

Tropical Disease Foundation



Confronting Tuberculosis Today:

**MAKATI MEDICAL CENTER
DIRECTLY OBSERVED THERAPY - SHORT-COURSE
(MMC DOTS) CLINIC**



Bristol-Myers Squibb (Phil.), Inc.

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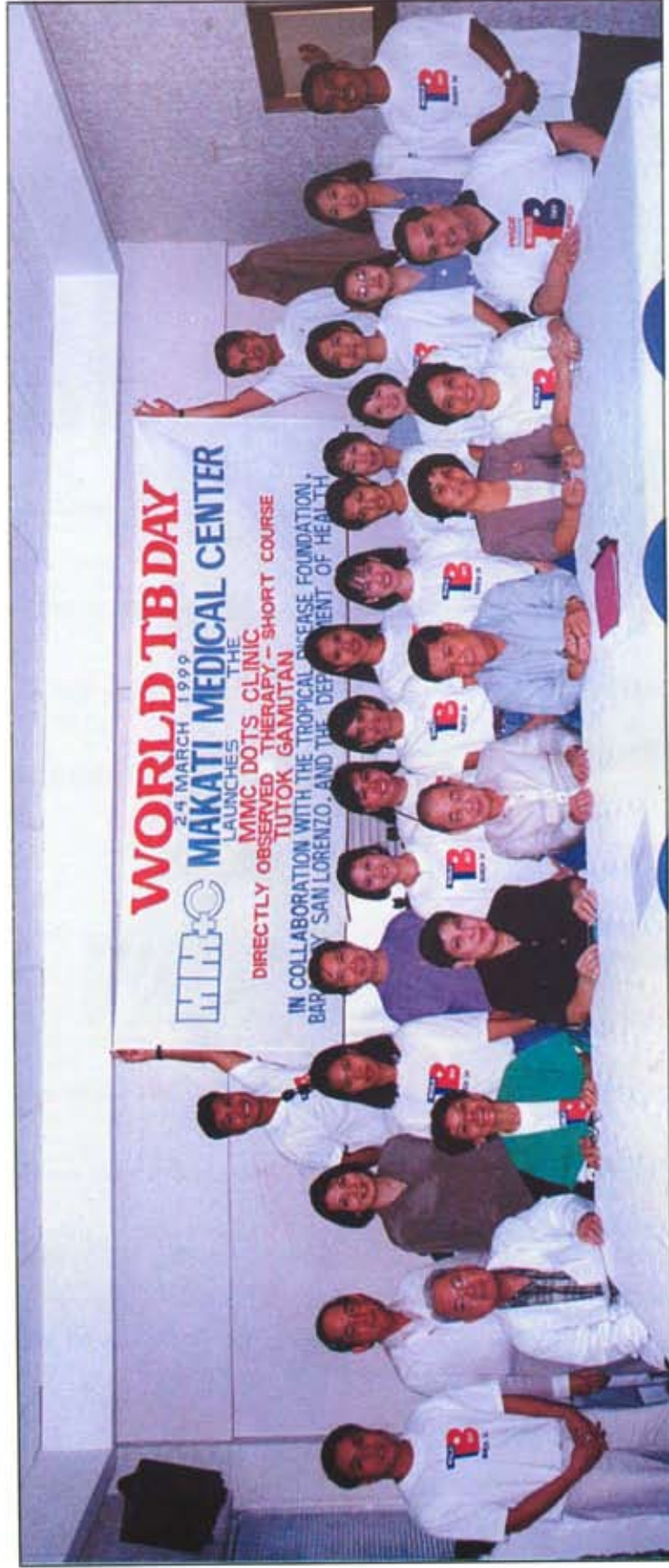
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“THE GOOD DOCTOR”

a Repertory Philippines' production of a Neil Simon play

9 April 2000, 3:00 (matinee) and 8:00 pm, Sunday, William J. Shaw Theatre, 5th level, EDSA Shangri-La Mall

in support of the



**Makati Medical Center Directly Observed Therapy - Short-course
(MMC DOTS) Clinic**

FOREWORD

We are deeply grateful to our benefactors: our co-presentors, sponsors, patrons, donors and friends of the Foundation who have supported "The Good Doctor" fund-raising for the Makati Medical Center (MMC) Directly Observed Therapy - Short-course (DOTS) Clinic. Your generosity will fully be recompensed for as Jesus said,

"whatsoever you do to the least of my brethren, that you do unto me...."

The MMC DOTS clinic is a public-private collaboration towards the control of tuberculosis, the number one public health problem in the Philippines today. It is the crowning glory of the service programme of the Tropical Disease Foundation (TDF) in partnership with the MMC, the Department of Health and Barangay San Lorenzo. In its first year of operation, donations in cash and medicines were provided by our friends in the industry: United Laboratories, GlaxoWellcome Philippines, Bristol-Myers Squibb (Phil.), Inc., Rhone Poulenc Rorer, Bayer Philippines and Abbott Philippines. Today, you all have joined us in this private-public partnership. On behalf of the MMC DOTS Clinic patients, we thank you all so very much.

In the year just passed, we are happy to report that through the TDF training program, we have reached more than 1,500 doctors, nurses, and medical technologists through our Post-graduate Circuit Course held in 9 cities and towns from Luzon to Mindanao. The 1998-1999 edition of the Guidelines on Antimicrobial Therapy published last year should help reinforce this activity.

As a tribute to our research program, the Outstanding Health Research Award (OHRA) was conferred on the "1997 Nationwide Tuberculosis Prevalence Survey" by the Philippine Council for Health Research and Development. From our humble beginning in 1984, we continue to grow as shown by our manpower development, and outputs of our training and research programs described in this annual report. We dedicate all these to our benefactors, without whose support, all these would not have been possible.

Thelma E. Tupan

Confronting tuberculosis today ...

600,000 Filipinos are transmitting TB today.

The Philippines has the highest prevalence of tuberculosis (TB) in the Southeast Asian region. During the 1997 Nationwide TB Prevalence Survey conducted by the Tropical Disease Foundation (TDF) on behalf of the Department of Health, it was learned that in a population of 70 million, there are approximately 600,000 Filipinos actively infecting 10-20 persons yearly, of whom 10% will develop active disease in their lifetime.

The survey also found that only 25% of Filipinos with TB symptoms consult professional caregivers. Of these, 11.5% consult private practitioners and only 7.5% utilize government health centers where anti-TB drugs are free. Hence, there is a need for the private sector to join efforts in collaboration with government for the control of TB.

MMC DOTS Clinic - a private-public partnership

In response to the problem, TDF together with the Makati Medical Center (MMC), representing the private sector, partnered with the Department of Health (DOH) and Barangay San Lorenzo (BSL), representing the public sector, to establish the MMC Directly Observed Therapy - Short-course (DOTS) Clinic. This was formally launched on March 24, 1999, during the World TB Day celebration. DOTS is a comprehensive strategy strongly advocated by the World Health Organization (WHO) wherein trained healthcare workers literally watch TB patients ingest their medicines and monitor their response until cure or treatment completion. This obviates the biggest problem in TB treatment - non-compliance to prescribed therapy, which is a minimum of 6 months with 2-4 drugs taken at a time.

MMC provides the clinic space and supports the clinic staff (a physician executive officer and 2 public health nurses); TDF extends its expertise in the diagnosis of TB through sputum microscopy, culture and drug susceptibility testing. DOH provides three of the primary anti-TB drugs, Isoniazid, Rifampicin and Pyrazinamide; and BSL funds the purchase of Ethambutol, Streptomycin, and clinic supplies.

DOTS - PLUS

The MMC DOTS Clinic aims to ensure compliance through the DOTS-Plus strategy wherein drug susceptibility testing is done on isolated strains of *M. tuberculosis* to determine the best drugs to provide the patients. Individualized regimens administered by direct observation is the hallmark of the DOTS-Plus strategy which is a step beyond the DOTS strategy.

The Strategy

A. Directly observed therapy (DOT)

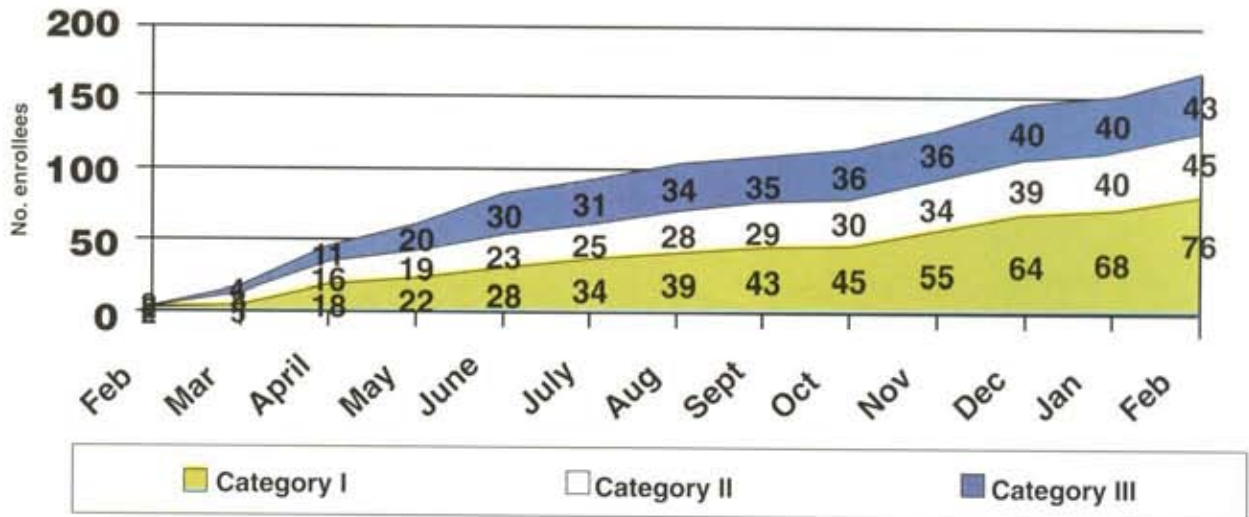
Clinic DOT: The MMC DOTS Clinic is open from 4 to 8 pm on Mondays to Fridays and 8 to 12 noon on Saturdays. This schedule allows working patients and students to avail of the clinic services. DOT is supervised by a clinic doctor and 2 public health nurses daily for the first month, then thrice weekly thereafter until the end of therapy.

Domiciliary DOT: Patients who fail to report to the clinic as scheduled are followed up in their homes the next day by the nurses where DOT is done.

B. Patients

TB patients from Metro Manila willing and able to adhere to the protocol of supervised therapy in the MMC DOTS Clinic may be enrolled after signing a contract

Fig. 1. MMC DOTS Clinic: No. of enrollees according to category
(Feb 1999 - Feb 2000) N= 164



Treatment outcomes

Since its opening on February 5, 1999, 164 patients have been enrolled (Fig. 1). To date, 85 (52%) patients have successfully completed treatment. Based on World Health Organization (WHO) definitions, cure

was found in 37 (44%), treatment completed in 48 (56%); 2 (1%) were transferred out, 4 (2.4%) died, 6 (3.6%) were lost, and 12 (7.3%) were treatment failure. The rest are still undergoing treatment in the Clinic (Fig. 2).

Fig. 2. MMC DOTS Clinic: Treatment outcomes
(Feb 1999 - Feb 2000) N=164



Treatment success

The first graduation of patients from the DOTS strategy was held last 17 December 1999 during the clinic christmas party. Forty-three (43) patients were awarded certificates of treatment completion by Dr.

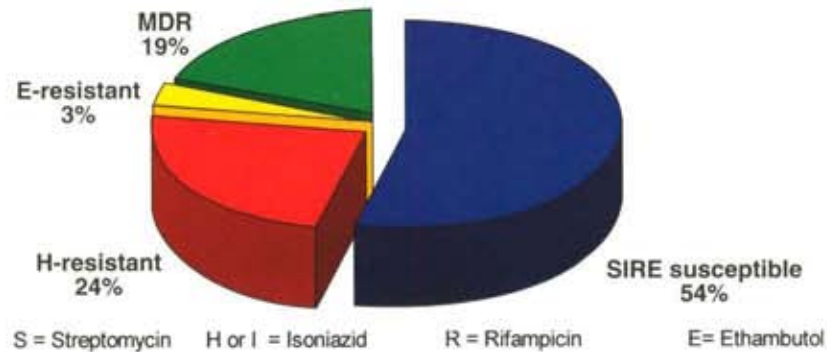
Raul G. Fores (MMC), Dr. Thelma E. Tupasi (TDF), Dr. Nora Cruz (DOH), and Kagawad Myles Hugo and Kagawad Diva Abad Santos (BSL). Another batch of 42 patients graduated last 24 March 2000 during the celebration of the World TB Day.

Treatment failure

Of the first 164 patients enrolled in the first year of operation, 12 patients were considered treatment failure. These patients were all enrolled as Category II or retreatment cases as they had previously

received anti-TB drugs. Relapse, persistence of the organism by sputum microscopy after at least five months of therapy, and interrupted treatment for at least 2 months are included in this category.

Fig 3. MMC DOTS Clinic: Susceptibility of 63 *M. tuberculosis* isolates

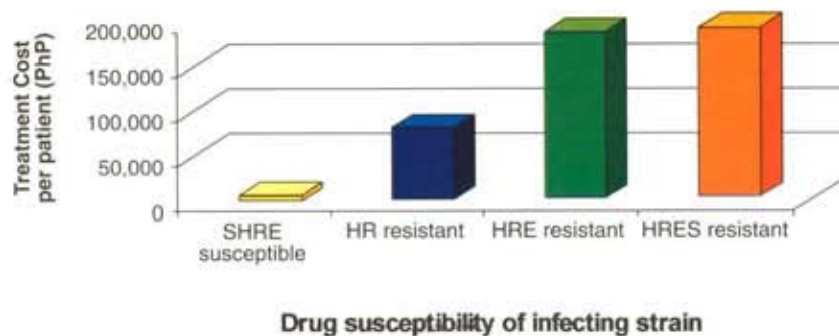


Multi-drug resistant tuberculosis (MDR-TB)

Among 140 available culture results, 63 (45%) were positive for *M. tuberculosis*. Of these, 34 (54%) were SIRE-susceptible, 15 (24%) were INH-resistant, 2 (3%) were Ethambutol-resistant, while 12 (19%) were multi-drug resistant or MDR (Fig. 3). The

latter requires second-line anti-TB drugs imported at exorbitant costs and administered for a prolonged period of up to 21 months. Drug procurement is through the assistance of the World Health Organization (WHO).

Fig. 4. Treatment cost per patient based on WHO procurement assistance



S = Streptomycin

H = Isoniazid

R = Rifampicin

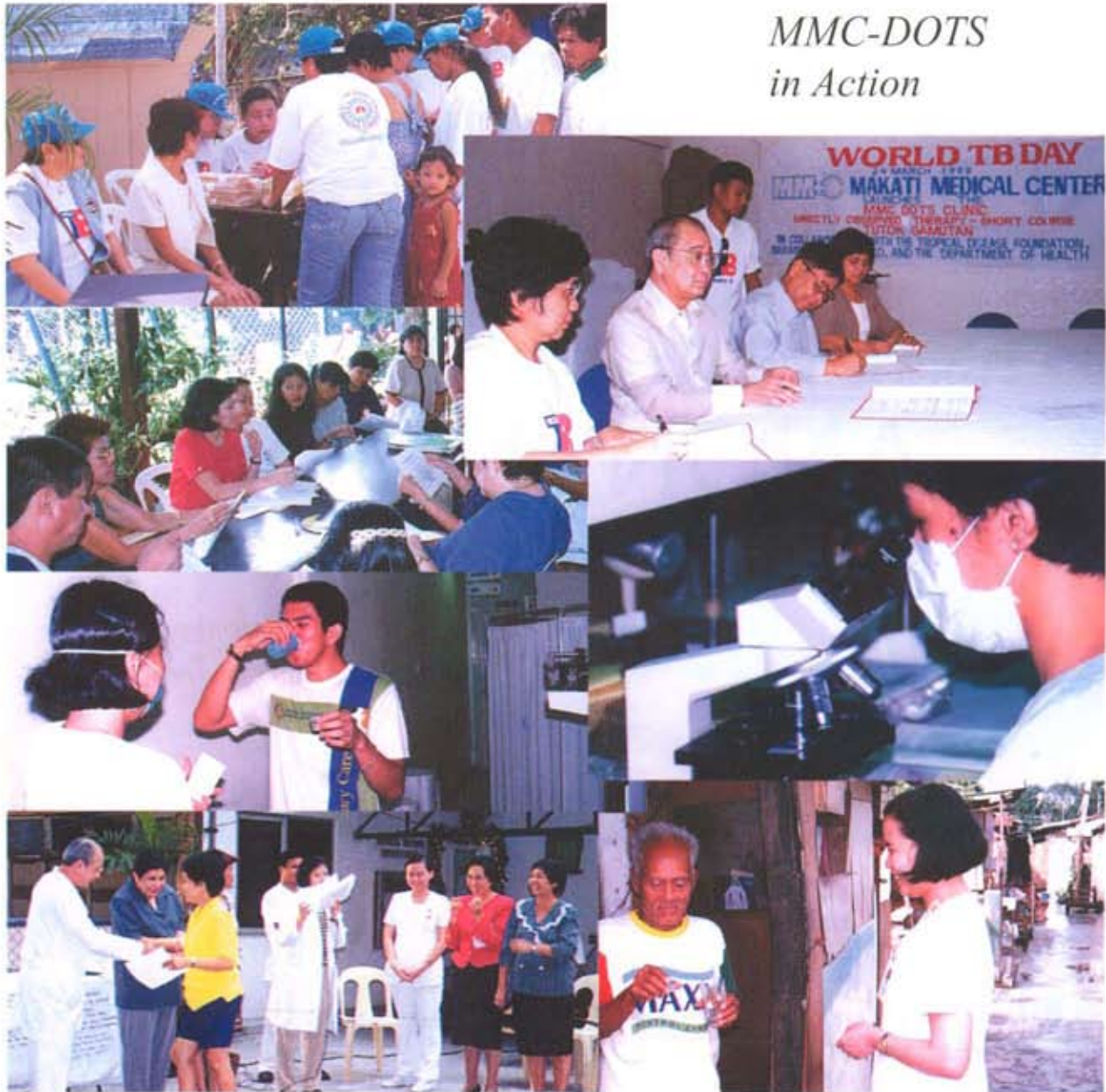
E = Ethambutol

MMC DOTS Clinic: its vision

TB patients, both susceptible and resistant, will continue to avail of the fully subsidized supervised treatment provided by the MMC DOTS Clinic. The goal of this fund-raising project is to support the procurement of 2nd line anti-TB drugs for MDR-TB, for unless we treat MDR TB, the problem will be amplified as resistant strains will be selected

by TB treatment directed only towards the sensitive strains. This aim, however, is quite formidable because the cost of treatment per MDR-TB patient ranges from a low of PhP 80,000 to a high of PhP 188,000 compared to PhP 5,000 per patient if SIRE-susceptible (Fig. 4). Contributions made to this fund-raising activity will certainly allow us to realize this goal.

MMC-DOTS in Action



Maraming salamat po!

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Special thanks to

George and Grace Ramos and Mr. Vince Garcia

From the patients of the MMC DOTS Clinic

The Tropical Disease Foundation 1999 Annual Report



HISTORY

The Tropical Disease Foundation is a private, non-stock, non-profit organization founded in 1984 by a group of physicians. It is supported by research grants, donations, and endowments. Its objective is to undertake researches and provide training and service in the control and management of tropical infectious diseases.

A Memorandum of Agreement was signed with the Makati Medical Center (MMC) in 1987, and Dr. Constantino P. Manahan became the Chairman of the Board of Trustees of the Foundation. After Dr. Manahan's untimely demise, Dr. Romeo Gustilo became Chairman of the Board of Trustees. From 1987 to date, the Honorary Chairman of its International Advisory Board has been Dr. Calvin M. Kunin.

Through the generosity of donors and friends, the Foundation has been able to establish its research laboratory. The research laboratory has gradually expanded, and now includes facilities for special microbiology, mycobacteriology, immunology, mycology, and virology. With these laboratory facilities, the Foundation has been able to pursue its activities in educational and research programs in tropical infectious diseases of public health importance. Notable among these are its community-based prospective studies on Acute Respiratory Infection (ARI) and the recently completed 1997 Nationwide Tuberculosis Prevalence Survey undertaken on behalf of the Department of Health.

Linkage with the Makati Medical Center

The Makati Medical Center was founded by a group of distinguished health professionals headed by Dr. Constantino P. Manahan who was the first Chairman of the Board and concurrent Medical Director. It is owned and operated by the Medical Doctors, Inc. and was formally inaugurated on 31 May 1969.

The Foundation complements the facilities of the MMC mainly in the fields of microbiology, immunology and virology. Subject to the rules and regulations of the MMC Institutional Review Board, the Foundation is authorized to undertake research projects in accordance with the provisions of the Helsinki Declaration. The MMC accordingly allows its staff, including

medical residents and fellows, to participate in the researches of the Foundation. In turn, the research facilities of the Foundation are also made available to the MMC personnel for the management of patients who are in need of them. The Foundation actively participates in the MMC training programs and in its other related activities.

The MMC, because of its belief in the sanctity of human life, renders equal standards of medical services to all patients regardless of their socio-economic status. Its efforts are geared toward meeting the health needs of the patients by maintaining highly qualified staff and by constantly updating its medical technology.

RESEARCH PROGRAMME

Outstanding Health Research Award

The Philippine Council for Health Research and Development (PCHRD) announced on 29 February 2000 that the project entitled "The 1997 Nationwide Tuberculosis Prevalence Survey in the Philippines" was unanimously chosen winner for the year 2000 search for the Outstanding Health Research Award (OHRA). The project, which was undertaken by the TDF on behalf of the Department of Health, was cited for its impact on the National TB Control program. As stated by Dr. Mariquita Mantala, Director of the TB Control Service, Department of Health, the data obtained from the survey was utilized for three important purposes. The first was to

advocate for political and financial support for TB control. Since TB was acknowledged as a significant public health problem, it was chosen to be the priority health program of Pres. Estrada. Second, the findings were used in the development of the operational and strategic plan of the National TB Control Program; and third, in the development and implementation of a social mobilization campaign called "TB Alert".

This recognition has been an impetus in our current involvement in the TB control program of the DOH through the MMC DOTS clinic.

Table 1. Research Projects and Funding Agencies

Research Projects (Year Undertaken)	Sponsor
SENTRY (March-December 1999)	<i>Bristol-Myers Squibb</i>
A Double-Blind Study Comparing the Safety and Efficacy of Cefepime versus Ceftazidime in Severe Bacterial Infections (March-December 1999)	<i>Bristol-Myers Squibb</i>
Point-in-Time Determination of the Antimicrobial Activity of Cefepime Compared to Other Broad-Spectrum Beta-Lactams at Medical Centers in the Philippines (February-December 1998)	<i>Bristol-Myers Squibb</i>
The Efficacy of Sublingually Administered Natural Human Interferon Alpha in the Treatment of Patients with Chronic Active Hepatitis B (1992-1998)	<i>Pharma Pacific Management Pty Ltd., Australia</i>
Tuberculin Skin Testing among Healthcare workers at the Makati Medical Center (1996-1998)	<i>Glaxo-Wellcome Philippines</i>
The Second Nationwide Tuberculosis Prevalence Survey (March-December 1997)	<i>World Bank and the Philippine Health Development Project (PHDP)</i>
Prevalence Survey of the Dermatologic Diseases in the Philippines (April-June 1997)	<i>Janssen Pharmaceuticals</i>
Seroepidemiologic Study of Hantaviruses in the Philippines (April-June 1997)	<i>Glaxo-Wellcome Philippines Vizcarra Pharma</i>
Comparison Between 7H9 with OADC Enrichment Broth and Solid Lowenstein Jensen Medium for Primary Isolation of Mycobacteria (1995-1996)	<i>Astra Fund for Clinical Research and Continuing Medical Education (AFCRCME)</i>

Research Projects (Year Undertaken)	Sponsor
Multi-center Study on Lincomycin for Streptococcal Pharyngitis (1995-1996)	<i>Upjohn Philippines</i>
Multi-center Study on Short-Course 2% Clindamycin Vaginal Cream vs. Oral Metronidazole for Bacterial Vaginosis (1996)	<i>Upjohn Philippines</i>
<i>In-vitro</i> Study of Pefloxacin vs. Ciprofloxacin and Ofloxacin (1996)	<i>Rhone-Poulenc Rorer</i>
Spectrum of Ulcerative Keratitis at the Makati Medical Center (1993)	<i>Glaxo-Philippines, Inc.</i>
<i>In-vitro</i> Susceptibility of Gram-negative and Gram-positive Pathogens to Tosufloxacin as Compared with Other Quinolones (1992-1993)	<i>Cyanamid Lederle (Phils), Inc.</i>
<i>In-vitro</i> Susceptibility of Bacterial Isolates to Cefepime as Compared to Ceftazidime and Ceftriaxone (1992)	<i>E.R. Squibb and Sons</i>
A Randomized Open-label, Comparative Multi-center, Study of Parenteral Piperacillin/Tazobactam Versus Ceftazidime Plus Metronidazole in the Treatment of Hospitalized Patients with Intraabdominal Infections (1991-1992)	<i>Cyanamid Lederle (Phils), Inc.</i>
Piperacillin and Tazobactam Sensitivity Profile (1991-1992)	<i>Cyanamid Lederle (Phils), Inc.</i>
Short-term Chemotherapy of Leprosy with Minocycline and Rifampicin (1991)	<i>Cyanamid Lederle (Phils), Inc</i>
Etiology of Childhood and Acute Respiratory Infections: Pathophysiologic Studies (1991)	<i>Board on Science and Technology for International Development, U.S. National Academy of Sciences</i>
Minocycline in the Treatment of Lepromatous Leprosy (1990)	<i>National Research Council of the Philippines</i>
Lymphoblastoid Interferon Alpha in the Management of Chronic Hepatitis B Infection (1989-1990)	<i>Wellcome Foundation Ltd.</i>
Levels of Prostacyclin and Thromboxane in Pregnancy-Induced Hypertension (1989-1990)	<i>International Development Research Centre</i>
Traditional Practices and Ritual Therapy on Acute Respiratory Infection (1989-1990)	<i>National Research Council of the Philippines</i>
Inhibitory and Sensitivity Patterns of Local Common Pathogens to Aztreonam (1989)	<i>E.R. Squibb & Sons</i>
Multi-drug Therapy in Leprosy (1988-1990)	<i>Cyanamid Lederle (Phils), Inc</i>
Surveillance of Ofloxacin Resistance (1987-1990)	<i>Daiichi</i>
Acute Respiratory Infection in Childhood: Data Analysis (1987-1990)	<i>Board on Science and Technology for International Development, U.S. National Academy of Sciences</i>
Etiology of Childhood Acute Respiratory Infections: Pathophysiologic Studies (1991)	<i>Board on Science and Technology for International Development, U.S. National Academy of Sciences</i>
Acute Respiratory Infection (1987)	<i>Astra Pharmaceuticals (Phils.), Inc.</i>
<i>Chlamydia</i> Infection in Filipino Women (1987)	<i>U.S. Naval Medical Research Unit 2 (NAMRU)</i>

MANPOWER DEVELOPMENT PROGRAMME

By the very nature of its work, the Foundation is in constant need of personnel trained in special laboratory techniques. The Foundation therefore makes it possible to have its staff trained in different hospitals

and laboratories here and abroad. Table 2 shows the grantees, the various sponsors providing training grants, and the various institutions where they trained.

Table 2. Training Grants since 1987

Name	Training Grant (Sponsor)	Venue
Maria Lourdes Villa, M.D. Rowena Cardaño, R.M.T. April 9-21, 1999	Basic Course on Medical Mycology (Pfizer)	University of Santo Tomas Manila, Philippines
Evelyn Alesna, M.D. Sept 1996-July 1997	Group Training Course on Advanced Microbial Diseases Study (JICA)	Research Institute for Microbial Diseases (Biken), Osaka University in Osaka, Japan
Alicia B. Rivera, R.M.T. 21-28 September 1997	Drug Susceptibility of Mycobacteria (Rhône-Poulenc Rorer)	Korean Institute of Tuberculosis (KIT), Seoul, Korea
Zenaida Chua, R.N. Feb 18-23, 1996	Hospital Infection: Enhancing Present Arrangements	London
Ma. Imelda Quelapio, M.D. 1996	Basic Course on Medical Mycology (Pfizer)	University of Santo Tomas Manila, Philippines
Evelyn Alesna, M.D. 1995	Basic Course on Medical Mycology (Pfizer)	University of Santo Tomas Manila, Philippines
Jocelyn M. Lazo, R.M.T. May - July 1994	Detection of <i>M. tuberculosis</i> by Polymerase Chain Reaction (Daiichi)	Nagasaki University Japan
Vilma M. Co, M.D. November, 1994	Nosocomial Infectious Diseases and Hospital Epidemiology (Makati Medical Center)	Harvard Medical School Children's Hospital, Boston, Massachusetts U.S.A.
Alicia B. Rivera, R.M.T. 13 April - 2 July 1993	Antifungal Assays (British Medical Council)	Regional Dept. of Infectious Diseases and Tropical Medicine Univ. of Manchester, U.K. University of Leeds, U.K.
19-23 April 1993	BSM Course in Diagnostic Medical Mycology (British Medical Council)	
Benilda Q. Baello, R.M.T. 17-28 May 1993	Respiratory Infections in Immunocompromised Patients (Insular Life Assurance Co., Ltd)	National Institutes of Health, Bethesda, Maryland, U.S.A.
Melanie B. Nogoy, R.M.T. September 1991-March 1992	Basic Training on Electron Microscopy (Insular Life Assurance Co., Ltd)	National University of Singapore
Normando C. Gonzaga, M.D. 28 October-1 November 1991	WHO Bi-regional Training Course on Electron Microscopy in Biomedical Research and Diagnosis of Human Diseases (WHO)	Chulalongkorn University Bangkok, Thailand
Eileen E. Navarro, M.D. Shirley Cruzada, R.M.T. Alicia B. Rivera, R.M.T. 2 April-31 May 1991	Basic Course on Medical Mycology (Tropical Disease Foundation)	University of Santo Tomas Manila, Philippines
Normando C. Gonzaga, M.D. October - November 1990	Immuno-electron Microscopy and Gold Immunoblotting in Chronic Hepatitis B Infection (Wellcome)	National University of Singapore

Name	Training Grant (Sponsor)	Venue
Lerma C. Baes, R.M.T. 1990	Rapid Viral Diagnosis, Chlamydia Isolation (Daiichi)	National Institute of Health Mahidol University Bangkok, Thailand
Roland C. Francisco, R.M.T. March 1990	<i>P. aeruginosa</i> serotyping, Isolation of <i>Legionella</i> and Rapid detection of <i>Strongyloides stercoralis</i>	Ryukyu University Okinawa, Japan
Rebecca Littau, M.D. 1988-1991	Immunopathology of Dengue Virus and HIV (Asia Brewery)	University of Massachusetts Worcester, U.S.A
Mariyul Javato-Laxer, M.D. Eileen E. Navarro, M.D. 1988-1989	Immune Mechanism of <i>Schistosoma japonicum</i> (NAMRU)	George Washington University Medical Center Washington, D.C., U.S.A.
Eileen E. Navarro, M.D. Lolita Tolentino, R.M.T. 1988	Clinical Features of Viral and Bacterial Infections, Immunologic Monitoring & Rapid Diagnostic Techniques in Transplant Patients (Mr. Freddie Elizalde)	Children's Hospital of Pittsburgh, U.S.A.
Lolita Tolentino, R.M.T. 1988	Antibiotic Susceptibility Testing by MIC, Mycobacteriology	Nagasaki University Nagasaki, Japan
	Identification of <i>P. carinii</i> & <i>L. pneumophila</i> ; Viral Antigen Detection from Clinical Specimens (Daiichi, Boie-Takeda, and Filipino-Chinese Medical Specialty Scholarship Foundations)	Sendai National Hospital Japan
Thelma E. Tupasi, M.D. 1988	<i>Influenza</i> and Respiratory Syncytial Virus (WHO)	National University of Singapore
Ma. Lourdes O. Gomez, M.D. 1988	Oral Rehydration for Diarrhea (Tropical Disease Foundation)	San Lazaro Hospital Philippines
Thelma E. Tupasi, M.D. Nellie V. Mangubat, BSFT 1987	Computerized Data Management (National Academy of Sciences, Board on Science and Technology for International Development)	University of Maryland College Park, Maryland, U.S.A.

EDUCATIONAL PROGRAMME

Post-Graduate Circuit Course in Infectious Diseases

The Tropical Disease Foundation (TDF) conducted a Post-graduate Circuit Course in Infectious Diseases entitled "Confronting Infectious Diseases in the 3rd Millennium" in 9 areas in the Philippines. This was a Continuing Medical Education (CME) project arranged by the TDF. The course covered recent updates on various topics of interest to physicians in practice like Beta-lactam Antibiotics, Antibiotic Pharmacodynamics, Clinical Practice Guidelines on the Management of Community-acquired Pneumonia, Nosocomial Pneumonia, Urinary Tract Infection, Sexually Transmitted Diseases, Viral Hepatitis, Dengue Fever, Tuberculosis Prevalence in the Philippines, Drug-resistant TB, Directly Observed Therapy - Short-course (DOTS) for TB,

Leprosy, Line-related Infections, Soft Tissue Infections, and Pediatric Immunizations.

The faculty included Infectious Disease specialists led by Dr. Thelma E. Tupasi. Other lecturers were Dr. Benjamin Limson, Dr. Roberta Romero, Dr. Rodrigo Romulo, Dr. Vilma Co, Dr. Julius Lecciones, Dr. Ma. Lourdes Gozali, Dr. Dennis Garcia, Dr. Margarita Cayco, Dr. Homer Abiad, Dr. Ellamae S. Divinagracia, Dr. Evelyn Alesna, Dr. Ma. Imelda Quelapio, Dr. Ma. Lourdes Villa, Dr. Carmela Rivera, and Dr. Faith Villanueva. Microbiologists in the faculty included Ms. Alice B. Rivera, RMT, Mr. Ephraim Grimaldo, RMT and Ms. Rowena C. Cardaño, RMT.

The circuit course started in Makati Medical Center on Saturday, March 20, 1999 followed by Cebu City (Grand Convention Center) on Friday, April 9, Tagbilaran City (Metro Centre Hotel) on Saturday, April 10, Lipa City, Batangas (N. L. Villa Medical Center) on May 29, Iloilo City (St. Paul's Hospital) on June 5, in Bambang, Nueva Vizcaya (Villa Margarita Resort) on June 19, in the Philippine Children's Medical Center

(PCMC) in Quezon City on June 26, in Davao City (Grand Men Seng Hotel) on July 24 and in Lucena City (Sentro Pastoral) on July 31, 1999.

A total of 1,593 physicians (private and government), medical technologists, nurses and barangay midwives attended the post-graduate courses in the different areas.



*1st Post-graduate Course
in Infectious Diseases
"Confronting Infectious Diseases
in the 3rd Millennium"*

Cebu City
April 9, 1999



Davao City
July 24, 1999



Nueva Vizcaya
June 19, 1999

Infectious Disease Fellowship Training Program

The Infectious Disease Section of the Makati Medical Center has an accredited two-year fellowship training program. Aside from the fellows, the teaching program also involves third-year medical residents who undergo clinical and laboratory sessions for two months as part of their residency training. The curriculum includes clinical care of patients with community- and

hospital-acquired infections; laboratory training in bacteriology, mycobacteriology, mycology, and virology; and research training in the epidemiology of infectious diseases and clinical trials of new antimicrobial agents. Since 1988, a total of 9 fellows have completed the training program. Two others will soon complete the program.

Table 3. Fellowship Training Programme

Fellows	Years
Marivyl Javato, MD	1987-1988
Rebecca Littaua, MD	1987-1988
Maria Lourdes Gomez – Gozali, MD	1988-1989
Mamerto G. Garvez, MD	1989-1990
Vilma Martinez-Co, MD	1991-1992
Ellamae M. Sorongon, MD	1993-1994
Evelyn T. Alesna, MD	1995-1997
Maria Imelda D. Quelapio, MD	1996-1998
Maria Lourdes A. Villa, MD	1997-1999
Carmela A. Rivera, MD	1998-2000
Faith D. Villanueva, MD	1999-2001

Infection Control Program

The Infection Control Committee (ICC) of the Makati Medical Center was created to establish the standard operating patient care program for the prevention, investigation, reporting and control of nosocomial infections. The ICC is a hospital committee responsible to the medical staff. The working committee which focuses on infection control in the hospital, involves members from the Infectious Disease Section and representatives from different departments such as Microbiology and Pathology, Pharmacy, Dietary and Housekeeping Services, Medicine, Surgery, Obstetrics, Pediatrics, Emergency Department, the Administration, etc.

The ICC holds regular monthly meetings to

formulate policies for the control of infections, to review various surveillance programs and the employees' health program, and constantly assesses the effectivity and implementation of ICC policies and guidelines.

It maintains a continuing surveillance of nosocomial infections in patients and hospital staff. Notable among these is the ongoing surveillance of tuberculin skin test conversion in the paramedical and house staff. The Rational Antibiotic Usage program is a continuing project of the Infection Control Committee aimed at preventing the emergence of bacterial resistance to antibiotics by means of continuous surveillance of the susceptibility

patterns of common hospital bacterial pathogens. Results of the surveillance are reported quarterly in a hospital paper, the

MMC Observer, and serve as the basis for the recommendation of appropriate antibacterial agents.

Guidelines on Antimicrobial Therapy

This manual is a biennial project of the Foundation with the intention of providing physicians with a handy reference for the rational choice of empiric antimicrobial therapy. This is also part of the fellowship training of the TDF as fellows contribute to

the project by providing evidenced-based data to update recommendations. The first edition was published in 1988, the second edition in 1990, the third edition in 1993, the fourth edition in 1996, and the fifth edition in 1998.

The Constantino P. Manahan Memorial Lectures

To honor the memory of the First Medical Director of the Makati Medical Center and the third Chairman, Board of Directors of the Tropical Disease Foundation, Memorial Lectures have been held since the first

anniversary of his untimely demise. Distinguished professors and scientists have delivered lectures on various topics along their lines of expertise.



The 10th C.P. Manahan Lecture:
Prof. John Russell, Department of Microbiology Medical School, University of Minnesota, USA, delivered the lecture: "A New Vaccine for Lyme Disease" on 22 January 1999.



The 11th C.P. Manahan Lecture:
Dr. Calvin M. Kunin, Promerene Professor of Medicine, Ohio State University, delivered the lecture: "Current Status of UTI" on 8 December 1999.

PUBLICATIONS

1999

The 1997 Nationwide Tuberculosis Prevalence Survey in the Philippines

Tupasi TE, Radhakrishna S, Rivera AB, Pascual MLG, Quelapio MID, Co, VM, Villa MLA, Beltran G, Legaspi JD, Mangubat NV, Sarol JN, Reyes AC, Sarmiento A, Solon M and FS, and Mantaia MJ. *Int J Tuberc Lung Dis* 3(6):471-477

Drug-Resistant TB in the Philippines

Rivera AB, Tupasi TE, Balagtas ED, Cardaño RC, Baello BQ, Quelapio MID, Villa MLA, Pascual MLG, Co VM, Mantala MJ. *Int J Tuberc Lung Dis* 3(7):639-641

Quinolone Use in the Developing World: State of the Art

Tupasi TE. *Drugs* 1999;58 (suppl 2):55-59

1998

Guidelines on Antimicrobial Therapy, 5th edition, 1998-1999

Tupasi TE, Limson BM, Romero RC, Co VM, Gozali LG, Leccionnes JA, Alesna ET, Quelapio ID, Villa LA and Rivera CA

1997

Rapid and Improved Recovery Rate of *Mycobacterium tuberculosis* in Mycobacteria Growth Indicator Tube combined with Solid Lowenstein Jensen medium

Rivera AB, Tupasi TE, Grimaldo ER, Cardano RC, and Co VM. *International Journal of Tuberculosis and Lung Disease* 1997;1(5):454-459

Antibiotic Usage in Community-Acquired Pneumonia in a Tertiary Care Hospital

Magalit PN, Sorongon ED, and Tupasi TE. *The Philippine Journal of Microbiology and Infectious Diseases April-June 1997*;26(2):109-112

Sublingual Interferon Alpha in the Treatment of Chronic Hepatitis B: Its Clinical, Biochemical and Biologic Effects

Co VM, Clarin SM, Mangubat NM, Lazo J, Alesna ET, Gonzaga NC and Tupasi TE. *The Philippine Journal of Microbiology and Infectious Diseases April-June 1997*;26(2): S53-S60

Morphologic Liver Changes in Hepatitis B: Impact of Interferon

Gonzaga NC, Garvez MD, Nogoy M, Abrabtes F, Ng M, and Tupasi TE. *The Philippine Journal of Microbiology and Infectious Diseases April-June 1997*;26(2):S61-S66

1996

Guidelines on Antimicrobial Therapy, 4th edition, 1996

Tupasi TE, Limson BM, Romero RC, Co VM, Leccionnes JA, Gozali LG, Sorongon ED, and Alesna ET

Pharmacodynamics as Basis for Rational Antimicrobial Dosing

Tupasi TE. *The Philippine Journal of Microbiology and Infectious Diseases* 1996 Dec;25(2):70-77

Multiple Sexual partners: Risk Factor for Bacterial Vaginosis.

Alesna E, Pascual-Viduya M, Rivilla-Manalastas MA, Baello B, Cardano RC, Borromeo R, and Tupasi TE. *The Philippine Journal of Microbiology and Infectious Diseases* 1996 June;25(1):1-3

Antibiotic Use in the Western Pacific: Viewpoint from the Philippines. Tupasi TE. *Proceedings: 5th Western Pacific Congress of Chemotherapy and Infectious Diseases* 1996; 154-160

Life-threatening Group A Streptococcal Infections

Tupasi TE. *The Philippine Journal of Microbiology and Infectious Diseases* 1996 June;25(1):21-25

1995

Aflatoxin and Outcome from Acute Lower Respiratory Infection in Children in the Philippines Denning DW, Quiapo SC, Altman DG, Makarananda K, Neal GE, Camallere EL, Morgan MRA, Tupasi TE. *Annals of Tropical Paediatrics* 1995;15:209-216

1994

Tuberculous Abscess: A Suppurative Response to *Mycobacterium tuberculosis* Infection

Co VM, Grimaldo ER, Rivera AB, Francisco RC, Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994*

Multi-drug Resistant *Mycobacterium Tuberculosis*: Role of the Fluoroquinolones.

Francisco RC, Grimaldo ER, Rivera AB, Bautista TL, Co VM, Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994*

Chronic Hepatitis B Infection in Filipinos.

Gonzaga NC, Co VM, Maybituin SP, Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994*

Multicenter Study on Candida Infections.

Sorongon ED, Pena A, Mendoza MT, Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994*

Antibiotic Usage in Typhoid Fever in a Tertiary Hospital in Metro Manila.

Sorongon ED, Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994*

1993

Guidelines on Antimicrobial Therapy, 3rd edition, 1992

Tupasi TE, Limson BM, Romero RC, Co VM, Gozali LG, Lecciones JA, Romero RC, Co VM, Lecciones JA and Gozali LG

***Mycoplasma Pneumoniae* and *Chlamydia trachomatis* in Acute Lower Respiratory Infections in Filipino Children.**

Saikku P, Ruutu P, Leinonen M, Kleemola M, Paladin F, and Tupasi TE.

Am J Trop Med 1993;49(1):88-92

A Randomized Study of Piperacillin-Tazobactam vs Ceftazidime plus Metronidazole in the Treatment of Intra-abdominal Infections.

Co VM, Ang JC, Lazo JM, Arguelles VQ and Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994:505-508*

Drug-Resistant *Salmonella typhi*

Sorongon ED, Co RR, Co VM and Tupasi TE. *Makati Medical Center Proceedings, 1994;VIII:29-33*

Comparative Activities of Tosufloxacin and Other Fluoroquinolones against Common Clinical Isolates

Baello BQ, Rivera AB, Co VM, and Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994:612-513*

In-vitro Activity of Piperacillin-Tazobactam on Piperacillin-Resistant Organisms

Tolentino LE, Baes LC, Co VM, Lazo JM, and Tupasi TE. *4th Western Pacific Congress of Chemotherapy and Infectious Diseases, Supplement to JAMA Southeast Asia, December, 1994: 519-521*

1992

Vascular Catheter-Associated Fungemia in Patients with Cancer: Analysis of 155 Episodes

Lecciones LA, Lee JW, Navarro EE, Witebsky FG, Marshall D, Steinberg SM, Pizzo PA, Wlask TJ. *Clinical Infectious Diseases* 1992;14:875-83

Disseminated Histoplasmosis with Unusual Cutaneous Lesions in a Patient from the Philippines

Navarro EE, Tupasi TE, Verillo VM, Romero RC, Tuazon CU. *Am J. Trop Med Hyg.* 46(2), 1992

Is there an Emergence of Resistance with the Clinical Use of Ciprofloxacin?

Tupasi TE, Garvez MD. *Supplement to JAMA Southeast Asia, October 1992, 8(10):6-9*

Clinical Features of Life-Threatening Streptococcal Infections

Tupasi TE. *Book of Abstracts, 3rd Western Pacific Congress on Chemotherapy and Infectious Diseases*

Chemotherapy of Leprosy, Multidrug Therapy

Jacobson R, Romero RC. *Regional Meeting on Leprosy Control, WHO, Manila, 23 June 1992*

Squamous Metaplasia in the Respiratory Epithelium of Children Who Died of Pneumonia

Gonzaga NC, Anderson VM, Navarro EE, Quiapo SC. *Book of Abstracts, 3rd Western Pacific Congress on Chemotherapy and Infectious Diseases*

Liver Morphology in Filipino Adults Who Are Chronic HBV Carriers

Gonzaga NC, Ng M, Zamuco J, Canonigo EB, Perez VN, Tolentino LE, Garvez MD, Olympia EG, Mirasol GL, Tupasi TE. *Book of Abstracts, 3rd Western Pacific Congress on Chemotherapy and Infectious Diseases*

Extrapulmonary Tuberculosis in a Tertiary Hospital

Co VM, Francisco RC, Bautista TL, Tupasi TE. *Book of Abstracts, 3rd Western Pacific Congress on Chemotherapy and Infectious Diseases*

In-vitro Activity of Ciprofloxacin Against *Mycobacterium Tuberculosis* Resistant to Primary Antimycobacterial Agents

1991

A CD4+CTL Clone to a Conserved Epitope on HIV-1 P24: Cytotoxic Activity and Secretion of IL-2 and IL-6
Littau RA, Takeda A, Ennis FA. *Journ Virology Dec 1991; 66:608-611*

An HLA-C-Restricted CD8+ Cytotoxic-Lymphocyte Clone Recognizes A Highly Conserved Epitope on Human Immunodeficiency Virus Type 1 GAG

Littau RA, Oldstone MB, Takeda A, Debouck C, Wong JT, Tuazon CU, Moss B, Kievits F, Ennis FA. *Journ of Virology, August 1991;4051-4056*

Betalactam Resistance in Coagulase-Negative Staphylococci: Lack of Correlation with Glycocalyx Production

Lazo JM, Baello BQ, Rivera AB, Co VM, Tupasi TE, Navarro EE

Clinical Application of the Widal Test

Tupasi TE, Lucas-Aquino R, Mendoza MT, Tuazon CU, Lolekha S. *PSMID Journal, Jan-Jun 1991; 20(1)*

Detection of Circulating Candida Enolase by Immunoassay in Patients with Cancer and Invasive Candidiasis

Walsh TJ, Hathorn JW, Sobel JD, Merz WG, Sanchez V, Maret M, Buckley HR, Pfaller MA, Schaufele R, Sliva C, Navarro EE, Lecciones JA, Chandrasekar P, Lee J, Pizzo PA. *New England Journal of Medicine. April 11, 1991; 324:1026-1031*

Empiric Therapy with Amphotericin B in Febrile Granulocytopenic Patients

Walsh TJ, Lee J, Lecciones JA, Rubin M, Butler K, Francis P, Weinberg M, Roides E, Marshall D, Gress J, Pizzo PA. *RID 1991; 13:496-503*

***Hemophilus Ducreyi* in Genital Ulcers: Clinical and Microbiologic Features**

Rivera AB, Baello B, Co VM, Tupasi TE, Navarro EE

In-vitro Susceptibilities of *Mycobacterium tuberculosis* to Primary Antimycobacterial Agents.

Francisco RC, Littau R, Tupasi TE

In-vitro Susceptibility to Imipenem of Gram-negative Pathogens from Nosocomial Infections at MMC
Baello B, Rivera A, Tupasi TE

Positive Urine Cultures for *Candida albicans* in Hospitalized Patients: Implications for Management
Cantillep A, Espinosa M, Lecciones JA, Tupasi TE, Navarro-Almario EE

Tuberculin Test Response of Filipino Infants Vaccinated with BCG at Birth
Magsino-Songco MM, Pascual-Martin MR, Lecciones JA

Vaccinia-Virus Specific Human Cytotoxic T-cell Clones
Littau RA, Takeda A, Ennis FA. *Vaccines* 91, pp.359-36

1990

Guidelines on Antimicrobial Therapy, 2nd edition, 1990

Tupasi TE, Limson BM, Javato MC, Littau RA, Navarro EE, Lecciones JA, Gomez LO, Garvez MD, Mangubat NV, and Vallente RU

Clinical Utilization of the Quinolones: Its Impact on the Resistance Patterns of Commonly Isolated Pathogens

Garvez MD, Francisco RC, Tolentino LE, Baes LC, Co SL, Tupasi TE. *Proceedings of a Symposium held at the 38th Annual Meeting of the Japan Society of Chemotherapy Western Branch, Gifu, Japan, 1990*

Pathology and Clinical Aspects of Acute Respiratory Tract Infections in Children

Gonzaga NC, Navarro EE, Lucero MG, Queipo SC, Schroeder I, Tupasi TE. *Reviews of Infectious Diseases*. Vol. 12, Supp 8, Nov-Dec 1990

Strategies for Vaccines Against AIDS

Jaffe PA, Takeda A, Littau R, Haubrich R, Tuazon C, Ennis FA. *Phil J Internal Medicine* 1990 Jan-Feb;28:1-5

Antimicrobial Prescribing Patterns in Hospital: Determinants and Proposed Interventions

Javato-Laxer M, Navarro E, Littau R, Gomez ML, Tupasi TE. *The Phil J of Microbiology and Infec Dis*. Vol. 18, No. 2, July-December, 1989

The Prevalence of *Chlamydia trachomatis* in Cervicitis in Pregnant Females

Javato-Laxer M, Singson R, Tolentino L, Tupasi TE, Borromeo R, Manahan CP. *The Philippine Journal of Microbiology and Infectious Diseases*. Vol 19, No. 1, Jan-June 1990

Immune Response to Cryptosporidiosis in Philippine Children

Laxer MA, Alcantara AK, Menorca MD, Fernando MT, Ranoa CP. *Am J Trop Med Hyg* 1990 42 (2):131-139 (89-183)

Catheter-associated Fungemia in Cancer Patients: Analysis of 155 episodes

Lecciones JA, Lee JW, Navarro EE, Witebsky FG, Marshall DJ, Steinberg SM. (*Proceedings of the ICAAC, Houston, Texas, 1989*)

Treatment of Community-acquired Lower Respiratory Tract Infections with Oral Cefuroxime Axetil

Limson BM, Garvez MD. *Clinical Therapeutics*. 1990; Vol. 12, No. 5:436

Monotherapy with Pefloxacin in Multidrug Resistant Nosocomial Gram-Negative Bacteremia

Limson BM, Pena AC, Garvez MD. *J Antimicrobial Therapy* 1990; No. 26, Suppl. 1:91-95

Human IgG Fc Receptor II Mediates Antibody-dependent Enhancement of Dengue Virus Infection

Littau R, Kurane I, Ennis FA. *The Journal of Immunology*. April 15, 1990; 144 (8):3183-3186

Respiratory Rate Greater than 50 per Minute as a Clinical Indicator of Pneumonia in Filipino Children with Cough

Lucero MG, Tupasi TE, Gomez, Beltran MG, Crisostomo AU, Romano VV, Rivera LM. *Reviews of Infectious Diseases*. Nov-Dec 1990; 12(8)

Clinicopathologic studies of Children Who Die of Acute Lower Respiratory Tract Infections: Mechanisms of Death

Navarro EE, Gonzaga NC, Lucero MG, Queipo SC, Schroeder I, Gomez ML, Tupasi TE. *Reviews of Infectious Diseases*. Nov-Dec 1990; 12(8)

Hemodialysis-Hemoperfusion in Fulminant Viral Hepatitis

Ramos CP, Almario JS. *Biomaterials, Artificial Cells and Artificial Organs*, Vol. 18, No. 5, 1990

Patterns of Acute Respiratory Tract Infection in Children: A Longitudinal Study in a Depressed Community in Metro Manila

Tupasi TE, de Leon LE, Lupisan MS, Torres CU, Leonor ZA, Sunico ME, Mangubat NV, Miguel CA, Medalla F, Tan ST, Dayrit M. *Reviews of Infectious Diseases*. Nov-Dec 1990; 12(8)

Etiology of Acute Lower Respiratory Tract Infection in Children from Alabang, Metro Manila

Tupasi TE, Lucero MG, Magdangal DM, Sunico ME, Torres CU, de Leon LE, Paladin JF, Baes L, Javato MC. *Reviews of Infectious Diseases*. Nov-Dec 1990; 12(8)

Malnutrition and Acute Respiratory Tract Infection in Filipino Children

Tupasi TE, Mangubat NV, Sunico ME, Magdangal DM, Navarro EE, Leonor ZA, Lupisan S, Medalla F, Lucero MG. *Reviews of Infectious Diseases*. Nov-Dec 1990; 12(8)

Diversity of Outer Membrane Protein Profiles of Nontypable *Haemophilus influenzae* Isolated from Children from Papua New Guinea and the Philippines
Weinberg GA, Lehman D, Tupasi TE, Ggranoff DM. *Reviews of Infectious Diseases*. Nov-Dec 1990; 12(8)

Traditional Practices and Ritual Therapy in Acute Respiratory Infection

Valencia LB. (*Final Project Report to the National Research Council of the Philippines, 1990*)

1989

Child Care Practices Of Mothers: Implications For Intervention In Acute Respiratory Infections

Tupasi TE, Miguel CA, Tallo VL, Bagasao TMP, Natividad JN, Valencia LB, de Jesus MEG, Lupisan S, Medalla F. *Annals of Trop Ped.* 1989; 9:82-88

Comparative study of ciprofloxacin versus cotrimoxazole in the treatment of Salmonella enteric fever

Limson BM, Littaua RA. *Jour Clin Study & Treatment* 1989; Vol. 17

Acute suppurative thyroiditis caused by *Salmonella typhi*

Aquino RL, Navarro E, Saniel MC. *Phil Jour of Micro and Infect Dis.* 1989; Vol 18, Jan-June

Immunity to diphtheria in children in a rural community of Baclayon Municipality, Bohol

Trabajo E, Tupasi TE, Kaneko Y. *Phil Jour of Micro and Infect Dis.* 1989; Vol 18, Jan-June

Bacterial resistance and antimicrobial utilization in a Manila Hospital

Littaua RA, Javato MC, Tupasi TE. *APUA Newsletter.* (7) 3: 1989

Hemophilus influenzae from Filipino children with pneumonia

Tupasi TE, de Leon LE, Kaneko Y. Presented at the 29th Interscience Conference on Antimicrobial Agents and Chemotherapy. 17-20 September 1989, Houston, Texas

Malnutrition and Acute Respiratory Infection

Tupasi TE, Mangubat NV, Sunico ME, Magdangal DE, Navarro EE, Leonor Z, Lupisan S, Medalla F, and Lucero MG. Presented at the 29th ICAAC, 17-20 September 1989 Houston, Texas and at the 11th Asia-Pacific Congress on Diseases of the Chest, 19-22 November 1989, Bangkok, Thailand

Etiology and Morphologic Changes in the Lungs of Children Who die of Pneumonia

Gonzaga NC, Navarro EE, Lucero MG, Queipo SC, Schroeder I, Tupasi TE. Presented at the 11th Asia-Pacific Congress on Diseases of the Chest 19-22 November 1989, Bangkok, Thailand

Disseminated Histoplasmosis in an Immunocompromised Host

Navarro EE, Tupasi TE, Verallo VM, Romero RC. Presented at the Asian Dermatological Association Convention, 22-25 November 1989, Singapore

Activated EB Virus and Vaccinia Virus-specific killer cells in individuals infected with HIV-1

Littaua RA, Takeda A, Tuazon CU and Ennis FA. Presented at Virology Meeting, Cold Spring Harbor, Long Island, New York, September 1989

1988

Guidelines on Antimicrobial Therapy, 1st edition 1988

Tupasi TE, Limson B

Acute lower respiratory tract infection associated with Chlamydial TWAR antibody in Filipino children

Saikku P, Ruutu P, Leinonen M, Panelius J, Tupasi TE, Grayston JT.

L Infect Dis Nov 1988; 158(5): 1095-1097

Determinants of morbidity and mortality due to acute respiratory infections: implications for intervention

Tupasi TE, Velmonte MA, Sarvictores MEG, Abraham L, de Leon LE, Tan ST, Miguel CA, Saniel MC. *J Infect Dis April 1988; 157(4): 615-623*

Serotypes of *Streptococcus pneumoniae* and *Hemophilus influenzae* from children with pneumonia

Tupasi TE, de Leon LE, Kaneko Y. *The Journal of the Japanese Association for Infectious Diseases March 1988; 62:403-404*

Ceftazidime Versus a Combination Of Amikacin And Ticarcillin In The Treatment Of Severe Infections

Limson BM, Navarro E, Littaua R, Que E, Kua LT. *Clin Therapeutics* 1988; (10)5

1986-87

Rationalizing antimicrobial use in respiratory infection: The Philippines

Tupasi TE, de Leon LE. *APUA Newsletter Fall 1987; V(3): 1, 6-7*

PARTICIPATION IN CONFERENCES

International

47th Annual Meeting of the Japan Society of Chemotherapy (Tokyo), 11 June 1999

Speaker: Thelma E. Tupasi, MD: *"Future Prospects on Quinolones"*

Tazocin Pan-European Conference on Intensive Care Medicine (Baveno, Lake Maggiore, Italy) - 8-11 July 1999

Participant: Thelma E. Tupasi, MD

21st International Congress for Chemotherapy (Birmingham, UK) - 7 July 1999

Chairman: Thelma E. Tupasi, MD: *"Treatment of Parasitic Diseases, Lessons from Veterinary Medicine"*

1st International Congress of the Asia Pacific Society of Infection Control (APASIC) (Hongkong) - 8-11 August 1999

Participants: Ma. Imelda D. Quelapio, MD & Mrs. Zenaida Chua, RN

Wyeth Infectious Disease Global Advisory Board Meeting (Philadelphia, USA) - 30 September 1999

Participant: Thelma E. Tupasi, MD

39th Interscience Conference of Antimicrobial Agents and Chemotherapy (ICAAC) - 26-29 September 1999

Participant: Thelma E. Tupasi, MD

National

18th Annual Chest Convention (EDSA Shangri-La Hotel) - 5 March 1999

Speaker: Thelma E. Tupasi, MD: *"Sequential Switch Therapy in LRTI"*

8th Postgraduate Course in Internal Medicine (Our Lady of Lourdes Hospital) - 18 March 1999

Speaker: Thelma E. Tupasi, MD: *"Antibiotic Pharmacodynamics / Judicious Use of Antibiotics"*

2nd Subspecialty Postgraduate Course in Perinatology and Neonatology (Children's Medical Center of the Philippine & General Hospital, Inc.) - 27 May 1999

Speaker: Thelma E. Tupasi, MD: *"Infections in Pregnancy and the Neonatal Period (TB, Hepatitis, Dengue, HIV)"*

5th Annual Convention on Infection Control (PHICS): "Common Sense in Infection Control" (Occupational Safety and Health Center, Diliman, Quezon City) - 27-28 May 1999

Speaker: Vilma M. Co, MD: *"Detecting Outbreaks"*

Participants: Ma. Imelda D. Quelapio, MD & Mrs. Zenaida Chua, RN

St. Luke's Lecture for the Month - 16 June 1999

Speaker: Thelma E. Tupasi, MD: *"Pharmacokinetics and Judicious Use of Antibiotics"*

4th CPE Seminar of the Philippine Association of Medical Technologists (PAMET) - Emilio Aguinaldo Colleges, Taft Avenue, Manila - 12 August 1999

Speaker: Thelma E. Tupasi, MD: *"The 1997 National Tuberculosis Prevalence Survey"*

Speaker: Alice B. Rivera, RMT: *"Drug-Resistant Tuberculosis in the Philippines"*

6th Annual Convention of the PhilCAT (Manila) 20-21 August 1999

Speaker: Thelma E. Tupasi, MD: *"1997 NTPS: Lessons Learned"*

3rd Orthopedic Symposium (Department of Orthopedics, Makati Medical Center) - 27 August 1999

Speaker: Thelma E. Tupasi, MD: *"Tuberculous Arthritis"*

DOH Training of Trainers on the DOTS Strategy (Manila) - 4-8 October 1999

Participants: Ma. Imelda D. Quelapio, MD, Nona Rachel B. Mira, RN, Michael Abeleda, RN

12th Midyear Convention of the Philippine College of Physicians (Iloilo City) - 9 October 1999

Speaker: Thelma E. Tupasi, MD: *"Use and Misuse of Antibiotics"*

3rd Regional Convention of the Philippine Society for Microbiology and Infectious Diseases, Visayas Chapter (Iloilo City) - 21 October 1999

Keynote Lecture: Thelma E. Tupasi, MD: *"The Tuberculosis Problem in the Philippines"*

7th Annual Postgraduate Course of the Philippine College of Physicians, Central and Eastern Visayas Chapter (Cebu City) - 6 November 1999

Speaker: Thelma E. Tupasi, MD: *"Penicillin: a Romance Rekindled"*

21st Annual Convention of the Philippine Society for Microbiology and Infectious Diseases (Westin Philippine Plaza Hotel) - 2 December 1999

Reactor: Thelma E. Tupasi, MD: *"Updates on the Management of Antimicrobial Resistance"*

Lecturer: Thelma E. Tupasi, MD: *"Penicillin: How Useful in Respiratory Streptococcus pneumoniae"*

Lecturer: Ma. Imelda D. Quelapio, MD: *"A Double-Blind Study Comparing the Safety and Efficacy of Cefepime versus Ceftazidime in Severe Bacterial Infections"*

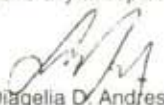
March 7, 2000

THE BOARD OF TRUSTEES
 TROPICAL DISEASE FOUNDATION, INC.
 MAKATI MEDICAL CENTER
 MAKATI CITY

I have examined the statement of assets, liabilities and fund balance of Tropical Disease Foundation, Inc. as of December 31, 1999 and the related statement of revenues and expenses and changes in fund balance and cash flows for the year then ended. These financial statements are the responsibility of the Foundation's management. My responsibility is to render an opinion on these financial statements based on my audit.

My audit was conducted in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, the financial statements referred to above, present fairly, in all material respects, the financial position of Tropical Disease Foundation, Inc. as of December 31, 1999 and the results of its operations and its cash flows for the year then ended, in conformity with generally accepted accounting principles applied on a consistent basis.


 Diagelia D. Andres
 Certified Public Accountant
 Cert. No. 0033719
 PTR No. 70129755
 Issued at Muntinlupa City
 On January 26, 2000

TROPICAL DISEASE FOUNDATION, INC.
(A Nonstock, Nonprofit Corporation)
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 1999
(With Comparative Figures in 1998)

	1999	1998
CASH FLOWS FROM OPERATING ACTIVITIES		
Excess of revenues over expenses (deficit)	P (1,178,930.97)	P 403,157.00
Adjustment to reconcile excess of revenues over expenses to net cash provided by operating activities:		
Depreciation	1,275,626.27	655,519.00
Changes in operating assets and liabilities:		
Decrease (Increase) in assets:		
Investment trust fund	(929,177.24)	(315,014.00)
Receivables	116,038.00	1,540,854.00
Advances to officers and staffs	(23,665.80)	-
Prepaid expenses	9,408.00	24,076.00
Increase (Decrease) in liabilities:		
Accounts payable & accrued expenses	(26,096.98)	(48,033.00)
Loans payable	-	(1,382,500.00)
Plan liabilities	1,429,192.00	-
Net Cash Provided by (to) Operating Activities	672,393.28	878,059.00
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of property and equipment	(59,283.50)	(239,188.00)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	613,109.78	638,871.00
CASH AND CASH EQUIVALENTS		
January 1	1,570,042.00	931,169.00
December 31	2,183,151.78	1,570,040.00

See accompanying Notes to Financial Statements

TROPICAL DISEASE FOUNDATION, INC.
(A nonstock, nonprofit corporation)
STATEMENT OF REVENUES AND EXPENSES AND CHANGES IN FUND BALANCE
FOR THE YEAR ENDED DECEMBER 31, 1999
(With Comparative Figures in 1998)

		1999		1998
REVENUES				
Grants	P	2,520,808.35	P	1,230,718.00
Donations and contributions		4,127,600.69		3,621,467.00
Gain on sale of office equipment		-		16,529.00
Other income, net		256,900.20		47,445.00
Total Revenue	P	6,905,309.24	P	4,916,159.00
EXPENSES				
Salaries, wages and honoraria	P	1,488,829.72	P	1,303,933.00
Laboratory and medical supplies		1,437,344.18		528,319.00
Printing, stationeries and office supplies		157,670.25		415,635.00
Employee benefits (SME, Pag-ibig)		308,996.22		253,611.00
Insurance		168,692.02		156,657.00
Seminars and workshop		22,750.00		153,029.00
Temporary services		-		136,019.00
Interest and bank charges		126,103.97		111,698.00
Travel and transportation		311,929.99		96,046.00
Repairs and maintenance		123,248.08		95,667.00
Loss on foreign exchange transactions		-		89,460.00
Utilities		65,268.00		65,584.00
Communications		89,954.95		38,921.00
Professional fees		162,332.00		30,000.00
Membership fees and other dues		16,785.78		3,100.00
Gasoline and oil		43,586.89		2,635.00
Taxes and licenses		4,600.09		1,312.00
Uniforms		39,197.50		-
Representation & Entertainment		441,195.98		-
Donation expense		57,795.00		-
Retirement Plan Expense		1,540,546.00		-
Depreciation		1,275,626.27		655,519.00
Miscellaneous		201,787.32		375,857.00
Total Expenses	P	8,084,240.21	P	4,513,002.00
EXCESS OF REVENUES OVER EXPENSES	P	(1,178,930.97)	P	403,157.00
FUND BALANCE				
January 1		5,085,263.00		4,682,106.00
December 31	P	3,906,332.03	P	5,085,263.00

See accompanying Notes to Financial Statements

TROPICAL DISEASE FOUNDATION, INC.
 (A Nonstock, Nonprofit Corporation)
 STATEMENT OF ASSETS, LIABILITIES & FUND BALANCE)
 'DECEMBER 31, 1999
 (With Comparative Figures in 1998)

		1999		1998
A S S E T S				
CURRENT ASSETS				
Cash & Cash Equivalents (Note 2)	P	2,183,151.78	P	1,570,040.00
Trust Funds:				
Pension Plan - C 20170		984,890.01		365,548.00
Investment Plan - C-20150		1,444,520.72		-
Receivables		-		116,038.00
Advances to Officers & Staff		23,665.80		-
Prepaid Expenses		-		9,408.00
Total Current Assets	P	4,636,228.31	P	2,061,034.00
PROPERTY & EQUIPMENT				
Laboratory Equipment	P	4,493,620.51	P	5,606,308.00
Office Equipment		898,914.50		861,631.00
Motor Vehicle		513,750.00		513,750.00
Laboratory facilities		219,941.00		219,941.00
Office furniture & fixtures		175,823.00		175,823.00
Accumulated Depreciation		(6,082,346.27)		(4,806,720.00)
Book Value	P	219,702.74	P	2,570,733.00
REFUNDABLE DEPOSITS (Note 3)		621,634.00		621,634.00
TOTAL ASSETS	P	5,477,565.05	P	5,253,401.00

LIABILITIES AND FUND BALANCE

ACCOUNTS PAYABLE & ACCRUED EXPENSES	P	142,041.02	P	168,138.00
PLAIN LIABILITIES		1,429,192.00		-
TOTAL LIABILITIES		1,571,233.02		168,138.00
FUND BALANCE - 12.31.		3,906,332.03		5,085,263.00
TOTAL LIABILITES AND FUND BALANCE	P	5,477,565.05	P	5,253,401.00

See accompanying Notes to Financial Statements

THE TROPICAL DISEASE FOUNDATION, INC.

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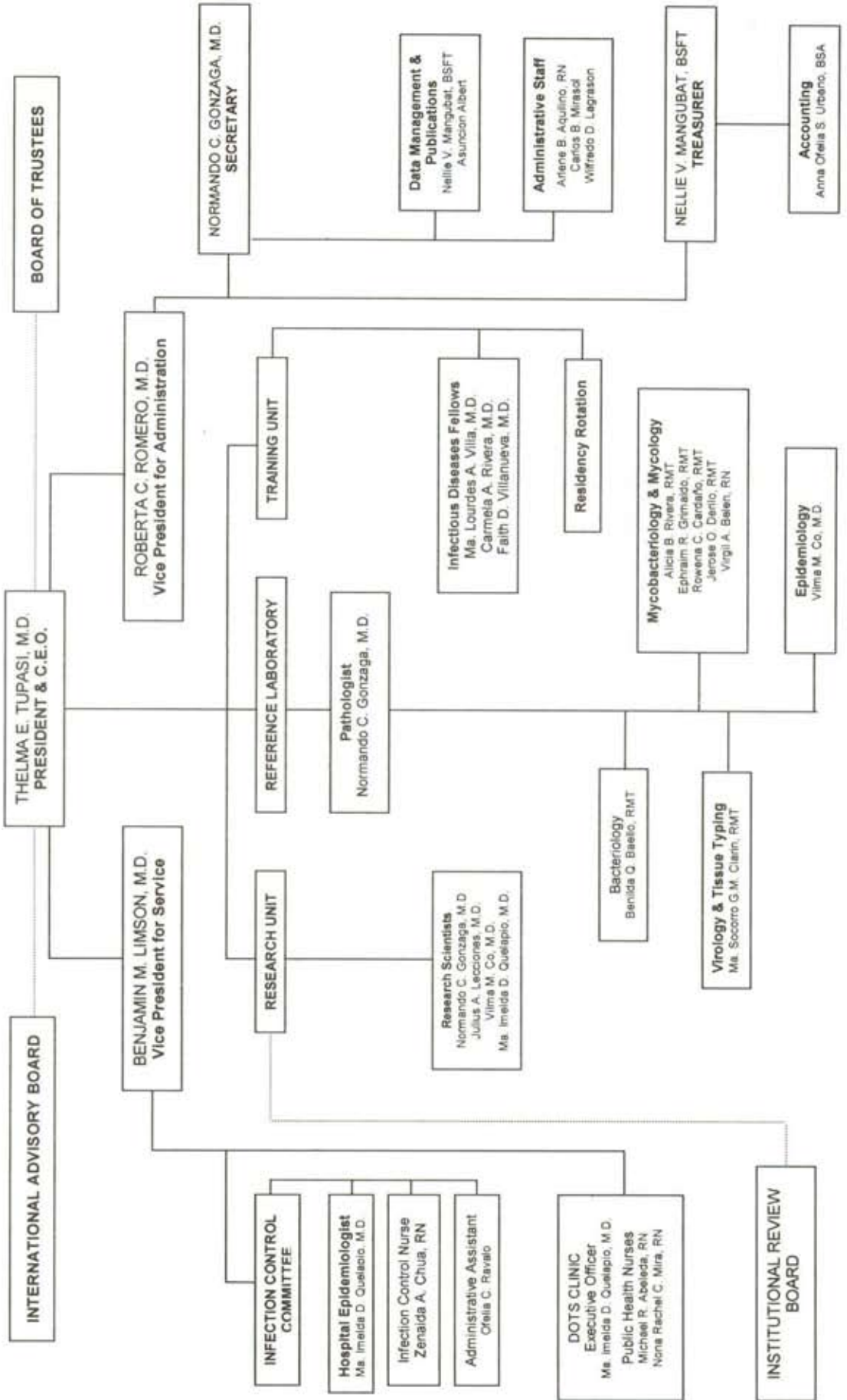
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TROPICAL DISEASE FOUNDATION, INC. Organizational Chart



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Endowments Supporting Current Projects

Endowments are invited in the following categories:

Benefactors	P 100,000.00 or more
Patrons	P 20,000.00 - P 99,000.00
Sponsors	P 10,000.00 - P 19,000.00
Donors	Less than P10,000.00
Friends of the Foundation	

Cash endowments of P 500,000.00 or more may designate their endowment to a specific research project or for the general use of the Foundation.

An endowment of P 1,000,000.00 may sponsor one research project for one year.

Endowment for the Future

Donations of money, securities, property or life insurance can be given to the Tropical Disease Foundation for general support or for specific projects designated by the donor.

Memorial and Honorary Endowments Remembering a Loved One

Endowments may be made in honor or in memory of a friend or relative. The Foundation acknowledges this by giving a certificate of appreciation to the person honored or to the family of the deceased.

Tropical Disease Foundation, Inc.
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