2013 ANNUAL REPORT

Tropical
Disease
Foundation Inc.

ABOUT TDF

The Tropical Disease Foundation, Inc. (TDF) is a non-stock, non-profit, and non-government science foundation it continues to bolster its advocacy response to diminish the prevalence of Tuberculosis (TB) in the Philippines.

The TDF Directly Observed Treatment Short-Course (DOTS) Clinic was included as a Satellite Treatment Centre in collaboration with the Philippine Business for Social Progress under the auspices of the National TB Program. In addition to basic DOTS, patients with drug-resistant TB are provided services through the Programmatic Management of Drug-Resistant Tuberculosis (PMDT).

Clinical Trials on a new drug for TB, Delamanid, have been undertaken to test efficacy and safety for Multi-Drug Resistant TB (MDR-TB) in combination with optimized background regimen (OBR).

Projects in collaboration with Otsuka Pharmaceuticals are well underway to improve TB detection and monitoring of patients.

The foundation has also started contact tracing of leprosy patients in the urban area, expanding its scope of action to combat against prevailing infectious diseases.

The highpoint of the year 2012 – 2013 for TDF was the acknowledgment given by the international community to its Founding President, Dr. Thelma E.Tupasi, bestowing upon her an honorary membership in the International Union Against Tuberculosis and Lung Disease (IUATLD). This award was given in acknowledgement of the significant research programs and health care service delivery in the control of TB and other lung diseases.

Our Mission & Vision

The Tropical Disease Foudation, Inc. (TDF) believes in equitable, universal access to health for economic prosperity. Its programs and projects encourage participation from the national and local communities through its research, training, and health care service advocacies.

Our Thrusts

TDF's main direction is situated in:

Conducting research, training and service in infectious diseases of public health importance	**Entering into partnership with public and private agencies in the implementation of programs in the control of infectious diseases**	**Entering into partnership with national and international institutions involved in research to ensure technology transfer**	**Entering into a multi-sector partnership with other disciplines to ensure that cured patients are socio-economically productive**	**Serving as a national and international training center for infectious diseases**

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MESSAGE

We are grateful to have been blessed with another year to serve our fellow Filipinos. Recently, the World Health Organization (WHO) has reported that the number of Tuberculosis (TB) cases in the Philippines has regressed in the last 21 years and the Tropical Disease Foundation Inc. (TDF) is determined to be of assistance in keeping with the Millennium Development Goal of reversing TB incidence by 2015.

For 29 years, TDF has been committed to provide quality health care service for Filipinos afflicted with TB, encouraging both the public and the private sectors to contribute their knowledge and resources in advancing the study and management of TB treatment and prevention in the country. Since 1984, TDF has established itself as a foundation that delivers significant medical research for the benefit of our community. We are thankful for the support we have received through the years as we witness the development of new technologies and medical procedures in treating infectious diseases.

This year's Annual Report presents our current activities in response to abating TB prevalence, as well as new research project initiatives for other infectious diseases such as leprosy. Together with our international and local partners, TDF looks forward in bringing to light new solutions to ease the conditions of people with diseases, resulting to a healthier nation.

Thelma E. Tupasi

DR. THELMA TUPASI
Director of Research and Founder

PROJECTS FOR 2012 – 2013

As the Tropical Disease Foundation Inc. (TDF) continues to take on the challenges in delivering public health care in the Philippines, its continues to be involved in research, service, and training to remain astride with current needs while keeping up with changes and trends in practicing health work. Here are the projects that TDF has been involved with in the past year.

TDF serves local community through clinic and laboratory services

In cooperation with the Makati City Health Department and the Center for Health Development – Metro Manila (CHD-MM) of the Department of Health, the operation of the TDF Directly-Observed Treatment Short-course (DOTS) clinic aims to prevent and eliminate the spread of TB. Involving the private sector in Public-Private Mix DOTS (PPMD) is an important strategy to ensure treatment adherence.

The TDF-DOTS Clinic caters to patients who live or work within a two-kilometer radius, whether they are walk-in patients or referrals from physicians of nearby hospitals such as the Makati Medical Center (MMC), diagnostic clinics, schools, and business establishments. Trained medical and laboratory staff at TDF provide proper care and treatment to patients.

To accommodate the working sector, the clinic operates from 7:00 in the morning until 7:00 in the evening. TB kits (drugs) and lab supplies come from Department of Health through the Makati City Health Department. AFB sputum smear tests for TB suspects are facilitated, while treatment is initiated for patients whose sputum is tested positive for TB bacteria. Patients who are smear negative but X-ray positive pulmonary TB are referred to the TB Diagnostic Committee (TBDC) of the Makati City Health Department, who then recommends which patients should undergo treatment.

The TDF DOTS Clinic has been engaged by the Philippine Business for Social Progress (PBSP) as a Satellite Treatment Center for PMDT since June 2013. Patients are now provided with free medicines and free laboratory tests provided by the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM).

The TDF Laboratory

Delivery of high-quality laboratory services is a critical component to the overall mission of providing first-rate diagnostic services. The research and training of our staff primarily focus on tuberculosis (TB), pan susceptible and drug-resistant. To ensure top-quality, efficient and cost-effective results laboratory staff have been trained at international research institutions such as the Korean Institute of Tuberculosis, Universidad Peruana Cayetano Heredia, and the Harvard School of Public Health. The laboratory is capable of performing a wide array of diagnostic and clinical services and assessments.

Sputum Microscopy

Method : Direct Sputum Smear Microscopy (DSSM) by Ziehl-Nielsen Method
Direct sputum microscopy by Ziehl-Nielsen method is done in accordance with the guideline of National TB Program (NTP). The quality of this approach has been validated by the National Tuberculosis Reference Laboratory (NTRL) for DSSM.

Immunoflourescence by Auramine-O microscopy, allows for a larger field of 200x or 450x that of DSSM and gives a more rapid result. Furthermore, a technician can read double the number of slides. Quality assurance is provided by the Supranational Reference Laboratory (SRL), Bureau of Tuberculosis, Department of Disease Control, MOPH Thailand.

TB Culture

Lowenstein-Jensen Method is a traditional mycobacterial culture performed on solid medium. Cultures are examined for growth weekly for eight (8) consecutive weeks. Confirmation of growth is prepared by examining the presence of AFB in the smear. Further, all confirmed samples are identified using MPB64-ICA assay.

Mycobacteria Growth Indicator Tube (MGIT) is intended for the detection and recovery of mycobacteria from sputum specimens utilizing a modified Middlebrook 7H9 medium supplemented with a mixture of oleic acid, albumin, dextrose and catalase (OADC) enrichment and PANTA antibiotic mixture. This supplement allows for rapid isolation of M. tuberculosis using a fluorescence quenching-based oxygen sensor. An automated system MGIT 960, performs readings within the device and results are printed as early as 10 days if positive or negative after 42 days.

Culture Identification

An immunochromatographic assay for rapid identification of M. tuberculosis complex using anti-MPB64 monoclonal antibodies on both solid and liquid cultures can differentiate M. tuberculosis complex from mycobacteria other than Tuberculosis (MOTT) in as fast as 15 minutes. Available kits include BD MGIT™ TBc Identification Test (TBc ID) and SD Bioline SD® MPT64TB Ag Kit.

Drug Susceptibility Test (DST)

Disc Elution – Proportion Method, 7H10 Medium, assesses the inhibition of M. tuberculosis growth in the presence of antibiotics to distinguish between susceptible and resistant strains. This method is used to test resistance to Streptomycin, Isoniazid, Rifampicin, Ethambutol, and Pyrazinamide drugs. Antibiotics results are typically available in four (4) weeks from initialization. Quality assurance testing for this method has been provided by the Korean Institute of Tuberculosis, WHO Collaborating Centre for Research, Training and Reference Laboratory on Tuberculosis, Republic of Korea since 2004.

MGIT 960 system by the US Food and Drug Administration (FDA) allows for the detection of drug resistance to Streptomycin, Isoniazid, Rifampicin, Ethambutol, and Pyrazinamide drugs. In addition, it also uses second-line drugs which are levofloxacin, amikacin, capreomycin , kanamycin, ofloxacin, moxifloxacin.

PCR – Based Assays

GenoType MTBDRplus® Line Probe Assay is a DNA STRIP/PCR based technology that permits molecular genetic identification of the M. tuberculosis complex and its resistance to rifampicin and isoniazid directly from AFB smear positive pulmonary sample as well as from cultivated cultures. Test results are regularly available three (3) days from setup.

Xpert® MTB/RIF, an automated, cartridge-based nucleic amplification assay for detection of M. tuberculosis complex and resistance to rifampicin. Provides unprecedented sensitivity for detecting MTB even in smear negative, culture positive specimens. Requiring no instrumentation other than the GeneXpert® System, results are often available within two (2) hours using smear positive and negative sputum samples.

External Quality Assurance (EQA)

TDF Laboratory has been participating in external quality assurance program provided by Integrated Quality Laboratory Services (IQLS) since December 2011. Two (2) surveys are to be conducted in a year until 2016. IQLS contracted German Reference Laboratory for Mycobacteria of Borstel to prepare the samples for the survey. The laboratory evaluates samples according to a specific manual of operations. Cultures that are found to be positive for Mycobacterium tuberculosis complex, a drug susceptibility test (DST) is performed on different anti-TB drugs: Streptomycin, Isoniazid, Rifampicin, Ethambutol, Pyrazinamide, Levofloxacin, Amikacin, Moxifloxacin, Ofloxacin, Capreomycin, and Kanamycin.

The table below shows the average scores obtained by the laboratory on the four (4) surveys:

Area	Average Scores of Survey 1-4 Dec 13, 2011- Jun 27, 2013
Microscopy (Auramine-O stain)hh	87.50%
Identification	100.00%
DST- 1st Line Drugs	98.66%
DST- 2nd Line Drugs	100.00%
Repeatability- Identification	100.00%*
Repeatability- DST	100.00%*

*Surveys 1 and 4 did not evaluate Repeatability factors

Investigational study using LAM-specific antibodies to detect Mycobacterium tuberculosis in Sputum

Feedback of LAM2 results to health center physicians taking part in the LAM 2 research study, 2012.

In 2011, an investigational study using LAM-specific antibodies was conducted with Otsuka Pharmaceuticals to detect Mycobacterium tuberculosis in sputum. It is the first stage of an exploratory study of a new diagnostic TB test using lipoarabinomannan (LAM), a component of the cell wall of Mycobacterium tuberculosis. Lipoarabinomannan (LAM) is a major component of MTB, comprising up to 1.5% of total bacterial weight. The project was designed as a point- of-care test, combining expertise with LAM and immunochromatographic tests which would determine LAM's placement in sputum specimens with pulmonary TB.

Phase II of the study is currently being conducted in relation to the optimal sputum processing procedure for better LAM detection of patients with tuberculosis, whether LAM is detected in the blood, urine, and stool specimens of immunocompetent patients with untreated TB. Phase II of the study will evaluate whether LAM detection system can be used for estimating the bacterial load in sputum specimens from smear positive patients during anti-TB treatment.
Currently, there are no available tools to monitor drug efficacy during treatment. Time to liquid culture positivity has been proposed as a substitute in early bactericidal activity studies of anti-tuberculosis agents. However, culture takes several weeks to obtain results and therefore, can't be used for purpose of monitoring the drug efficacy. Rapid methods to reliably quantify response to anti-TB drug efficacy are desirable. If it is confirmed that the level of LAM is associating with the bacillus load in sputum specimen, the test potentially can be used for a tool for drug efficacy monitoring.

Phase III of the study using LAM-specific antibodies to detect Mycobacterium tuberculosis in Sputum

Although Phase II of the LAM study is yet to be completed, preparations for LAM Phase III are already underway. The title of LAM Phase III is **"Evaluation of 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."** The main objective for LAM Phase III is to determine the sensitivity and specificity of the LAM-ELISA test as compared to the currently available TB diagnostics in the market.

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

Another investigational project was 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. TDF is approximately among 18 sites globally involved in the study, with approximately 390 patients to be randomized.
The total duration of the trial is estimated to be approximately 45 months from first patient enrolled in any participating site in any country until last patient completion of the Post-treatment follow-up period in any participating trial site in any country.
An Investigator's Meeting held last 28-29 August 2012 in Makati Shangri-La Hotel kicked-off the Study 213 in the country, with the TDF site officially starting in the conduct of the Site Initiation Visit on 26-28 September 2012. The site screened its first patient on 30 October 2012, who subsequently became the site's first randomized subject on. By July 2013, the site has screened 21 subjects who provided consent, 14 of whom were randomized.

As of June 2013, 13 subjects were on-going treatment and study procedures. Future plans for the study include the continuation of active case-finding to provide treatment for MDR-TB patients in neighboring cities without easily-accessible Programmatic Management of MDR-TB (PMDT) coverage. With the reintegration of TDFI into PMDT on July 2013 through the TDFI Satellite Treatment Center (STC), case finding was improved, with the STC contributing a patient to the study. Members of the Clinical staff are continuing to come up with strategies to better improve subject participation in the study.

Orientation for the Study 213 project on the Delamanid drug for MDR-TB patients.

A TDF staff orients MDR-TB patients regarding their 6-month treatment on Delamanid.

Leprosy Patients at Jose Reyes Memorial Medical Center

Although the Philippines has achieved its leprosy elimination goal (<1/10,000) at the beginning of 2000, the incidence has remained constant in the last 12 years. More than 2,000 new cases are reported every year with children below 15 years of age coming down with the disease. This is the highest in the Asia Pacific region. Furthermore, the epidemiologic data show a ratio of multibacillary to paucibacillary cases at 9:1, again the highest in the region.

In 2013, 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. Our findings after a four month study showed that only 65% of patients came from Metro Manila, the rest (35%) were from the provinces as far away as Romblon and the Mountain Province. Two reasons were basically given: peripheral health units were unable to diagnose the disease and so were referred to Jose Reyes, or once the patients learned of their disease, they chose to travel away from home for fear of being rejected by family and neighbors.

Most of these patients were severely infected and eight out ten were males below 50 years of age. The disease seems to strike young men at the height of their productivity. A look at their economic situation showed that most of them live below the poverty level.

Contact tracing of household members proved difficult. In spite a provision for transportation allowance, only 10% brought their household members to be examined. The others could not get off from work or school to be examined. Of the members examined, a young boy was found to have an early form of leprosy. Nearly 50% of patients did not want the other members of their family to know their affliction and had kept it secret from them. We were even threatened bodily harm if we tried to contact them.

Given these results, the next project involves looking at a community with a high prevalence of leprosy and to teach and train barangay health workers, school teachers and school nurses on signs and symptoms of skin diseases including leprosy, identifying these children with skin problems to be examined by us and other dermatologists on a weekly basis. This will commence in January 2014 in Valenzuela City, in collaboration with the City Health Officer and his leprosy coordinator, the DepEd and volunteer dermatologists from the Philippine Dermatological Society.

Barangay Health Officials at the Tumana Health Center

CAPACITY BUILDING AND TECHNICAL ASSISTANCE

For years, TDF has been evolving with the changing trends in global health care through building capacity of new skills, knowledge and technology, enabling TDF staff to be more effective health practitioners and development workers. As a leading public health foundation specializing in treating infectious diseases, TDF staff is given opportunities to share their expertise with others in the field.

In 2012-2013, the TDF staff participated in various lectures and symposia on a wide range of specializations. The following are the list of the training/conferences the TDF staff has participated in or conducted with partner organizations:

No.	Dept.	Training Details		
		Title of Seminar	Inclusive Date/s	Venue
01	Laboratory	Short Course on Building Design and Engineering Approaches to Airborne Infection Control	July 30-August 10, 2012	Harvard School of Public Health, USA
02	Clinic	Philcat Convention	Aug. 16-17, 2012	Crowne Plaza
03	Clinic	Philcat Convention	Aug. 16-17, 2012	Crowne Plaza
04	Clinic	Philcat Convention	Aug. 16-17, 2012	Crowne Plaza
05	Laboratory	2012 Advance Biosafety Officer's Training Graduate Reunion	Aug. 29-31, 2012	Century Park Hotel, Manila
06	Clinic	GCP Training	Sept. 6, 2012	Royal Cargo
07	Clinic	GCP Training	Sept. 6, 2012	Royal Cargo
08	Clinic	GCP Training	Sept. 6, 2012	Royal Cargo
09	Clinic	GCP Training	Sept. 6, 2012	Royal Cargo
10	Clinic	GCP Training	Sept. 6, 2012	Royal Cargo
11	Laboratory	HIV License Renewal Training	Sept. 13, 2012	San Lazaro Hospital
12	IT	Real Impact for Better Gov't: Business Continuity and Disaster Management	Sept. 12, 2012	New World Hotel, Makati City
13	Laboratory: Study 213	Training for Sputum Collectors Study 213	Sept. 21, 2012	TDF, 5th Flr.
14	Laboratory: Study 213	GCLP Lab Training	Sept. 28, 2012	TDF, 5th Flr.
15	Laboratory: Study 213	Laboratory Manual Version 2 Training	Oct. 25, 2012	TDF, 5th Flr.
16	Clinic	PSMID Convention	Nov. 28, 2012	Crowne Plaza Galleria
17	Clinic	Proper Handling, IATA Basic Air Cargo Training	Dec. 4, 2012	PAREXEL Clinical Research (Philippines) LTD. Corp.
18	Clinic	HIV Training	Jan. 8-12, 2013	

No.	Dept.	Training Details		
		Title of Seminar	Inclusive Date/s	Venue
19	Laboratory: Study 213	2nd Line DST Training	Jan. 15, 2013	TDF, 5th Flr.
20	Laboratory: Study 213	Laboratory Supplies Management	Jan. 16, 2013	TDF, 5th Flr.
21	Finance	PICPA Seminar: : IFRS for SMEs	January 23-24, 2013	PICPA Building Shaw Boulevard, Mandaluyong City
22	Laboratory	2013 Compliance Training for the Safe Transport of Division 6.2 Infectious Substances, Biological Specimens, Dry Ice & Related Materials	January 30, 2013	On-Line Training
23	Laboratory: Study 213	Laboratory Result Flowchart	Feb. 03, 2013	TDF, 5th Flr.
24	Laboratory: Study 213	Essential Laboratory Sections/ New Staff Training	Feb. 05, 2103	TDF, 5th Flr.
25	Laboratory: Study 213	Central Laboratory Instructions Manual Training	Feb. 20, 2013	TDF, 5th Flr.
26	Clinic	World TB Day	March 21, 2013	United Laboratories, Bayan
27	Laboratory: Study 213	Receipt of Sputum Samples Training	April 3, 2013	TDF, 5th Flr.
28	Clinic	Leprosy Treatment and Management Training	April 3-4, 2013	RITM, Alabang, Muntinlupa City
29	Clinic	GCP Training	April 5, 2013	Makati Med Center, Makati City
30	Clinic	PMDT Training	April 8-19, 2013	Manila Grand Opera Hotel, Manila
31	Clinic	PMDT Training	April 8-19, 2013	Manila Grand Opera Hotel, Manila
32	Laboratory	Basic NTP Microscopy Training for Medical Technologists/ Microscopist	May 27-31, 2013	Gems Hotel and Conference Center, Antipolo City
33	Laboratory: Study 213	Philippines-Micro Technical Meeting	Jun. 06, 2103	TDF, 5th flr.
34	GSD	Supervisory Leadership Development	July 5, 2013	RCBC Plaza, Makati City
35	Laboratory	Supervisory Leadership Development	July 5, 2013	RCBC Plaza, Makati City
36	Laboratory	Supervisory Leadership Development	July 5, 2013	RCBC Plaza, Makati City
37	Laboratory	Supervisory Leadership Development	July 5, 2013	RCBC Plaza, Makati City
38	Laboratory	Supervisory Leadership Development	July 5, 2013	RCBC Plaza, Makati City
39	Laboratory	Supervisory Leadership Development	July 5, 2013	RCBC Plaza, Makati City
40	Clinic	PMDT Training	July 8-22, 2013	Lung Center of the Philippines

ORGANIZATION

Chairman
Dr. Jose Conrado Benitez

Members:
Dr. Thelma E. Tupasi
Dr. Florina R. Kaluag
Dr. Claver P. Ramos
Dr. Florentino S. Solon
Prof. Ernesto D. Garilao
Arch. Pablo R. Antonio, Jr.
Mr. Vitaliano N. Nañagas II

Executive Officers

Officer in Charge
Dr. Roberta C. Romero

Director of Research
Dr. Thelma E. Tupasi

Director of Administration
Ms. Leilani C. Naval

Chief Finance Officer
Ms. Lorna M. David

Management Staff

Finance Manager
Ms. Jovita P. Belen

Laboratory Manager
Mr. Henry B. Evasco II

Assistant Laboratory Manager
Ms. Claudette V. Guray

Clinic Physician
Dr. Rholine Gem Martin S. Veto

Head Nurse
Ms. Ma. Begonia R. Baliwagan

Operations Officer
Dr. Carmenchu Marie S. Echiverri-Villavicencio

Human Resources Officer
Ms. Marita I. Nucum

General Services Officer
Ms. Marilou B. Ortiz

LIST OF PUBLICATIONS

FOR JULY 2012 - JULY 2013

1. Resistance to fluoroquinolones and second-line injectable drugs: impact on multidrug-resistant TB outcomes.
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.
Eur Respir J. 2013 Jul;42(1):156-68. doi: 10.1183/09031936.00134712. Epub 2012 Oct 25.

2. Drug resistance beyond extensively drug-resistant tuberculosis: individual patient data meta-analysis.
Migliori GB, Sotgiu G, Gandhi NR, Falzon D, DeRiemer K, Centis R, Hollm-Delgado MG, Palmero D, Pérez-Guzmán C, Vargas MH, D'Ambrosio L, Spanevello A, Bauer M, Chan ED, Schaaf HS, Keshavjee S, Holtz TH, Menzies D; Collaborative Group for Meta-Analysis of Individual Patient Data in MDR-TB.

3. Patterns of treatment interruption among patients with multidrug-resistant TB (MDR TB) and association with interim and final treatment outcomes.
Podewils, LJ, Gler MT, Quelapio M I, Chen MP. PLoS ONE. July 2013; 8(7) e70064.

4. Multidrug resistant pulmonary tuberculosis treatment regimens and patient outcomes: an individual patient data meta-analysis of 9,153 patients.
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Free PMC Article

5. Prevalence of and risk factors for resistance to second-line drugs in people with multidrug-resistant tuberculosis in eight countries: a prospective cohort study.
Dalton T, Cegielski P, Akksilp S, Asencios L, Campos Caoili J, Cho SN, Erokhin VV, Ershova J, Gler MT, Kazennyy 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.
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Lancet 2013 Feb. 23;38(9867):626.

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Int J Tuberc Lung Dis. 2012 Oct;16(10):1335-43.

6. Screening outcomes from patients with suspected multidrug-resistant tuberculosis: lessons learned in the Philippines.
Gler MT, Guilatco RS, Guray CV, Tupasi TE.
Int J Tuberc Lung Dis. 2012 Oct;16(10):1326-30. doi: 10.5588/ijtld.12.0038. Epub 2012 Aug 3.

7. Predictors of poor outcomes among patients treated for multidrug-resistant tuberculosis at DOTS-plus projects.
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, Viiklepp P, Zignol M, Cegielski JP.
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IC Accreditation No. F-2013/002-0
Valid until March 26, 2016

FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT

The Board of Trustees and Members
TROPICAL DISEASE FOUNDATION, INC.
Philippine Tuberculosis Bldg., Amorsolo corner Urban Avenue,
Pio del Pilar, Makati City

Report on the Financial Statements

We have audited the accompanying financial statements of **TROPICAL DISEASE FOUNDATION, INC.,** which comprise the statements of financial position as of July 31, 2013 and 2012, and the statements of comprehensive income, statements of changes in equity and statements of cash flows for years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Philippine Financial Reporting Standards for Small and Medium-sized Entities, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement,whether due ro fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with Philippine Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements.

Audit involves performing procedures to obtain audit evidence about the amounts and disclosure in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of **TROPICAL DISEASE FOUNDATION, INC.** as of July 31, 2013 and 2012, and its financial performance and cash flows for the years then ended in accordance with Philippine Financial Reporting Standards for Small and Medium-sized Entities.

Report on the Supplementary Information Required Under Revenue Regulations.

Our audits were conducted for the purpose of forming an opinion on the basic financial statement taken as a whole. The supplementary information required under Revenue Regulations 15-2010 and 19-2011 in Notes 31 and 32, respectively, are presented for purposes of filing with the Bureau of Internal Revenue and are not a required part of the basic financial statements. Such information is the responsibility of the Management of TROPICAL DISEASE FOUNDATION, INC. The information has been subjected to the auditing procedures applied in our audits of the basic financial statements. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

R.S. BERNALDO & ASSOCIATES
BOA/PRC No. 0300
Valid Until December 31, 2015
SEC Group A Accredited
Accreditation No. 0153-FR-1
Valid until September 13, 2014
BSP Group B Accredited
Valid until February 14, 2014
CDA CEA No. 013-AF
Valid until October 25, 2013
IC Accreditation No. F-2013/002-0
Valid until March 26, 2016

ROMEO A. DE JESUS, JR.
Partner
CPA Certificate No. 86071
SEC Group A Accredited
Accreditation No. 1135-A
Valid until July 5, 2014
BIR Accreditation No. 08-004744-1-2012
Valid from April 10, 2010 until April 9, 2015
Tax Identification No. 109-227-897
IC Accreditation No. SP-2013/006-0
Valid until March 26, 2016
PTR No. 3693345
Issued on January 23, 2013 at Makati City

November 12, 2013

FINANCIAL STATEMENTS

STATEMENTS OF FINANCIAL POSITION

July 31, 2013 and 2012
(In Philippine Peso)

	NOTES	2013	2012 (As restated)
ASSETS			
Current Assets			
Cash	7	21,556,668	18,412,679
Advances and other receivables	8	10,199,993	8,679,179
Short-term investments	9	180,756,952	162,159,606
		212,513,613	189,251,464
Non-current Assets			
Available-for-sale financial assets	10	43,344	31,464
Property and equipment – net	11	90,258,504	92,839,050
Refundable deposit		718,954	818,734
Deferred tax asset	26	78,003	31,727
		91,098,805	93,720,975
TOTAL ASSETS		303,612,418	282,972,439
LIABILITIES AND FUND BALANCES			
LIABILITIES			
Current Liabilities			
Trade and other current liabilities	12	2,247,978	5,044,669
Funds held in trust	13	-	100,195
		2,247,978	5,144,864
Non-current Liabilities			
Deferred grant	14	13,771,144	-
Retirement benefit payable	23	260,008	105,757
		14,031,152	105,757
TOTAL LIABILITIES		16,279,130	5,250,621
FUND BALANCES			
Fund Balance	16	287,292,194	277,692,604
Fair Value Gain on Available-for-Sale Financial Assets	17	41,094	29,214
TOTAL FUND BALANCES		287,333,288	277,721,818
TOTAL LIABILITIES AND FUND BALANCES		303,612,418	282,972,439

STATEMENTS OF COMPREHENSIVE INCOME

For the Years Ended July 31, 2013 and 2012
(In Philippine Peso)

	NOTES	2013	2012 (As restated)
SOURCES OF FUNDS	18	38,657,170	56,704,045
OTHER INCOME	19	21,334,706	9,063,877
		59,991,876	65,767,922
PROGRAM EXPENSES	20	42,191,853	32,045,986
GENERAL AND ADMINISTRATIVE EXPENSES	21	7,165,383	7,016,190
OTHER EXPENSES	22	977,492	1,117,737
		50,334,728	40,179,913
EXCESS OF INCOME OVER EXPENSES BEFORE TAX		9,657,148	25,588,009
INCOME TAX EXPENSE	25	57,559	82,106
EXCESS OF INCOME OVER EXPENSES AFTER TAX		9,599,589	25,505,903
FAIR VALUE GAIN ON AVAILABLE-FOR-SALE FINANCIAL ASSET	17	11,880	7,243
TOTAL COMPREHENSIVE INCOME		9,611,469	25,513,146

STATEMENTS OF CHANGES IN FUND BALANCES

July 31, 2013 and 2012 For the Years Ended July 31, 2013 and 2012
(In Philippine Peso)

	Notes	Fund Balance	Fair Value Gain on Available-For-Sale Financial Assets	Total
Balance at July 31, 2011, as previously reported		225,368,968	21,971	225,390,939
Correction of prior period errors	27	26,817,734		26,817,734
Balance at July 31, 2011, as restated		252,186,702	21,971	252,208,673
Excess of income over expenses, as restated	27	25,505,903	-	25,505,903
Fair value gain on available-for-sale financial assets	17	-	7,243	7,243
Balance at July 31, 2012, as restated		277,692,605	29,214	277,721,819
Excess of income over expenses		9,599,589	-	9,599,589
Fair value gain on available-for-sale financial assets	17	-	11,880	11,880
Balance at July 31, 2013		287,292,194	41,094	287,333,288

STATEMENTS OF CASH FLOWS

July 31, 2013 and 2012 For the Years Ended July 31, 2013 and 2012
(In Philippine Peso)

	NOTES	2013	2012 (As restated)
CASH FLOWS FROM OPERATING ACTIVITIES			
Excess of income over expenses before tax		9,657,148	25,588,009
Adjustments for:			
Depreciation	11	6,507,528	6,194,605
Retirement benefits	23	154,251	105,757
Unrealized foreign exchange loss – net	22	145,598	509,935
Finance income	19	(3,124,785)	(3,001,813)
Fair value gain on short-term investments	19	(4,432,030)	(434,116)
Gain on sale of government securities	19	(8,676,209)	(3,135,800)
Provision for credit losses	21	-	274,458
Operating cash flows before changes in working capital		231,501	26,101,035
(Increase) Decrease in operating assets:			
Advances and other receivables		(1,624,648)	(1,580,305)
Refundable deposit		99,780	258,051
(Decrease) Increase in operating liabilities:			
Trade and other current liabilities		(2,646,601)	(1,880,084)
Funds held in trust		(100,195)	(60,896)
Deferred grant		13,771,144	-
Net cash from operating activities		9,730,981	22,837,801
CASH FLOWS FROM INVESTING ACTIVITIES			
Proceeds from sale of investments	9	38,676,209	41,435,800
Finance income received	19	39,334	74,327
Additions to property and equipment	11	(4,077,072)	(1,084,364)
Additions to short-term investments	9	(41,079,865)	(91,147,795)
Net cash used in investing activities		(6,441,394)	(50,722,032)
EFFECTS OF FOREIGN EXCHANGE RATE CHANGES ON CASH	22	(145,598)	(509,935)
NET INCREASE (DECREASE) IN CASH		3,143,989	(28,394,166)
CASH AT BEGINNING OF YEAR	7	18,412,679	46,806,845
CASH AT END OF YEAR		21,556,668	18,412,679

The Notes to Financial Statements are available upon request.

DR. TUPASI WAS AWARDED A LIFETIME HONORARY MEMBERSHIP BY THE INTERNATIONAL UNION AGAINST TUBERCULOSIS AND LUNG DISEASE (IUATLD)

Dr. Thelma E. Tupasi was recognized by the International Union Against Tuberculosis and Lung Disease (IUATLD) during the 44th Union World Conference on Lung Health held last November 3, 2013 in Paris France. She was presented with the Union medal in recognition for her efforts to advance the study and management of Tuberculosis (TB) in the Philippines and throughout Asia.

Dr. Tupasi's efforts reinforced new and rapid diagnostic tests in identifying TB infection and treatment procedures. Dr. Tupasi was the first to open a Directly Observed Treatment Short course (DOTS) Plus facility for the treatment of multi-drug resistant tuberculosis in the Philippines.

Honorary membership in the UNION recognises colleagues for their distinguished contributions to the fight against tuberculosis and lung disease. As Honorary Members, each member uses their wisdom and experience to help to guide The Union in its mission. Former inductees in the UNION as Honorary members were Asma El Sony and Dr. Richard O'Brien, both of whom were recognized for their efforts in TB mitigation in Sudan and the U.S. respectively.

Founded in 1920, The International Union Against Tuberculosis and Lung Disease is both a highly regarded international scientific institute, strong in technical assistance, research and education; and a Federation of more than 2,000 member organisations and individuals committed to the same vision: health solutions for the poor. The UNION seeks to bring innovation, expertise, solutions and support to address health challenges in low- and middle-income populations. Its scientific department focuses on tuberculosis, HIV, lung health and non-communicable diseases, tobacco control and research. The Union is most widely known for the research that led to the global strategy for treating and controlling tuberculosis.

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