

1998 Annual Report



Tropical Disease Foundation

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FOREWORD

This report is dedicated to the benefactors and friends of the Tropical Disease Foundation. The achievements herein described in our service, research, training and personnel development programmes could not have been possible without their generosity and wholehearted support. For these, we will always be grateful.

As we approach the third millennium, we are full of vigor in rededicating our efforts towards the fulfillment of our mission-

...the pursuit of the control and prevention of tropical infectious diseases so that all may enjoy their right to health and well-being.


Thelma E. Tupasi, M.D.

President, Tropical Disease Foundation



Tropical Disease Foundation.....

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.

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

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 the community-based prospective studies on Acute Respiratory Infection (ARI) and the 1997 Nationwide Tuberculosis Prevalence Survey undertaken on behalf of the Department of Health.

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

Research projects are done in collaboration with local and foreign institutions and universities. The research programme helps to establish linkages in order to facilitate technology transfers. Table 1 lists the various research projects undertaken by the TDF and the funding sponsors from 1987-1998.

I - Clinical Trials

Oromucosal Interferon In Chronic Hepatitis B Infection (1996-1998)

A randomized, double-blind placebo-controlled trial was conducted to evaluate the efficacy and safety of sublingually administered oromucosal low-dose human lymphoblastoid interferon alpha [IFN-a-n1 (Ins)] in Filipino patients with chronic replicative Hepatitis B virus infection with elevated alanine aminotransferase (ALT). Its clinical, biochemical and virological effects were also determined.

Interferons are multifunctional protein mediators which modulate the expression of various cellular genes, attaining an antiviral state that results in the inhibition of cell multiplication and modulation of the immune system. (Tovey, 1995). Their immunostimulating action has been known for many years. They possess varied immune regulatory functions and have been shown to have potent activity against several infectious agents (Hutchinson, 1990). Studies of chronic hepatitis B have shown long-term response rates up to 42% following interferon therapy of 3-6 months in

Caucasian patients (Muller, 1981) and 15% in Asian patients (Lok, 1984).

The parenteral administration of high doses of recombinant type 1 interferons has been shown to be effective in the treatment of chronic hepatitis B. However, this has been associated with systemic adverse reactions such as fever and flu-like symptoms, muscle pain, headache, fatigue, anorexia, hair loss, and rarely depression (Bruno, 1991). Sublingual administration of interferon at remarkably lower but physiologic doses has been shown to be effective in the treatment of hepatitis B, with HBeAg clearance rates of 19% and 31% at dosages of 200 IU and 400 IU, respectively (Yao, 1991). It has been postulated that the low-dose interferon attaches to interferon receptors that abound in the oral cavity. This stimulates the elaboration of a soluble substance that in turn induces the antiviral and immunomodulating effects in the treated patients with chronic hepatitis B (HBV) or hepatitis C (HCV).

Table 1. Research Projects and Funding Agencies

Research Projects (Year Undertaken)	Sponsor
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)	Bristol-Myers Squibb
SENTRY (March-December 1998)	Bristol-Myers Squibb
A Double-Blind Study Comparing the Safety and Efficacy of Cefepime versus Cefazidime in Severe Bacterial Infections (March-December 1998)	Bristol-Myers Squibb
Drug-Resistant <i>Mycobacterium tuberculosis</i> in the Philippines (October 1997-December 1998)	World Health Organization
The Efficacy of Sublingually Administered Natural Human Interferon Alpha in the Treatment of Patients with Chronic Active Hepatitis B (1992-1998)	Pharma Pacific Australia, Ltd.
The Second Nationwide Tuberculosis Prevalence Survey (March-December 1997)	World Bank and the Philippine Health Development Project (PHDP)



From a total of 459 patients with (+) HBsAg screened, 100 (22%) had (+) HBeAg. Of these, 44 (10%) had ALT levels >1.5x the normal value. These patients were enrolled in the study, 22 were randomly allocated to the interferon arm and were given two tablets each containing 200 IU IFN-a-nl (Ins). The other 22 patients were randomized to the placebo arm and were given matching placebo tablets. The first 8 patients (IFN = 5, Pla = 3) were not evaluated because of protocol modification.

Fourteen (14) of the remaining 17 patients on IFN completed the 8 months treatment course. Three patients failed to complete the clinical trial and were lost to follow-up on weeks 3, 16 and 26 of the study.

Sixteen (16) of the remaining 19 patients on placebo completed the treatment course. One case had an early withdrawal due to HBV-related nephrotic syndrome and the other two (2) were lost to follow-up on weeks 32 and 36. Seven of those who completed the placebo course agreed to be crossed-over to the IFN arm, and completed the IFN treatment. They were included in the 21 evaluable cases on the IFN arm.

None of the patients studied in either treatment arm had clearance of HBsAg. Among the 21 patients treated with IFN, clearance of HBeAg was noted in 8 (38.1%) patients with seroconversion to positive antibody to HBeAg (anti-HBe) in 7(33%); both were statistically significant compared to no clearance nor seroconversion in the 16 patients on placebo (p=0.005 and p=0.012, respectively). Serum HBV-DNA clearance was not significantly different in the two arms: 13(61.9%) patients on the IFN and 6(37.5%) on placebo arm (p=0.14). ALT normalization was not significantly different in the two treatment arms (p=0.09), although there was a trend for higher normalization in those in IFN. It was achieved in 11(53.4%) patients on IFN, including all 8 IFN responders, compared to only 4(25%) patients on placebo.

Except for one patient with skin rash, low-dose oromucosal IFN was well tolerated and completely devoid of any evidence of toxicity. The sublingual tablet form of IFN offers the therapeutic benefit equal to the parenterally administered IFN. Its advantages are high patient compliance due to easier administration and lower cost.

A Double-Blind Study Comparing the Safety and Efficacy of Cefepime versus Ceftazidime in Severe Bacterial Infections (March-December 1998)

A double-blind study compared the safety and efficacy of Cefepime, a new fourth generation cephalosporin, with Ceftazidime, a third generation cephalosporin in the initial therapy of patients with

severe bacterial infection. Both drugs were given by continuous intravenous infusion for 24 hours daily for 5-14 days. Patients were randomized to the two drugs at a ratio of 2:1 (Cefepime: Ceftazidime).

Table 1 (cont.)

Research Projects (Year Undertaken)	Sponsor
Prevalence Survey of Dermatologic Diseases in the Philippines (April-June 1997)	Janssen Pharmaceuticals
Seroepidemiologic Study of Hantaviruses in the Philippines (April-June 1997)	Glaxo-Wellcome Philippines Viscarra Pharma
Tuberculin Skin Testing among Healthcare Workers at the Makati Medical Center (1996-1997)	Glaxo-Wellcome Philippines
Comparison Between 7H9 with OADC Enrichment Broth and Solid Lowenstein Jensen Medium for Primary Isolation of Mycobacteria (1995-1996)	Astra Fund for Clinical Research and Continuing Medical Education (AFCRCME)
Multi-center Study on Lincomycin for Streptococcal Pharyngitis (1995-1996)	Upjohn Philippines
Multi-center Study on Short-course 2% Clindamycin Vaginal Cream vs. Oral Metronidazole for Bacterial Vaginosis (1996)	Upjohn Philippines
In-vitro Study of Pefloxacin vs. Ciprofloxacin and Ofloxacin (1996)	Rhone-Poulenc Rorer
Spectrum of Ulcerative Keratitis at the Makati Medical Center (1993)	Glaxo Philippines, Inc.



Clinical and bacteriologic responses were compared as well as *in-vitro* susceptibility testing of both drugs using the E-test and the disk diffusion method. Serum bactericidal titers (SBTs) were also determined within 20-24 hours after the start of the first dose.

The interim report of this study included 44 patients, 30 of whom were randomized to Cefepime and 14 to Ceftazidime. Four patients were dropped from the study due to diagnoses other than bacterial infections. Clinical diagnoses of those evaluated included 10 lower respiratory tract infections, 10 urinary tract infections, 10 intraabdominal infections, 4 line-related infections, 2 soft tissue infections, 2 cases of primary bacteremia and 2 of febrile neutropenia.

Clinical response was found in 75% versus 67% in Cefepime and Ceftazidime, respectively; bacteriologic response in 75% versus 62.5%. Resistance was more to Ceftazidime than to Cefepime and SBTs of > 1:8 were more in the Cefepime group.

Discordance was noted between the SBTs versus clinical and bacteriologic response (cure and failure). There was likewise discordance between SBTs and susceptibility testing using the E-test and the disk diffusion method.

The interim results of the study showed that there was equivalence in response among patients given Cefepime as compared to those given Ceftazidime.

II - Laboratory-Based Studies

SENTRY (March-December 1998)

This surveillance study was done to determine the frequency of occurrence of pathogens causing blood stream infections (BSI), lower and upper respiratory tract, wound, and urine infections, and assess the antimicrobial susceptibility patterns of all isolates including yeast.

The Tropical Disease Foundation was chosen as one of the participating laboratories among Western Pacific countries, including Japan, China,

Taiwan, Australia, Hongkong, Singapore and South Africa. The centers submitted specimens to the coordinating study center which is the Women's and Children's Hospital in Adelaide, Australia.

A total of 394 isolates were sent by the Foundation to the study center, 163 from blood, 115 from the respiratory tract, 41 from infected wounds, and 75 from urine.

Table 1 (cont.)

Research Projects (Year Undertaken)	Sponsor
<i>In-vitro</i> Susceptibility of Gram-negative and Gram-positive Pathogens to Tosufloxacin as Compared with Other Quinolones (1992-1993)	Cyanamid Lederle (Phils), Inc.
<i>In-vitro</i> Susceptibility of Bacterial Isolates to Cefepime as Compared to Ceftazidime and Ceftriaxone 1992	E.R. Squibb and Sons
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)	Cyanamid Lederle (Phils), Inc.
Piperacillin and Tazobactam Sensitivity Profile (1991-1992)	Cyanamid Lederle (Phils), Inc.
Short-term Chemotherapy of Leprosy with Minocycline and Rifampicin (1991)	Cyanamid Lederle (Phils), Inc.
Etiology of Childhood Acute Respiratory Infections: Pathophysiologic Studies (1991)	Board on Science and Technology for International Development, U.S. National Academy of Sciences



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)

This was a multi-center study with the objective of providing reliable quantitative information for local hospital laboratories in the Philippines regarding Cefepime's comparative activity and spectrum against important nosocomial pathogens, versus other marketed broad-spectrum beta-lactams.

This *in-vitro* study involved clinical strains, namely *C. freundii*, *Enterobacter* spp., indole-positive

Proteus, *E. coli*, *Klebsiella* spp., oxacillin-susceptible *S. aureus* and coagulase-negative *Staphylococcus*, *Acinetobacter* spp. and *P. aeruginosa*. Susceptibility testing of the isolates were done using the E - test.

A total of 88 specimens were submitted to the sponsoring company, which sent the isolates to the University of Iowa for confirmatory testing.

Drug-Resistant *Mycobacterium tuberculosis* in the Philippines (October 1997-December 1998)

The second nationwide tuberculosis prevalence survey in the Philippines was undertaken in 1997 with a parallel study in the urban poor populations in Metro Manila, Cebu, and Cagayan de Oro. One objective was to determine the prevalence of drug resistant *Mycobacterium tuberculosis*.

M. tuberculosis was isolated from sputum specimens of subjects with radiographic evidence of pulmonary tuberculosis. A total of 188 isolates were obtained from 2,096 specimens cultured. Following standard procedures, sensitivity tests against Isoniazid, Rifampicin, Streptomycin, and Ethambutol were performed according to the proportional method using LJ media. Susceptibility to Pyrazinamide was determined using the pyrazinamidase test.

Resistance was noted in 17.6% of the isolates tested. Acquired resistance was 25.7% while primary drug resistance was 14.6%. Multi-drug resistance (MDR) to isoniazid and rifampicin with or without resistance to other drugs was noted in 4.3%. Acquired MDR was 14.3% and was significantly higher than primary MDR (1.5%).

Of the isolates tested, 14.9% were resistant to isoniazid, 4.3% to rifampicin, 6.4% to streptomycin, and 1.1% each to ethambutol and pyrazinamide. The prevalence of MDR *M. tuberculosis* in rural and urban communities was not different implying that short-course chemotherapy would still be effective in 95.7% of patients. The study concluded that previous treatment for tuberculosis was associated with a significant relative risk of 10.7 for the emergence of MDR *M. tuberculosis*.

Table 1 (cont.)

Research Projects (Year Undertaken)	Sponsor
Minocycline in the Treatment of Lepromatous Leprosy (1990)	National Research Council of the Philippines
Lymphoblastoid Interferon Alpha in the Management of Chronic Hepatitis B Infection (1989-1990)	Wellcome Philippines
Levels of Prostacyclin and Thromboxane in Pregnancy-Induced Hypertension (1989-1990)	International Development Research Centre
Traditional Practices and Ritual Therapy on Acute Respiratory Infection (1989-1990)	National Research Council of the Philippines
Inhibitory and Sensitivity Patterns of Local Community Pathogens to Aztreonam (1989)	E.R. Squibb & Sons
Multi-drug Therapy in Leprosy (1988-1990)	Cyanamid Lederle (Phils), Inc.
Surveillance of Ofloxacin Resistance (1987-1990)	Daiichi
Acute Respiratory Infection in Childhood: Data Analysis (1987-1990)	Board on Science and Technology for International Development, U.S. National Academy of Science
Acute Respiratory Infection (1987)	Astra Pharmaceuticals (Phils.), Inc.
Chlamydia Infection in Filipino Women	U.S. Naval Medical Research Unit 2 (NAMRU)



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 sponsors of training grants, and the institutions where they trained.

Table 2. Training Grants

Name	Training Grant (Sponsor)	Venue
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, RMT 21-28 September 1997	Drug Susceptibility of Mycobacteria (Rhone-Poulenc Rorer)	Korean Institute of Tuberculosis 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, RMT 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, RMT 13 April - 2 July 1993	Antifungal Assays (British Medical Council)	Regional Dept. of Infectious Diseases and Tropical Medicine University of Manchester U.K.
Alicia B. Rivera 19-23 April 1993	BSM Course in Diagnostic Medical Mycology (British Medical Council)	University of Leeds U.K.
Benilda O. Baello, RMT 17-28 May 1993	Respiratory Infections in Immunocompromised Patients (Insular Life Assurance Co., Ltd)	National Institute of Health Bethesda, Maryland, U.S.A.
Melanie B. Nogoy, RMT 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, RMT Alicia B. Rivera, RMT 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



Table 2. (cont.)

Name	Training Grant (Sponsor)	Venue
Lerma C. Baes, RMT 1990	Rapid Viral Diagnosis, Chlamydia Isolation (Daiichi)	National Institute of Health Mahidol University Bangkok, Thailand
Roland C. Francisco, RMT March 1990	<i>P. aeruginosa</i> serotyping, Isolation of <i>Legionella</i> and Rapid Detection of <i>Strongyloides stercoralis</i> (Daiichi)	Ryukyu University Okinawa, Japan
Rebecca Littau, M.D. 1988-1991	Immunopathology of Dengue Virus and HIV (Asia Brewery)	University of Massachusetts Worcester, Mass. U.S.A.
Marivyl 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, RMT 1988	Clinical Features of Viral and Bacterial Infections, Immunologic Monitoring and Rapid Diagnostic Techniques in Transplant Patients (Mr. Freddie Elizalde)	Children's Hospital of Pittsburgh, U.S.A.
Lolita Tolentino, RMT 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 Foundation)	Sendai National Hospital Japan
Thelma E. Tupasi, M.D. 1988	Influenza and Respiratory Syncytial Virus (WHO)	National University of Singapore
Ma. Lourdes G. Gozali, 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.



SERVICE PROGRAMME

Reference Laboratory

It is with a sense of achievement and pride that the Foundation, with its facilities, extends its services to the public as a reference laboratory in mycobacteriology, mycology and virology. Diagnostic tests for opportunistic pathogens such as cultures for *Nocardia*, *Legionella*, *Mycobacteria*, anaerobes, and special stains for *Pneumocystis carinii*, are now available for work-up of immunocompromised patients. The Foundation also undertakes TB culture and sensitivity tests. In addition, special

examinations for cryptococcal antigen latex agglutination system, Chlamydia, leptospiral culture and serology are done. The virology laboratory, which has been operational since April 1993, enables the Foundation to do researches on viruses using shell vial techniques for viral cultures and immunofluorescence for rapid viral diagnosis.

For organ transplant patients, tissue typing-HLA-ABC, HLA-DR and crossmatching-Bw typing are done.



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 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 the following departments: Microbiology and Pathology, Pharmacy, Dietary and Housekeeping Services, Medicine, Surgery, Obstetrics, Pediatrics, Emergency room, and the Administration.

The ICC holds regular monthly meetings to formulate policies for the control of infections, review various surveillance programs and employees' health program, and constantly assess 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.



EDUCATIONAL PROGRAMME

Training Programme

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 eight fellows have completed the training program. Two others will soon complete the program.

Table 3. Fellowship Training Programme

Fellows	Years
Marivyl Javato, MD	1987 - 88
Rebecca Littaua, MD	1987 - 88
Maria Lourdes Gomez-Gozali, MD	1988 - 89
Mamerto G. Garvez, MD	1989 - 90
Vilma Martinez-Co, MD	1991 - 92
Ellamae M. Sorongon, MD	1993 - 94
Evelyn T. Alesna, MD	1995 - 97
Maria Imelda D. Quelapio, MD	1996 - 98

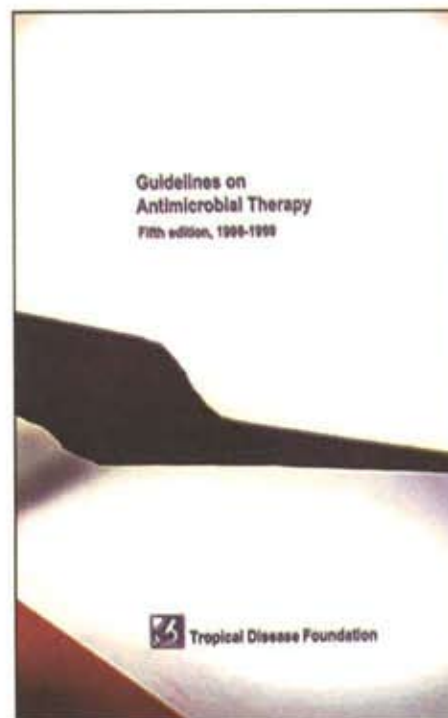


Guidelines on Antimicrobial Therapy (1988-1998)

This manual is a regular project of the Foundation with the intention of providing physicians a handy reference for the rational choice of empiric antimicrobial therapy. This is also part of the fellowship training as fellows help provide evidenced-based data to update recommendations. The first edition was published in 1988, the second in 1990, the third in 1993, the fourth in 1996, and the fifth in 1998.

Rational Antimicrobial Usage (1986-present)

This is a project of the Infection Control Committee aimed at preventing the emergence of bacterial resistance to antibiotics by continuous surveillance of the susceptibility patterns of common hospital bacterial pathogens. Results are reported quarterly in a hospital paper, the MMC Observer, and serve as the basis for the recommendation of appropriate antibacterial agents.



The Constantino P. Manahan Memorial Lectures

To honor the memory of the first Medical Director of the Makati Medical Center and the first Chairman, Board of Trustees 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.

1st C.P. Manahan Lecture

1 February 1989

Symposium on Acute Respiratory Infection(ARI)

Guest Speakers-

Ma. Lourdes Gomez, MD

Salvacion Gatchalian,MD

Thelma E. Tupasi, MD

Normando Gonzaga, MD

Topics:

"Clinical Predictors of Pneumonia"

"Nasopharyngeal Oxygen in Children"

"Etiology of ARI"

"Clinicopathologic Findings in Children who Die of Pneumonia"

2nd C.P. Manahan Lecture

29 May 1990

Guest Speaker-

Dr. Petri Ruutu

Professor in Infectious Diseases

Second Department of Medicine

Helsinki University Central Hospital

Finland

Topic: *"Cytomegalovirus Infections in Immunocompromised Patients"*

3rd C.P. Manahan Lecture

9 May 1991

Guest Speaker-

Dr. John Decazes

Associate Professor of Infectious Diseases

St. Louis Hospital, Paris

Topic: *"Meningitis: Pathogenetic Mechanisms"*

4th C.P. Manahan Lecture

3 February 1993

Symposium on "Tuberculosis: New Insights on an Old Disease"

Guest Speakers-

Vilma M. Co, MD

Avelino Siquig, MD

Roland Francisco, RMT

Madel Espinosa, MD

Rodrigo Romulo, MD

Topics:

"Extrapulmonary TB in MMC 1989-1992"

"Clinical and Laboratory Features of Culture- Proven TB Meningitis at MMC"

"In-vitro Susceptibility of M. tuberculosis"

"Drug Resistance in TB"

"Impact of Resistance on TB Therapy"

**5th C.P. Manahan Lecture**

16 December 1995

Guest Speaker-

Dr. Augusto D. Litonjua

Director of Medical Education

Chairman of the Department of Medicine

Chief of the Section of Endocrinology

Makati Medical Center

Topic: *"Hyperglycemia in Pregnancy"***6th C.P. Manahan Lecture**

2 February 1996

Guest Speaker-

Dr. Oyewale Tomori

Virologist

Expanded Immunization Programme

African Regional Office

Harare, Zimbabwe

Topic: *"Ebola: from Deep in the Rain Forest, a Killer Virus Stalks the Human Race"***7th C.P. Manahan Lecture**

16 December 1996

Guest Speaker-

Dr. Enrique Ostrea, Jr.

Professor and Chairman of the Department of Pediatrics

Wayne State University

Detroit, Michigan

Topic: *"Perinatal AIDS: Impact of ACTG 076"***8th C.P. Manahan Lecture**

February 3, 1997

Guest Speaker-

Prof. John Burton

Associate Professor in History

Xavier University

Cagayan de Oro City

Topic: *"Jose Rizal: His Medical Career in Summary and Analysis"***9th C.P. Manahan Lecture**

16 December 1998

Guest Speaker-

Dr. Bun Yok Dy

Clinical Professor in Medicine

University of Santo Tomas

Faculty of Medicine and Surgery

Topic: *"Evolution of Therapy of Coronary Artery Disease"**9th C.P. Manahan Memorial Lecture-**L-R: Dr. Romeo Gustilo, Dr. Bun Yok Dy, Dr. Florina Kaluag, Dr. Raul Fores*



PUBLICATIONS

1998

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

Tupasi TE, Limson BM, Romero RC, Co VM, Gozali LG, Lecciones 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, Lecciones 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; 10(3):600-602*

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; 10(3):592-599*

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; 10(3):490-491*

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; 10(3):424-428*

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; 10(3):462-464*

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; 10(3):505-508*



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: 512-515

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

Drug-Resistant *Salmonella typhi*

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

1993

Guidelines on Antimicrobial Therapy, 3rd edition, 1993

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*

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, Verallo VM, Romero RC, Tuazon CU. *Am J. Trop Med Hyg 1992; 48(2)*

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

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, Silva 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, Roilides 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, Schroder I, Gornez 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, Granoff 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. Jan-June 1989; Vol 18

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

***Haemophilus 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, Verardo 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, Navarro E, Javato M.

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, Sanvictores 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 *Haemophilus 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

Nosocomial Infections at MMC: A Prospective Study and Analysis of Risk Factors
Littua R, Tupasi TE.
MMC Proceedings Jan-Jun 1987; 1(1): 24-29



Participation in Conferences

International

6th Western Pacific Congress on Chemotherapy and Infectious Diseases (Malaysia)

29 November-4 December 1998

President: Thelma E. Tupasi, MD

Co-Chairman: Thelma E. Tupasi, MD: Tropical and Travel-Associated Infections

Lecturer: Thelma E. Tupasi, MD "Microbiology Review of Cefepime - Update on Worldwide Studies"

Participants: Vilma M. Co, MD, Ma. Imelda Quelapio, MD and Ma. Lourdes Villa, MD

First ASEAN Forum on Antibiotics (Malaysia)

1 December 1998

Chairman: Thelma E. Tupasi, MD

Lecturer: Thelma E. Tupasi, MD "Comparative Study on Cefepime and Ceftazidime"

6th International Symposium on New Quinolones and Related Antibiotics (Denver, Colorado, USA)

15-17 November 1998

Lecturer: Thelma E. Tupasi, MD "Quinolones in the Underdeveloped World"

International Society for Infectious Diseases (Boston, Massachusetts, USA)

21 October 1998

Participant: Thelma E. Tupasi, MD

Worldwide Surveillance of Antimicrobial Resistance (Singapore)

26 January 1998

Delegate: Thelma E. Tupasi, MD "Point-in-Time Investigators' Meeting"

National

Philippine Society for Microbiology and Infectious Disease (PSMID) 20th Annual Convention (PICC)

24-27 November 1998

Chairman: Thelma E. Tupasi, MD "Task Force on Clinical Practice Guidelines on Community-Acquired Pneumonia in Immunocompetent Adults"

Lecturer: Thelma E. Tupasi, MD: "Interferon in Chronic Hepatitis"; "Updates in the Management of Nosocomial Infections"; "Cefepime: Worldwide Surveillance Data"

Lecturer: Ma. Imelda D. Quelapio, MD "Comparative Study of Cefepime and Ceftazidime in Severe Bacterial Infections"

TB Symposium

(University of Santo Tomas)

27 October 1998

Lecturer: Thelma E. Tupasi, MD "1997 National TB Prevalence Survey"

3rd Philippine National Convention on AIDS (Westin Plaza Hotel)

23-24 October 1998

Co-chairman: Thelma E. Tupasi, MD "Research in HIV"

Philippine College of Physicians Trainors' Workshop (Cavite)

9 October 1998

Participant: Thelma E. Tupasi, MD

PSMID, 2nd Mid-year Convention (Davao City)

2-4 July 1998

Lecturers: Thelma E. Tupasi, MD, Vilma M. Co, MD; Ma. Imelda Quelapio, MD and Ma. Lourdes Villa, MD "Consensus on Community-Acquired Pneumonia"

Philippine College of Chest Physicians at 25 (EDSA Shangri-La)

5 March 1998

Lecturer: Thelma E. Tupasi, MD

"Presentation of the 1997 National TB Prevalence Survey"



**FINANCIAL STATEMENTS
DECEMBER 31, 1998
AND
AUDITOR'S REPORT**



LEA VERONICA T. RECOMITE

CERTIFIED PUBLIC ACCOUNTANT
Unit C San Antonio Ave. cor. San Martin de Porres St.
San Antonio Valley 1, Paranaque, Metro Manila

REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANT

The Board of Directors
Tropical Disease Foundation

Makati Medical Center
Makati City

I have audited the accompanying statements of assets, liabilities and fund balance of Tropical Disease Foundation, inc. as of December 31, 1998 and 1997 and the related statements of revenues and expenses and changes in fund balance and cash flows for the years then ended. These financial statements are the responsibility of the Foundation's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit 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. I believe that my audit provides a reasonable basis for my opinion.

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, 1998 and 1997 and the results of its operations and its cash flows for the years then ended, in conformity with generally accepted accounting principles.

April 08, 1999


LEA VERONICA T. RECOMITE
CPA Cert. No. 58676
PTR No. 0079504
January 26, 1999
Pasig City
TELLER'S CODE P.
1999



TROPICAL DISEASE FOUNDATION, INC.
(A nonstock, Nonprofit Corporation)
STATEMENT OF ASSETS, LIABILITIES AND FUND BALANCE
DECEMBER 31, 1998
 (With Comparative Figures in 1997)

	1998		1997
<u>ASSETS</u>			
CURRENT ASSETS			
Cash and cash equivalents (Note 2)	P 1,570,040		P 931,169
Investment trust fund	365,548		50,534
Receivables	116,038		1,656,892
Prepaid expenses	9,408		33,484
Total Current Assets	2,061,034		2,672,079
PROPERTY AND EQUIPMENT			
Laboratory equipment	5,606,308		5,388,149
Office equipment	861,631		850,884
Motor vehicle	513,750		513,750
Laboratory facilities	219,941		219,941
Office furniture and fixtures	175,823		175,823
Accumulated depreciation	(4,806,720)		(4,161,483)
Net	2,570,733		2,987,064
REFUNDABLE DEPOSIT (Note 3)	621,634		621,634
	P 5,253,401		P 6,280,777

LIABILITIES AND FUND BALANCE

ACCOUNTS PAYABLE AND ACCRUED EXPENSES	P	168,138		216,171
LOANS PAYABLE				1,382,500
FUND BALANCE		5,085,263		4,682,106
	P	5,253,401		P 6,280,777

See accompanying Notes to Financial Statements.

APR 1999



TROPICAL DISEASE FOUNDATION, INC.
(A nonstock, Nonprofit Corporation)
STATEMENT OF REVENUES AND EXPENSES AND CHANGES IN FUND BALANCE
FOR THE YEAR ENDED DECEMBER 31, 1998
 (With Comparative Figures in 1997)

	1998	1997
REVENUES		
Grants	P 1,230,718	P 18,386,906
Donations and contributions	3,621,467	1,721,658
Gain on sale of office equipment	16,529	-
Other income, net	47,445	10,912
	4,916,159	20,119,476
EXPENSES		
Salaries, wages and honoraria	1,303,933	925,075
Depreciation	655,519	907,917
Laboratory and medical supplies	528,319	5,096,739
Printing, stationeries and office supplies	415,635	590,679
Employee benefits	253,611	731,076
Insurance	156,657	81,819
Seminars and workshops	153,029	245,216
Temporary services	136,019	3,739,158
Interest and bank charges	111,698	273,799
Travel and transportation	96,046	3,436,035
Repairs and maintenance	95,667	115,758
Loss on foreign exchange transactions	89,460	1,213,959
Utilities	65,584	70,707
Communications	38,921	72,963
Professional fees	30,000	20,000
Membership fees and other dues	3,100	-
Gasoline and oil	2,635	1,886
Taxes and licenses	1,312	1,305
Unrealized loss from decline in market value of stocks in the investment trust fund	-	10,993
Miscellaneous	375,857	374,413
	4,513,002	17,909,497
EXCESS OF REVENUES OVER EXPENSES	403,157	2,209,979
FUND BALANCE		
January 1	4,682,106	2,472,127
December 31	P 5,085,263	P 4,682,106

See accompanying Notes to Financial Statements.

24 APR 1999



TROPICAL DISEASE FOUNDATION, INC.
(A nonstock, Nonprofit Corporation)
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 1998
 (With Comparative Figures in 1997)

	1998	1997
CASH FLOWS FROM OPERATING ACTIVITIES		
Excess of revenues over expenses (deficit)	P 403,157	P 2,209,979
Adjustments to reconcile excess of revenues over expenses to net cash provided by operating activities:		
Depreciation	655,519	907,917
Changes in operating assets and liabilities:		
Decrease (Increase) in assets:		
Investment trust fund	(315,014)	288,226
Receivables	1,540,854	(1,654,163)
Prepaid expenses	24,076	594
Increase (Decrease) in liabilities:		
Accounts payable and accrued expenses	(48,033)	156,571
Loans payable	(1,382,500)	1,382,500
Net Cash Provided by Operating Activities	878,059	3,291,624
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of property and equipment	(239,188)	(3,516,673)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	638,871	(225,049)
CASH AND CASH EQUIVALENTS		
January 1	931,169	1,156,218
December 31	P 1,570,040	P 931,169

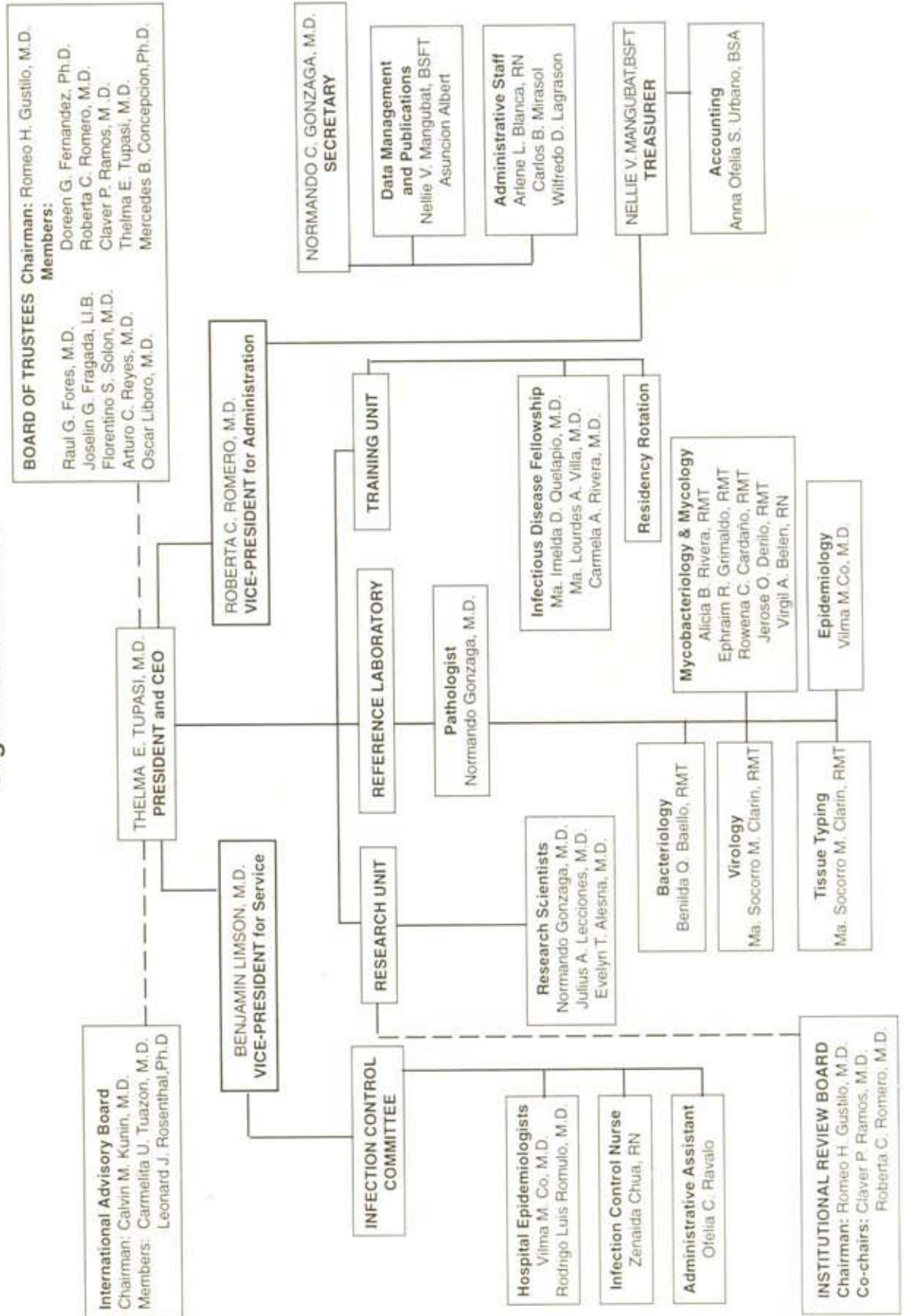
See accompanying Notes to Financial Statements.



APR 1999



TROPICAL DISEASE FOUNDATION, INC. Organizational Chart





The officers and staff of the Tropical Disease Foundation
and the Infection Control Committee



Seated (L-R): Dr. Normando Gonzaga, Dr. Vilma Co, Dr. Benjamin Limson, Dr. Thelma E. Tupasi, Dr. Roberta Romero, Dr. Rodrigo Romulo, Dr. Julius Leccioneres
2nd Row (L-R): Nellie Mangubat, Alicia Rivera, Dr. Ma. Lourdes Villa, Dr. Faith Villanueva, Dr. Carmela Rivera, Anna Ofelia Urbano, Dr. Ma. Imelda Quelapio,
Rowena Cardiano, Bemilda Baello.

Back row (L-R): Virgil Belen, Carlos Mirasol, Zenaida Chua, Arlene Blanca, Ma. Socorro Gloria Clarin, Ephraim Grimaldo, Wilfredo Lagrason



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We acknowledge with deep gratitude the benefactors, patrons, sponsors, donors, and friends of the Foundation.

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Director & Chairman of the Board
Makati Medical Center
Chairman, Board of Trustees
Tropical Disease Foundation

LUCRECIA LIZARES GUSTILO

Beloved wife of Romeo H. Gustilo, M.D.

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Arch. & Mrs. Willi Fernandez
Atty. & Mrs. Joselin Fragada
Dr. Yoshio Hamaguchi
Mr. & Mrs. Bernardo Jalandoni
Eduardo Jamora, M.D.
Mr. & Mrs. Precha Kulapongse
Mr. Horacio Pascual
Mrs. Beatrice Sim
Engr. Antonio Simpaio
Arch. & Mrs. Greg Timbol
Mr. & Mrs. Adolfo Villegas
Mr. Antonio Yap
Mr. & Mrs. Jose Yuzon
FC Masagana Bld.
Kidney Unit, Makati Medical Center
Ng Man To
R. & T. Rodriguez
A & S Hardware
Bacnotan Consolidated Industries, Inc.
Bataan Pulp and Paper Mills
Dermhaus
EMAR Corporation
Trans-Asia Oil and Mineral
Development Corp.
Unimer Trading Corporation
United Pulp and Paper Corporation
Victorias Marketing

Supporting the Foundation

The Foundation offers several opportunities for those who wish to support its undertakings.

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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Makati City, Philippines
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The logo defines the raison d'etre of the Foundation using a combination of symbols:

- the microscope represents medical research on bacteria, viruses, and parasites.
- the sun and the plant signify the tropics and its lush vegetation.
- the plant further implies the possibilities of research in the medical field.