100%
DST- 2nd Line Drugs	100%	100%
Average	96.88%	98.13%

Advocacy

TDF Joins the World TB Day Celebration

The TDF is a leading light in the fight against TB in the country with the depth of its involvement not just in the detection and treatment of the disease, but just as importantly, with the number of researches and advocacy activities it has conducted. One of the key factors in eradicating TB as a public health threat in the Philippines is its prevention. With this goal in mind, TDF joined forces with its partners to enhance collaborative efforts in educating people about TB control as part of the World TB Day Celebration on March 23 at the Unilab Bayanihan Center. This year's theme, "STOP TB: Makialam, Tara Na!", enjoins all sectors to actively participate in ensuring that every Filipino with likely symptoms and signs of tuberculosis will seek proper medical care, receive quality care and get treated. Emphasis was placed on getting everyone on board to reach the thousands of Filipinos who do not have the access to quality TB services or are stigmatized or are too shy to go to their local health centers for consultation.



World TB Day TDF Participants with former TDF Staff

Researches

Counseling of Leprosy Patients

to Promote Stigma Reduction and Increase in Contact Tracing

In 2013, the TDF conducted a study to determine the demography of 100 patients enrolled at the Jose Reyes Memorial Medical Center, a dermatological training institution in Metro Manila. The main objective of the study was to initiate contact tracing among household members of these patients by conducting health education to increase their knowledge and correct misperceptions of the disease. However, contact tracing of household members proved difficult. In spite of provisions for transportation allowance, only 10% of the patients brought their household members to be examined. The others could not get off from work or school to be examined. Nearly 50% of patients did not want the other members of their family to know their affliction and had kept it secret from them.

Given the findings from the earlier study, another project was implemented in 2014 entitled “Malinis na Kutis Campaign”. The goal of this study was to look at a community with high prevalence of leprosy; and to teach and train the barangay health workers, public school teachers, and school nurses in the area on signs and symptoms of skin diseases including leprosy. The training would enable them to identify these children with skin problems to be examined by TDF and other dermatologists on a weekly basis.

The study was implemented in Valenzuela City, Metro Manila, in collaboration with the City Health Officer and his leprosy coordinator, the local Department of Education, and volunteer dermatologists from the Philippine Dermatological Society.



TDF's Dr. Roberta Romero (center, sitting) together with volunteer dermatologists and the Valenzuela City Training Participants

Identifying needs of Street Based Sex Workers in the Prevention of HIV and STI

Quezon City has been identified as having the highest number of reported Human Immunodeficiency Virus (HIV) cases under the surveillance sites in the last several years. The population of street based sex workers (SBSWs) was estimated at 5, 556 in 2010 and 2,382 for the first quarter of 2011 according to National Epidemiology Center (NEC). The Quezon City STD/AIDS Council (QCSAC) passed an ordinance requiring operators and managers of establishments known to front for prostitution to undergo regular testing at the Social Hygiene Clinics. Given the potential for HIV and Sexually Transmitted Infection (STI) transmission, there are no preventive programs for SBSWs have been established.

It was under this setting that the TDF funded the project “Operationalization of the Informal Network Mechanism for Street-based Sex Workers in Relation to Human Immunodeficiency Virus (HIV) and Other Sexually Transmitted Infection (STIs) Prevention Program in the Philippines Intervention for Street-based Sex Workers” otherwise known as Project WELL (acronym for Winning Energies for Long Life). The project aims to identify the needs of SBSWs on the prevention of HIV and STI infection and to develop effective strategies to prevent these infections. The project was implemented by the Dr. Jovanni Templonuevo.



Evaluation of Reasons for Patients' Loss To Follow Up During MDR TB Treatment In The Philippines

The Philippines is one of the 22 high tuberculosis (TB) burden countries, as well as, having one of the highest incidents of multidrug-resistant TB (MDR-TB). Drug resistance has been detected in all regions, with a total of 12,000 cases recorded at the national level. Despite significant progress made in the programmatic management of drug-resistant TB (PMDT) and activities in case holding, the proportion of patients successfully completing treatment decreased from 73% in 2005 to 56% in 2009. Despite a system of enablers implemented by the PMDT, which include transportation allowance, loss to follow up increased from 13% to 33% in the same time period.

Clearly, reduction of the number of patients lost to follow up is an important factor in the push to eradicate the disease. However, evidence-based data on the reasons for loss-to-follow-up in the Philippines is very limited. Most of the information is gleaned from health care providers' views/experience rather than from patient data. This study was aimed at a better understanding of the patients' perspective in order to design effective interventions for improved treatment adherence.

To this end, the TDF, sponsored by the US Agency for International Development (USAID) to do the operational research through the Philippine Business for Social Progress – IMPACT and with research oversight provided by the Lung Center for the Philippines embarked on a study entitled "Evaluation Of Reasons For Patients' Loss To Follow Up During MDR-TB Treatment In The Philippines". The study aimed to:

1. Determine individual, clinical, interpersonal, health-setting, and socio-economic factors associated with loss to follow up from MDR-TB treatment in the Philippines;
2. Describe patient views on the types and delivery-mode of interventions that would have an impact on reducing MDR-TB treatment loss to follow-up.



To achieve these objectives, a retrospective case-control study of patients on MDR-TB treatment was conducted. Study source population included adults who are confirmed MDR or RIF-resistant patients with category IV treatment. Patients that met the definition of “case” and returned after loss to follow up at the time of interview were eligible for inclusion in the study as “cases”. Controls are defined as patients from the source population that are still continuing MDR TB treatment as of January 1, 2014 or with treatment outcome of cured, completed, or failed.

Prior to research implementation, training for field personnel in a form of a workshop was conducted by Dr. Joan Mangan and Dr. Ekaterina Kurbatova of the US Centers for Disease Control (CDC) to ensure that interviewers had the skills to extract the required data. The training was held at the TDF Training Room in Makati City.



TDF Staff with US-CDC Ms. Joan Mangan

Evaluation of Lipoarabinomannan Content in Sputum, Blood, Stool and Urine Specimens from TB Patients Using LAM Detection System

This is one of the ongoing diagnostic evaluation study sponsored by the Otsuka Pharmaceutical Development and Commercialization. The study started last May 2013 and expected to end on first quarter of 2015.

Evaluation of the LAM-ELISA test for the detection of Mycobacterium Tuberculosis in Sputum Specimens of Adult Pulmonary TB suspects: Comparison with AFB smear microscopy, Lowenstein-Jensen medium, the BACTEC MGIT 960 culture, and Xpert MTB/RIF

In Nov 4, 2013, the TDF Laboratory embarked on a Stage 3 study entitled the "Evaluation of the LAM-ELISA test for the detection of Mycobacterium Tuberculosis in Sputum Specimens of Adult Pulmonary TB suspects: Comparison with AFB smear microscopy, Lowenstein-Jensen medium, the BACTEC MGIT 960 culture, and Xpert MTB/RIF" sponsored by Otsuka (Philippines) Pharmaceutical Inc.

The study was designed to look into the performance characteristics of LAM-ELISA compared with AFB direct smear and culture as well as in comparison to the GeneXpert. TDF was designated as the Central Laboratory for the research.

STAND (Shortening Treatment by Advancing Novel Drugs) Trial

A Phase 3 clinical trial sponsored by Global Alliance for New Tb Drugs, the trial will use PA-824 in combination with PZA and Moxifloxacin for both drug-susceptible (DS) and drug-resistant (DR) TB in shortened durations (four and six months for the two categories, respectively).

The study anticipated that 126 subjects (randomized) from four sites in the Philippines will join this study. TDF as one of the four sites in the Philippines was assigned to enroll 44 subjects. Globally, the study duration of the trial is expected to be approximately four years.

Study 213: Phase III multicenter, randomized, double-blind, stratified placebo-controlled trial conducted globally in 2 parallel groups tests the safety and efficacy of Delamanid, an investigational medicinal product for the treatment of Multi-Drug Resistant Tuberculosis

This is an on-going investigational project conducted with Otsuka Pharmaceutical on studying the safety and efficacy of Delamanid (OPC-67683) in combination with an optimized background regimen (OBR) versus placebo with OBR during a 6-month intensive phase of Multidrug Resistant Tuberculosis (MDR-TB) treatment.

There are a total of 21 randomized subjects for TDF and 17 subjects were on-going treatment and study procedures. Two subjects have completed treatment while four patients are on Lost to follow-up status.

Recruitment officially stopped last September 30, 2013.

MSD Trial (OnceMRK)

A Phase 3 clinical trial sponsored by Merck, Sharp and Dohme Corporation. The study is to evaluate the safety and efficacy of reformulated raltegravir 1200 mg q.d. versus raltegravir 400 mg b.i.d, each and with combination therapy with TRUVADA in ART-naive patients.

Subjects will be attended to at the TDF office in the Medical Plaza Building. Eight patients were originally allocated for the TDF clinical trial site, however, an amendment was done to increase subject recruitment to 16 pending completion of enrollment of eight patients. The investigators' meeting was held in Vienna , Austria last May 15 to 16, 2014. Dr. CarmenchuEchiverrie and Carlo Caro attended the meetings.

The study duration expected to last until 2017.

Trainings

Workshop on Strengthening Programmatic Management of Drug-Resistant (PMDT) Referral System and Case Holding Mechanism

Representatives from the TDF-DOTS Clinic attended the Workshop on Strengthening PMDT Referral System and Case Holding Mechanism held on January 23 – 24, 2014 at the Crown Regency Hotel in Makati. The workshop was designed to help the PMDT in improving case detection and treatment of all TB cases including MDR-TB, as well as improving health policies and systems that is supportive to the National TB Control Program. TDF's presence in the workshop is a reflection of its active support and involvement in the PMDT program implementation.



Clinical Staff Providing Quality Services in the PPMD

In order to facilitate the achievement of PMDT goals, the workshop aimed to:

1. Determine the challenges and gaps in PMDT referral system in the province;
2. Determine the challenges and gaps in PMDT case holding mechanisms at all levels;
3. Create a local plan to improve PMDT referral system and case holding mechanism;
4. Create activities to address the gaps and challenges in referral system and case holding mechanisms

The workshop was attended by representatives from the Philippine Business for Social Progress-Innovations and Multi-sectoral Partnerships to Achieve Control of Tuberculosis (PBSP-IMPACT) , the National TB Program (NTP) Core Team from the Center for Health Development (CHD), Provincial/Municipal/City Health Offices, DOH-NTP Central Office, LCP-PMDT Program Management Office, PMDT Treatment Centers and Satellite Treatment Centers, and the Philippine Business for Social Progress-GF.

US-CDC Training Workshop for Loss To Follow Up (LTFU)

In its continued fight to eradicate tuberculosis in the country, the TDF has embarked on a research project that delves on reasons why patients discontinue Multi-Drug Resistant TB treatment. Entitled "Evaluation of reasons for patients' loss to follow up (LTFU) during MDR TB treatment in the Philippines" the project is sponsored by the U.S. Agency for International Development (USAID) Philippines through the IMPACT project. The study aims to determine individual, clinical, interpersonal, health-setting, and socio-economic factors associated with LTFU from MDR TB treatment in the Philippines as well as to describe patient views on the types and delivery-mode of interventions that would have an impact on reducing MDR-TB treatment loss to follow up.

To gather the required data, field personnel will seek out identified respondents and conduct interviews. In order to ensure that the interviewers are properly equipped with the right skills to extract data, an orientation workshop was conducted by Dr. Joan Mangan and Dr. Ekaterina Kurbatova of the US Centers for Disease Control (CDC).

The three-day workshop conducted on April 1 – 3, 2014 tackled various topics needed for the study such as:

- interview skills in a research setting
- familiarization with the various forms
- interview scripts to be used when in the field
- dealing with confidentiality and privacy of the patients
- how to properly obtain informed consent
- extraction of data from patient chart
- data management



Training of Staff with CDC Consultants

Technical Assistance

As a leading public health foundation specializing in treating infectious diseases of public health importance, the TDF gives members of its staff various opportunities to share their expertise in their field.

In line with this, the TDF's Laboratory Manager Ms. Claudette Guray lectured at the [Philippine Advanced Bio-risk Officers' Training (Batch 2) Personal Protective Equipment] held at the Harold's Hotel in Cebu City on [January 16 – 17, 2014]. The training is part of the Philippine Advanced Biorisk Officer Training Program (ABOT) sponsored by the National Institutes of Health, University of the Philippines Manila and the US Department of State Biosecurity Engagement Program.



ABOT Training Participants using Respirator



ABOT participants with Ms Claudette Guray

Capacity Building

The TDF staff participated in various lectures and symposia on a wide range of specializations. The following are the list of the training/conferences that the TDF staff has participated:

CABANATAN, MA. LOURDES O. (Finance)

Taxation of Employee Benefits and Expanded Withholding Tax

Aug. 14, 2013 / PICPA Bldg., Shaw Blvd, Mandaluyong City

BELEN, JOVITA P. (Finance) / **IFRS for SME'S**

Aug. 15-16, 2013 / PICPA Bldg., Shaw Blvd, Mandaluyong City

VETO, RHOLINE GEM MARTIN S. (Clinic) / **Philcat's 20th Convention**

Aug. 15-16, 2013 / Crowne Plaza Galleria

Manila, Ortigas Center, Mandaluyong City

JOSON, EVELYN S. (IT) / **Web Design**

September 14-15, 2013/ Inventive Media, Makati City

PUNO, PREDENTOR JR. M. / MARCELINO, ROS JOACHIM S.

CORPUZ, ELIZABETH KAYE A. / CRUZ, DON RUPERT H. / JAVIER, GINA M.

TURTUSION, JOSEPH HENRY B. / BERNARDINO, MARK LESTER M.

DEBLOIS, MAITA B. / LEPITEN, CHRISTIAN R. (LAB)

Good Clinical Practice Training

Oct. 23, 2013 / Otsuka Manila Research Center, Makati City

COCAL, CONSTANTINO JR. P. / VALDEZ, MAYCON V. (Clinic)

Training for New PMDT Staff

Nov. 11-22, 2013 / Lung Center of the Philippines, Quezon City

GERONIMO, ANTHONY A. (Lab)

HIV Proficiency Testing for Medical Technologists

Nov. 11-15, 2013 / Grand Opera Hotel, Manila

CORPUZ, ELIZABETH KAYE A. (Lab) / **GeneXpert Lecture**

Nov. 27, 2013 / Crowne Plaza Galleria Manila, Ortigas Center, Mandaluyong City

VETO, RHOLINE GEM MARTIN S. (Clinic)
Provider Initiated Counselling and Testing
Nov. 26 - 29, 2013 / Bayview Park Hotel, Ermita, Manila

VALDEZ, MAYCON V. (Clinic)
HIV Provider Initiated Counselling and Testing
Nov. 26 - Dec. 29, 2013 / Manila Grand Opera Hotel, Manila

JAVIER, GINA M. / GOME CERIA, MARJON / GUDA, GLAIZA ERIKA B. (Lab)
Study 213 Manual Training Biosafety Officers Training Course
Jan. 13, 2014 / Otsuka Manila Research Center

GURAY, CLAUDETTE V. (Lab) / **Second Training Program
for Advanced Biosafety Officer's Training (ABOT)**
Jan. 14-16, 2014 / Cebu City

VETO, RHOLINE GEM MARTIN S. (Clinic)
IMPACT Project Implementation Review
Jan. 13-14, 2014 / Crown Regency, Makati City

VETO, RHOLINE GEM MARTIN S. (Clinic)
Workshop on Strengthening PMDT Referral System and Case Holding
Jan. 23-24, 2014 / Crown Regency, Makati City

VETO, RHOLINE GEM MARTIN S. (Clinic)
DOH IDPCD Program Implementation Review
Mar. 17-18, 2014 / Widus Hotel Clark Pampanga

GOME CERIA, MARJON / GUDA, GLAIZA ERIKA B. (Lab)
GCP Training / Mar. 21, 2014 / Parexel Makati Office

VETO, RHOLINE GEM MARTIN S. / BALIWAGAN, MA. BEGONIA R. / BALANE, GLENN I.
ANONAS, MARCO / GABATIN, MIKAELA ANGELA A. / ROMANO, FREDDY E.
PEREÑA, MHON ADRIAN G. / BAYLON, MERCY / MALLARI, PAULA DANELLA
AMBUNAN, JAY-R / ALIAZAS, JOHN PAUL SAZAILA (Clinic)
LTFU Training Workshop / Apr. 1-3, 2014 / TDF 5/F Makati City

BALIWAGAN, MARIA BEGONIA R. (Clinic) / **GCP Training**
Mar. 21, 2014 / Parexel Makati Office

CABANATAN, MA. LOURDES O. (Finance)
How to Reduce Your Tax Legally and Ethically
May 16, 2014 / RCBC Makati City

The Organization

Board of Trustees

Chairman

Dr. Jose Conrado Benitez

Members:

Dr. Thelma E. Tupasi

Dr. Florina R. Kaluag

Dr. Claver P. Ramos

Dr. Florentino S. Solon

Arch. Pablo R. Antonio, Jr.

Mr. Vitaliano N. Nañagas II

Justice Manuel M. Lazaro

Dr. Ruben Encarnacion

Executive Officers

President

Dr. Thelma E. Tupasi

Chief Executive Officer

Dr. Roberta C. Romero

Director of Administration

Ms. Leilani C. Naval

Chief Financial Officer

Ms. Lorna M. David

The Organization

Management Staff

Finance Manager	Ms. Jovita P. Belen
Laboratory Manager	Ms. Claudette V. Guray
Clinic Physician	Dr. Rholine Gem Martin S. Veto
Head Nurse	Ms. Ma. Begonia R. Baliwagan
Human Resources Officer	Ms. Marita I. Nucum
General Services Manager	Ms. Marilou B. Ortiz
IT Officer	Ms. Evelyn S. Joson

