SUBJECT INDEX

This Subject Index is compiled from key words in the title of each entry. Original articles are indicated by (O), editorials (E), correspondence (C), news and notes (N), obituaries (Ob), abstracts (A), book reviews (B), reprinted article (R), and special section (SS).

Acid, fatty
Systematic study of the 3-hydroxy fatty acid composition of mycobacteria. Alugupalli, S., *et al.* ..... (A) 647
Water soluble complexes of C_{14} and C_{16} fatty acids and alcohols in media for cultivation of leprosy-derived psychrophilic mycobacteria. Kato, L., *et al.* ..... (O) 75

Acid-fast bacilli
Evaluation of sputum smears concentrated by cytocentrifugation for detection of acid-fast bacilli. Saceanu, C. A., *et al.* ..... (A) 202
Non-acid-fast fluorescent *M. leprae* (?) in skin smears from leprosy patients. Bramhne, H. G., *et al.* ..... (A) 476

Acquired immunodeficiency syndrome (AIDS)
A distinctive cytologic pattern for diagnosing tuberculosis lymphadenitis in AIDS. Llatjos, M., *et al.* ..... (A) 335
Borderline tuberculoid Hansen's disease in AIDS. Goodless, D. R., *et al.* ..... (A) 640
M. avium antigenuria in patients with AIDS and disseminated M. avium disease. Sippola, A. A., *et al.* ..... (A) 203
Orally administered clarithromycin for the treatment of systemic *M. avium* complex infection in children with acquired immunodeficiency syndrome. Husson, R. N., *et al.* ..... (A) 665
Persistent colonisation of potable water as a source of M. avium infection in AIDS. von Reyn, C. F., *et al.* ..... (A) 677
Polyclonal infections due to *M. avium* complex in patients with AIDS detected by pulsed-field gel electrophoresis of sequential clinical isolates. Slutsky, A. M., *et al.* ..... (A) 673
Tentative evidence of AIDS-associated biotype of *M. kansasii.* Tortoli, E., *et al.* ..... (A) 675
Treatment of disseminated disease due to the *M. avium* complex in patients with AIDS. Benson, C. A. ..... (A) 661

Adenosine triphosphate (ATP)
Clofazimine and B669 inhibit the proliferative responses and Na+,K+ adenosine triphosphate activity of human lymphocytes by a lysophospholipid-dependent mechanism. Anderson, R. and Smith, M. J. ..... (A) 309

Africa
Modelling the efficacy of prophylactic and curative therapies for preventing the spread of tuberculosis in Africa. Heymann, S. J. ..... (A) 195
Prevalence of antibodies to hepatitis C virus among patients with leprosy in several African countries and the Yemen. Denis, F., *et al.* ..... (A) 640

American Leprosy Missions (ALM)
ALM's Tom Frist steps down. ..... (N) 461

Amikacin
Activities of roxithromycin used alone and in combination with ethambutol, rifampin, amikacin, ofloxacin and clofazimine against *M. avium* complex. Rastogi, N., *et al.* ..(A) 671

Ansamycin
In vivo susceptibility of *M. leprae* to ofloxacin either singly or in combination with rifampicin and rifabutin—antileprosy activity of ofloxacin and ansamycins in mice. Dhople, A. M. and Ibanez, M. A. ..... (A) 654
In vitro activity of three new fluoroquinolones and synergy with ansamycins against *M. leprae.* Dhople, A. M. and Ibanez, M. A. ..... (A) 179

Antibody(ies)

A role for natural antibody in the pathogenesis of leprosy– antibody in nonimmune serum mediates C3 fixation to the M. leprae surface and hence phagocytosis by human mononuclear phagocytes. Schlesinger, L. S. and Horwitz, M. A. ..... (A) 317

[Anti-idiotype antibody used as antigen in serological study of leprosy.] Wang, D., *et al.* ..... (A) 319

Antibody response to recombinant 65-kDa, 70-kDa and 18-kDa mycobacterial antigens in leprosy patients and healthy contacts in a leprosy-endemic population. Ilangumaran, S., *et al.* ..... (O) 245

Antimitochondrial (pryuvate dehydrogenase) antibodies in leprosy. Gilburd, B., *et al.* ..... (A) 471

Autoantibodies and related immunity of leprosy patients from leprosarium in Taiwan. Wang, C. R., *et al.* ..... (A) 475

Class-specific immunoglobulins and antibodies to mycobacterial sonicates and autoantigens in leprosy patients and contacts. Mathew, J. M. and Muthukkaruppan, V. R. ..... (A) 644

[Determination of anti-PGL-I antibody in the blood of leprosy patients who completed MDT and their contacts.] Sun, X., *et al.* ..... (A) 475

[Determination of the antibody in the sera of leprosy patients with NT-P-BSA ELISA.] Song, X., *et al.* ..... (A) 475

Epidemiological studies in children of a low-endemic region, a high-endemic region, and dwellers of a leprosy colony: evaluation of anti-ND-BSA antibodies and lepromin response. Shah, D. H., *et al.* ..... (O) 539

Identification of an antigenic domain on *M. leprae* protein antigen 85B, which is specifically recognized by antibodies from patients with leprosy. Filley, E., *et al.* ..... (A) 322

Immunohistochemical demonstration of *M. leprae* in the nervous system of long-term cured leprosy patients using a *M. leprae* specific anti-PGL antibody. Goto, M., *et al.* ..... (A) 471

Infection with human immunodeficiency virus type 1 (HIV-1) and human T cell lymphotropic viruses among leprosy patients and contacts–correlation between HIV-1 crossreactivity and antibodies to lipoarabinomannan. Kashala, O., *et al.* ..... (A) 472

[On criteria for the positivity in determination of antibody against PGL-I with ELISA.] Meng, M., *et al.* ..... (A) 171

PGL-I antibody in HIV infected patients. Gonzalez-Abreu, E., *et al.* ..... (A) 656

Prevalence of antibodies to hepatitis C virus among patients with leprosy in several African countries and the Yemen. Denis, F., *et al.* ..... (A) 640

Serum antibodies from patients with ankylosing spondylitis and Reiter's syndrome are reactive with HLA-B27 cells transfected with the *M. tuberculosis* hsp60 gene. Kellner, H., *et al.* ..... (A) 490

[Study of the IgA antibody to PGL-I specific to *M. leprae.*] Gan, Y., *et al.* ..... (A) 167

The effects of chemotherapy on antibody levels directed against PGL-I and 85A and 85B protein antigens in lepromatous leprosy patients. Drowart, A., *et al.* ..... (A) 470

Antibodies, monoclonal,

Clinical evaluation of a serological assay using a monoclonal antibody (TB72) to the 38 kDa antigen of *M. tuberculosis.* Bothamley, G. H. and Rudd, R. M. ..... (A) 486

Production and characterization of new murine monoclonal antibodies reactive to *M. tuberculosis.* Arya, A., *et al.* ..... (A) 661

Antigen(s)

An immunodominant 30-kDa antigen of a candidate antileprosy vaccine, *Mycobacterium* w, shares T- and B-cell determinants with *M. leprae* and *M. tuberculosis.* Yadava, A. and Mukherjee, R. ..... (A) 175

[Anti-idiotype antibody used as antigen in serological study of leprosy.] Wang, D., *et al.* ..... (A) 319

Antibody response to recombinant 65-kDa, 70-kDa and 18-kDa mycobacterial antigens in leprosy patients and healthy contacts in a leprosy-endemic population. Ilangumaran, S., *et al.* ..... (O) 245

Antigen-coated latex particles as a model system for probing monocyte responses in leprosy. Hasan, R. S., *et al.* ..... (A) 169

Bacillaemia and *M. leprae* cell wall antigen in paucibacillary leprosy. Kaur, I., *et al.* ..... (A) 181

Cellular and humoral immune responses of cattle to purified *M. bovis* antigens. Fifis, T., *et al.* ..... (A) 487

Characterization of a *M. leprae* antigen related to the secreted *M. tuberculosis* protein Mpt32. Wieles, B., *et al.* ..... (A) 325
Characterization of the antigen 85 complex fibronectin-binding proteins derived from age culture filtrates of *M. bovis* BCG, Tice substrain. Oner, F., *et al.* ..... (A) 651
Class-specific immunoglobulins and antibodies to mycobacterial sonicates and autoantigens in leprosy patients and contacts. Mathew, J. M. and Muthukkaruppan, V. R. ..... (A) 644
Clinical evaluation of a serological assay using a monoclonal antibody (TB72) to the 38 kDa antigen of *M. tuberculosis.* Bothamley, G. H. and Rudd, R. M. ..... (A) 486
Clinical evaluation of rapid serodiagnosis of pulmonary tuberculosis by ELISA with cord factor (trehalose-6, 6' dimycolate) as antigen purified from *M. tuberculosis.* Maekura, R., *et al.* ..... (A) 200
Demonstration of PGL-I and LAM-B antigens in paraffin sections of leprosy skin lesions. Wang, T., *et al.* ..... (A) 475
Dendritic cell progenitors phagocytose particulates, including bacillus Calmette-Guerin organisms, and sensitize mice to mycobacterial antigens *in vivo.* Inaba, K., *et al.* ..... (A) 169
Detection and characterization of a lambda gt11 recombinant clone of *M. leprae* that expresses an antigenic determinant of a 64-kDa protein. Davidson, S. K. and George, G. T. ..... (O) 237
Development of IgG responses to mycobacterial antigens. Pilkington, C., *et al.* ..... (A) 337
Expression of *M. leprae* 18-kDa antigen in yeast in a GPI anchored form. Amorim, A. G., *et al.* ..... (A) 648
Identification of an antigenic domain on *M. leprae* protein antigen 85B, which is specifically recognized by antibodies from patients with leprosy. Filley, E., *et al.* ..... (A) 322
Identification of bovine T-cell epitopes for three *M. bovis* antigens: MPS700, 19,000 MW and MPB57. Pollock, J. M., *et al.* ..... (A) 670
Identification of human T cell epitopes in the *M. leprae* heat shock protein 70-kDa antigen. Adams, E., *et al.* ..... (A) 320
IgG response to purified 65- and 70-kDa mycobacterial heat shock proteins and to antigen 85 in leprosy. Launois, P., *et al.* ..... (O) 48
Immunological and functional characterization of proteins of *M. tuberculosis* antigen 85 complex using synthetic peptides. Leao, S. C., *et al.* ..... (A) 199
Leprosy spread in urban area: Part II: Reactivity of soluble antigen (SA) in three different groups of leprosy contacts in Sao Goncalo, Rio de Janeiro State, Brazil. Andrade, V. L. G., *et al.* ..... (A) 186
Long-lasting T-cell reactivity to *M. leprae* antigens in human volunteers vaccinated with killed *M. leprae.* Mustafa, A. S. and Oftung, F. ..... (A) 171
M. avium antigenuria in patients with AIDS and disseminated M. avium disease. Sippola, A. A., *et al.* ..... (A) 203
M. paratuberculosis and *E. coli* share common antigenic determinants. Gilot, P. and Misonne, M. C. ..... (A) 663
Mapping of Th1 helper T-cell epitopes on major secreted mycobacterial antigen 85A in mice infected with live M. bovis BCG. Huygen, K., *et al.* ..... (A) 489
Modulation of murine cytokine responses to mycobacterial antigens by helminth-induced T-helper-2 cell responses. Pearlman, E., *et al.* ..... (A) 173
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330
Presentation of mycobacterial antigens by human dendritic cells–lack of transfer from infected macrophages. Pancholi, P., *et al.* ..... (A) 336
Recognition of peptide epitopes of the 16,000-MW antigen of M. tuberculosis by murine T cells. Vordermeier, H. M., *et al.* ..... (A) 204
Structure and antigenicity of lipoarabinomannan from *M. bovis* BCG. Prinzis, S., *et al.* ..... (A) 201
Structure of the *M. tuberculosis* antigen 88, a protein related to the *E. coli* PstA periplasmic phosphate permease subunit. Braibant, M., *et al.* ..... (A) 486
Structures of the glycopeptidolipid antigens of *M. abscessus* and *M. chelonae* and possible chemical basis of the serological crossreactions in the *M. fortuitum* complex. Lopez-Marin, L. M., *et al.* ..... (A) 668
T and B cell response to purified filtrate antigen 85 from M. bovis BCG in leprosy patients and their contacts. Huygen, K., *et al.* ..... (A) 471

Th1/Th2 profiles in tuberculosis, based on the proliferation and cytokine response of blood lymphocytes to mycobacterial antigen. Surcel, H. M., *et al.* ..... (A) 494
The *M. bovis* 32-kilodalton protein antigen induces human cytotoxic T-cell responses. Munk, M. E., *et al.* ..... (A) 480
The *M. leprae* antigen-85 complex gene family–identification of the genes for the 85A, 85C, and related MPT51 proteins. De Wit, T. F. R., *et al.* ..... (A) 179
The effects of chemotherapy on antibody levels directed against PGL-I and 85A and 85B protein antigens in lepromatous leprosy patients. Drowart, A., *et al.* ..... (A) 470
The immunodominant 38-kDa lipoprotein antigen of *M. tuberculosis* is a phosphate-binding protein. Chang, Z., *et al.* ..... (A) 330

Apoptosis
An *in vitro* model of resistance in leprosy: apoptosis, but no necrosis of mycobacteria-infected monocytes is coupled with killing of intracellular mycobacteria. Laochumroonvorapong, P., *et al.* ..... (A) 683

Arabinomannan
Binding of the terminal mannosyl units of lipoarabinomannan from a virulent strain of *M. tuberculosis* to human macrophages. Schlesinger, L. S., *et al.* ..... (A) 672
Immunopathological stain of lipoarabinomannan-B (LAM-B) for diagnosis of leprosy. Butt, K. I., *et al.* ..... (A) 166
Infection with human immunodeficiency virus type 1 (HIV-1) and human T cell lymphotropic viruses among leprosy patients and contacts–correlation between HIV-1 crossreactivity and antibodies to lipoarabinomannan. Kashala, O., *et al.* ..... (A) 472
Lipoarabinomannan from *M. tuberculosis* modulates the generation of reactive nitrogen intermediates by gamma intereron-activated macrophages. Anthony, L. S. D., *et al.* .... (A) 661
Regulation of murine macrophage ffector functions by lipoarabinomannan from mycobacterial strains with different degrees of virulence. Adams, L. B., *et al.* ..... (A) 165

Armadillo(s)
Second armadillo bibliography published. ..... (N) 154

Arthritis
Arthritis in leprosy: clinical, laboratory, and radiological assessments. Singh, I., *et al.* ..... (E) 428
Differential mycobacterial 65-kDa heat shock protein T cell epitope recognition after adjuvant arthritis-inducing or protective immunization protocols. Anderton, S. M., *et al.* ..... (A) 469

Assay(s) (see also **ELISA**)
Clinical evaluation of a serological assay using a monoclonal antibody (TB72) to the 38 kDa antigen of *M. tuberculosis.* Bothamley, G. H. and Rudd, R. M. ..... (A) 486
Construction of a bioluminescent mycobacterium and its use for assay of antimycobacterial agents. Andrew, P. W. and Roberts, I. S. ..... (A) 176

Australia
Acetylation phenotype and genotype in Aboriginal leprosy patients from the North-West Region of Western Australia. Ilett, K. F., *et al.* ..... (A) 311
Leprosy in the Tropics and Australia. Britton, W. J. and Hargrave, J. C. ..... (A) 156

B663 (see **Clofazimine**)

Bacteriology
Large-scale use of polymerase chain reaction for detection of *M. tuberculosis* in a routine mycobacteriology laboratory. Clarridge, J. E., *et al.* ..... (A) 192

Bacteriophage
Comparative analysis of the genomes of mycobacteriophages infecting saprophytic and pathogenic mycobacteria. Coene, M., *et al.* ..... (A) 177

BCG (bacille Calmette-Guerin)
Characterization of the antigen 85 complex fibronectin-binding proteins derived from age culture filtrates of *M. bovis* BCG, Tice substrain. Oner, F., *et al.* ..... (A) 651
Dendritic cell progenitors phagocytose particulates, including bacillus Calmette-Guerin organisms, and sensitize mice to mycobacterial antigens *in vivo.* Inaba, K., *et al.* .... (A) 169
Human T cells recognize mycobacterial heat shock proteins in the context of multiple

HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae*. Mustafa, A. S., *et al.* ..... (A) 317
Incidence rates of leprosy in Karonga District, northern Malawi: patterns by age, sex, BCG status and classification. Ponnighaus, J. M., *et al.* ..... (O) 10
Isolation and identification of environmental mycobacteria in the *M. bovis* BCG trial area of South India. Kamala, T., *et al.* ..... (A) 650
Mapping of Th1 helper T-cell epitopes on major secreted mycobacterial antigen 85A in mice infected with live *M. bovis* BCG. Huygen, K., *et al.* ..... (A) 489
Mice that lack the interferon-gamma receptor have profoundly altered responses to infection with bacillus Calmette-Guerin and subsequent challenge with lipopolysaccharide. Kamijo, R., *et al.* ..... (A) 197
Monocyte antimycobacterial activity before and after *M. bovis* BCG vaccination in Chingleput, India, and London. Cheng, S. H., *et al.* ..... (A) 191
Proliferative responses of leprosy patients, healthy contacts and BCG vaccinees to a major native 12-kDa protein of *M. leprae*. Handzel, Z. H., *et al.* ..... (A) 315
Protective effect of BCG against leprosy and its subtypes; a case-control study in southern Vietnam. Thuc, N. V., *et al.* ..... (O) 532
Protective effect of BCG against tuberculous meningitis and miliary tuberculosis; a meta-analysis. Rodriques, L., *et al.* ..... (A) 493
Protective efficacy of BCG vaccine against leprosy in southern Malawi. Baker, D. M., *et al.* ..... (A) 186
Recombinant *M. bovis* BCG secreting functional interleukin-2 enhances gamma interferon production by splenocytes. O'Donnell, M. A., *et al.* ..... (A) 645
Structure and antigenicity of lipoarabimannan from *M. bovis* BCG. Prinzis, S., *et al.* ..(A) 201
T and B cell response to purified filtrate antigen 85 from *M. bovis* BCG in leprosy patients and their contacts. Huygen, K., *et al.* ..... (A) 471
T-Helper 1-like subset selection in *M. bovis* bacillus Calmette Guerin-infected resistant and susceptible mice. Kramnik, I., *et al.* ..... (A) 644

Biopsy

A colorimetric PCR method for the detection of *M. leprae* in skin biopsies from leprosy patients. Jamil, S., *et al.* ..... (O) 512
An improved method for DNA diagnosis of leprosy using formaldehyde-fixed, paraffin-embedded skin biopsies. Nishimura, M., *et al.* ..... (A) 645
Detection and species identification of mycobacteria from paraffin sections of lung biopsy specimens by the polymerase chain reaction. Perosio, P. M. and Frank, T. S. ..... (A) 337

Blood

Application of filter paper method of collection of blood for MLPA test. Bhatia, V. N., *et al.* ..... (A) 314
[Contents of superoxide dismutase and lipid-peroxide in the blood of leprosy patients.] Zhang, Z. and Huang, L. ..... (A) 175
Detection of *M. leprae* in tissue and blood by polymerase chain reaction. Lee, K. S., *et al.* ..... (C) 139
[Determination of anti-PGL-I antibody in the blood of leprosy patients who completed MDT and their contacts.] Sun, X., *et al.* ..... (A) 475

Bone

M. leprae DNA from ancient bone detected by PCR. Rafi, A., *et al.* ..... (A) 634

Book Reviews

Color Atlas of Tropical Dermatology and Venereology, K. F. Schaller, ed. McDougall, A. C. ..... (B) 450
Leprosy: a Reference Guide for Medical Practitioners, Programme Managers and Leprosy Workers by R. S. Misra. Hastings, R. C. ..... (B) 450
Leprosy for Medical Practitioners and Paramedical Workers by S. J. Yawalkar. Hastings, R. C. ..... (B) 451
Starvation in Bacteria, S. Kjelleberg, ed. Hastings, R. C. ..... (B) 149
Teaching Tools for Health Professionals by Luc G. Van Parijs and Betsy Abraham. ... (B) 451

Borderline leprosy

Benign rheumatoid nodules in a woman with chronic lymphocytic leukemia and borderline lepromatous leprosy. Cohen, P. R. and Kurzrock, R. ..... (A) 162

Borderline tuberculoid Hansen's disease in AIDS. Goodless, D. R., *et al.* ..... (A) 640
Phenotype and cytokine expression of intralesional cells in borderline leprosy. McClean, K., *et al.* ..... (O) 380

Brazil
An induction of the late hypersensitivity reaction to DNCB in patients with different clinical forms of hanseniasis in Brazil. Azulay, R. D. ..... (A) 161
Hanseniasis control in Sao Paulo State, Brazil. Lombardi, C. ..... (A) 187
Leprosy spread in urban area: Part I: Epidemiological characteristics of an endemic urban area for leprosy; the county of Sao Goncalo, Rio de Janeiro State, Brazil. Andrade, V. L. G., *et al.* ..... (A) 185
Leprosy spread in urban area: Part II: Reactivity of soluble antigen (SA) in three different groups of leprosy contacts in Sao Goncalo, Rio de Janeiro State, Brazil. Andrade, V. L. G., *et al.* ..... (A) 186
[New cases of hanseniasis in the Sao Carlos, SP, (Brazil) Region, 1983-1988.] Kaneko, K. A., *et al.* ..... (A) 186
[Physical disabilities in HD patients at the time of diagnosis: epidemiologic characteristics of the cases registered from 1983 to 1988 in the state of Sao Paulo, Brazil.] Trindade, M. A. B. and Nemes, M. I.B. ..... (A) 483
[Temporal tendencies in the detection of leprosy in the state of Sao Paulo (Brazil) 1934-1983.] Lombardi, C., *et al.* ..... (A) 656

Burma (see **Myanmar**)

Cancer
Squamous cell carcinoma in plantar ulcers in leprosy; a case control study. Richardus, J. H. and Smith, T. C. ..... (A) 164

Catalase
Catalase-peroxidase gene sequences in isoniazid-sensitive and isoniazid-resistant strains of *M. tuberculosis* from New York City. Stoeckle, M. Y., *et al.* ..... (A) 203
Characterization of the katG gene encoding a catalase peroxidase required for the isoniazid susceptibility of *M. tuberculosis.* Heym, B., *et al.* ..... (A) 180

Cell(s)
Dendritic cell progenitors phagocytose particulates, including bacillus Calmette-Guerin organisms, and sensitize mice to mycobacterial antigens *in vivo.* Inaba, K., *et al.* ..... (A) 169
Establishment of mouse cell lines expressing *M. leprae* genes. Nakanaga, K., *et al.* ..... (A) 684
Host response to mycobacterial cell wall subunit during experimental tuberculosis in mice. Chugh, I. B., *et al.* ..... (A) 191
In vivo effect of delipidified cell component of *M. leprae* in relation to infection with leprosy bacteria in mice. Damle, A. and Mahadevan, P. R. ..... (A) 167
Influence of the Ity/Lsh/Bcg gene on the development of suppressor cell precursors in the early phase of the infection of mice with *M. lepraemurium.* Gosselin, D., *et al.* ..... (A) 655
M. leprae–behaviour in fat cells undergoing adipose differentiation *in vitro.* Godard, C. M. ..... (A) 323
M. tuberculosis alters expression of adhesion molecules on monocytic cells. Ramirez, G. M. L., *et al.* ..... (A) 646
Major structural features of the cell wall arabinogalactans of *Mycobacterium, Rhodococcus,* and *Nocardia* spp. Daffe, M., *et al.* ..... (A) 177
Mycobacterial spindle-cell pseudotumor of the spleen. Suster, S., *et al.* ..... (A) 674
Phenotype and cytokine expression of intralesional cells in borderline leprosy. McClean, K., *et al.* ..... (O) 380
Physical organization of lipids in the cell wall of *M. chelonae.* Nikaido, H., *et al.* ..... (A) 182
Presentation of mycobacterial antigens by human dendritic cells–lack of transfer from infected macrophages. Pancholi, P., *et al.* ..... (A) 336
Relationship of manifestations of tuberculosis to CD4 cell counts in patients with human immunodeficiency virus infection. Jones, B. E., *et al.* ..... (A) 666
T lymphocyte reactivity of leprosy patients and healthy contacts from a leprosy-endemic population to delipidified cell components of *M. leprae.* Ilangumaran, S., *et al.* ..... (A) 643
Tumour necrosis factor-alpha production and immune cell activation in tuberculous meningitis. Mastroianni, C. M., *et al.* ..... (A) 490

Cells, B

An immunodominant 30-kDa antigen of a candidate antileprosy vaccine, *Mycobacterium* w, shares T- and B-cell determinants with *M. leprae* and *M. tuberculosis*. Yadava, A. and Mukherjee, R. ..... (A) 175

Cloning and B-cell-epitope mapping of Mpt64 and *M. tuberculosis* H37Rv. Oettinger, T. and Andersen, A. B. ..... (A) 651

T and B cell response to purified filtrate antigen 85 from *M. bovis* BCG in leprosy patients and their contacts. Huygen, K., *et al.* ..... (A) 471

Cells, epithelial

Factors affecting invasion of HT–29 and HEP-2 epithelial cells by organisms of the *M. avium* complex. Bermudez, L. E. and Young, L. S. ..... (A) 662

Role of soluble fibronectin and beta 1 integrin receptors in the binding of *M. leprae* to nasal epithelial cells. Byrd, S. R., *et al.* ..... (A) 321

Cells, Langerhans

Reduction in CDI positive epidermal Langerhan's cell numbers in leprosy lesions following epicutaneous application of 2:4 dinitrochlorobenzene. Narayanan, R. B., *et al.* ..... (A) 473

Successful treatment of adults Langerhans' cell histiocytosis with thalidomide–report of 2 cases and literature review. Thomas, L., *et al.* ..... (A) 203

Cells, mononuclear

Immunomodulation of human peripheral blood mononuclear cell functions by defined lipid fractions of *M. avium*. Barrow, W. W., *et al.* ..... (A) 329

In vitro tumor necrosis factor production by mononuclear cells from lepromatous leprosy patients and from patients with erythema nodosum leprosum. Santos, D. O., *et al.* ..(A) 174

Cells, natural killer (NK)

The presence of CD5(LOW+) Nk cells in normal controls and patients with pulmonary tuberculosis. Ishiyama, T., *et al.* ..... (A) 196

Cells, T

Close correlations between Daudi and mycobacterial antigen recognition by human-gamma/delta-encoded T cells and expression of V9JPC1-delta/V2DJC-delta-encoded T-cell receptors. Davodeau, F., *et al.* ..... (A) 167

Differential mycobacterial 65-kDa heat shock protein T cell epitope recognition after adjuvant arthritis-inducing or protective immunization protocols. Anderton, S. M., *et al.* ..... (A) 469

Differential rat T cell recognition of cathepsin D-released fragments of mycobacterial 65 kDa heat-shock protein after immunization with either the recombinant protein or whole mycobacteria. van Noort, J. M., *et al.* ..... (A) 676

Helper T cells without CD4: control of leishmaniasis in CD4 deficient mice. Locksley, R. M., *et al.* ..... (A) 171

Human T cells recognize mycobacterial heat shock proteins in the context of multiple HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae*. Mustafa, A. S., *et al.* ..... (A) 317

IFN-gamma, IL-6 and IL-4 modulate *M. leprae*-specific or PPD specific cytotoxic T cells in leprosy patients. Fink, S., *et al.* ..... (A) 315

Identification of bovine T-cell epitopes for three *M. bovis* antigens: MPS700, 19,000 MW and MPB57. Pollock, J. M., *et al.* ..... (A) 670

Identification of human T cell epitopes in the *M. leprae* heat shock protein 70-kDa antigen. Adams, E., *et al.* ..... (A) 320

Immunogenicity of mycobacterial T-cell epitope expressed in outer membrane protein PhoE of *E. coli*. Janssen, R., *et al.* ..... (A) 643

Infection with human immunodeficiency virus type 1 (HIV-1) and human T cell lymphotropic viruses among leprosy patients and contacts–correlation between HIV-1 crossreactivity and antibodies to lipoarabinomannan. Kashala, O., *et al.* ..... (A) 472

Long-lasting T-cell reactivity to *M. leprae* antigens in human volunteers vaccinated with killed *M. leprae*. Mustafa, A. S. and Oftung, F. ..... (A) 171

MHC-independent presentation of mycobacteria to human gamma delta T cells. Holoshitz, J., *et al.* ..... (A) 316

Mapping of Th1 helper T-cell epitopes on major secreted mycobacterial antigen 85A in mice infected with live *M. bovis* BCG. Huygen, K., *et al.* ..... (A) 489

Mycobacteria induce CD4+ T cells that are cytotoxic and display Th1-like cytokine secretion profile–heterogeneity in cytotoxic activity and cytokine secretion levels. Mutis, T., *et al.* ..... (A) 172
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330
Phospholipids of *M. intracellulare* inhibit T cell blastogenesis. Tomioka, H. and Saito, H. ..... (A) 674
Primary activation of V gamma 9-expressing gamma/delta cells by *M. tuberculosis*–requirement for Th1-type CD4 T cell help and inhibition by IL-10. Pechhold, K., *et al.* ..... (A) 646
Recognition of peptide epitopes of the 16,000-MW antigen of *M. tuberculosis* by murine T cells. Vordermeier, H. M., *et al.* ..... (A) 204
Stimulation of human gamma/delta T cells by nonpeptidic mycobacterial ligands. Constant, P., *et al.* ..... (A) 470
T-Cell fibronectin and mycobacterial adversarial strategy. Godfrey, H. P. ..... (A) 169
T-cells bearing V beta 6 T-cell receptors in the cell-mediated immune response to *M. leprae.* Wang, X. H., *et al.* ..... (A) 319
The *M. bovis* 32-kilodalton protein antigen induces human cytotoxic T-cell responses. Munk, M. E., *et al.* ..... (A) 480

Cell-mediated immunity (CMI)
Active humoral immunity in the absence of cell-mediated immunity in murine leprosy: lastly an explanation. Rojas Espinosa, O. ..... (C) 143

Chemotherapy (see also **Multidrug therapy** and **Therapy**)
A longitudinal study of percent agalactosyl IgG in tuberculosis patients receiving chemotherapy, with or without immunotherapy. Rook, G. A. W., *et al.* ..... (A) 338
Bioavailability and chemotherapeutic activity of clofazimine against *M. avium* complex infections in beige mice following a single implant of biodegradable polymer. Kailasam, S., *et al.* ..... (A) 465
Follow-up of tuberculosis patients undergoing standard antituberculosis chemotherapy by using a polymerase chain reaction. Levee, G., *et al.* ..... (A) 668
Leprosy 1962-1993. 1. Chemotherapy of leprosy–current status and future prospects. Waters, M. F. R. ..... (A) 160
Not by chemotherapy alone. Srinivasan, H. ..... (E) 404
Progress in the chemotherapy of leprosy. Grosset, J.-H. ..... (E) 268
The effects of World Health Organization chemotherapy on imported leprosy in Auckland, New Zealand, 1983-1990. Cornwall, J., *et al.* ..... (A) 157
The effects of chemotherapy on antibody levels directed against PGL-I and 85A and 85B protein antigens in lepromatous leprosy patients. Drowart, A., *et al.* ..... (A) 470
Use of polymerase chain reaction to assess efficacy of leprosy chemotherapy. Jamil, S., *et al.* ..... (A) 181

Children
Detection of *M. paratuberculosis* by polymerase chain reaction in children with Crohn's disease. Dellisola, B., *et al.* ..... (A) 487
Epidemiological studies in children of a low-endemic region, a high-endemic region, and dwellers of a leprosy colony: evaluation of anti-ND-BSA antibodies and lepromin response. Shah, D. H., *et al.* ..... (O) 539
[Leprosy in children in Liaoning Province.] Yu, A., *et al.* ..... (A) 657
Orally administered clarithromycin for the treatment of systemic *M. avium* complex infection in children with acquired immunodeficiency syndrome. Husson, R. N., *et al.* ..... (A) 665
Risk of infection with *M. tuberculosis* among children and mothers in Somalia. Peltola, H., *et al.* ..... (A) 491

China
China Leprosy Association holds Third Congress. He, D. ..... (N) 455
Histopathology course held in Cheng-du. Li, H.-Y. ..... (N) 626
National Training Course on Pathology of Leprosy held in Nanjing. Wang, T. ..... (N) 150

[Present situation on leprosy rehabilitation activity in China–a brief report on Japan-China Leprosy Rehabilitation Symposium.] Maeda, M. ..... (A) 156

Chromatography

Direct identification of *Mycobacterium* species in BACTEC 7H12B medium by high-performance liquid chromatography. Cage, G. D. ..... (A) 486

Investigations on the *in vitro* racemization of thalidomide by high-performance liquid chromatography. Knoche, B. and Blaschke, G. ..... (A) 637

Rapid identification of mycolic acid patterns of mycobacteria by high-performance liquid chromatography using pattern recognition software and a mycobacterium library. Glickman, S. E., *et al.* ..... (A) 332

Classification

[Difficulties with the use of the Ridley-Jopling classification–a morphological analysis.] Fleury, R. N. ..... (A) 168

Incidence rates of leprosy in Karonga District, northern Malawi: patterns by age, sex, BCG status and classification. Ponnighaus, J. M., *et al.* ..... (O) 10

Clinical

A more reliable PCR for detection of *M. tuberculosis* in clinical samples. Kox, L. F. F., *et al.* ..... (A) 333

A randomized clinical trial of two single-dose treatments for paucibacillary leprosy. Pattyn, S. R., *et al.* ..... (A) 638

An historical and clinical review of the interaction of leprosy and pregnancy: a cycle to be broken. Duncan, M. E. ..... (A) 313

An induction of the late hypersensitivity reaction to DNCB in patients with different clinical forms of hanseniasis in Brazil. Azulay, R. D. ..... (A) 161

[Amputations in 80 leprosy patients.] Tan, W., *et al.* ..... (A) 659

Arthritis in leprosy: clinical, laboratory, and radiological assessments. Singh, I., *et al.* ..... (E) 428

Clinical and epidemiologic characteristics of *M. haemophilum,* an emerging pathogen in immunocompromised patients. Straus, W. L., *et al.* ..... (A) 340

[Clinical and histologic evaluation of the Mitsuda reaction in consanguineous and non-consanguineous contacts of patients with bacilliferous forms of hanseniasis.] Trindade, M. A. B., *et al.* ..... (A) 175

Clinical evaluation of a serological assay using a monoclonal antibody (TB72) to the 38 kDa antigen of *M. tuberculosis.* Bothamley, G. H. and Rudd, R. M. ..... (A) 486

Clinical evaluation of rapid serodiagnosis of pulmonary tuberculosis by ELISA with cord factor (trehalose-6, 6' dimycolate) as antigen purified from *M. tuberculosis.* Maekura, R., *et al.* ..... (A) 200

Clinical trial of clarithromycin for cutaneous (disseminated) infection due to *M. chelonae.* Wallace, R. J., *et al.* ..... (A) 204

Clinical trial of clarithromycin for lepromatous leprosy. Chan, G. P., *et al.* ..... (A) 464

Clinical trial of fusidic acid for lepromatous leprosy. Franzblau, S. G., *et al.* ..... (A) 635

Clinical trial of ofloxacin alone and in combination with dapsone plus clofazimine for treatment of lepromatous leprosy. Ji, B.-H., *et al.* ..... (A) 465

Clinical trial of sparfloxacin for lepromatous leprosy. Chan, G. P., *et al.* ..... (A) 310

Colon is not involved in human leprosy. Sharma, V. K., *et al.* ..... (C) 439

Comparison of topical antibiotics for treating *M. fortuitum* keratitis in an animal model. Helm, C. J., *et al.* ..... (A) 332

Emergence of leprosy in a patient with mycosis fungoides. Grossman, D., *et al.* ..... (A) 468

Existence of senile plaques in the brain of elderly leprosy patients. Kimura, T. and Goto, M. ..... (A) 468

Gangliosides (cronassial) and nerve regeneration in leprosy; a multicenter clinical trial. Salafia, A. and Chauhan, G. ..... (A) 164

Genotypic identification of mycobacteria by nucleic acid sequence determination: report of a 2-year experience in a clinical laboratory. Kirschner, P., *et al.* ..... (A) 181

Leprosy in women; characteristics and repercussions. Ulrich, M., *et al.* ..... (A) 309

Lymphangiographic evaluation of patients with clinical lepromatous leprosy on clofazimine. Oommen, S. T., *et al.* ..... (O) 32

Milia in leprosy. Sandhya, A., *et al.* ..... (C) 609

Release of acid hydrolases in spectrum of human leprosy. Kumar, B., *et al.* ..... (A) 472

Study of some trace elements in leprosy. Alvarez Dominguez, A., *et al.* ..... (A) 161

Time and change: new dimensions in the immunopathologic spectrum of leprosy. Scollard, D. M. ..... (A) 473
The influence of thalidomide on the clinical and immunologic manifestations of erythema nodosum leprosum. Sampaio, E. P., *et al.* ..... (A) 174

Clofazimine
Activities of roxithromycin used alone and in combination with ethambutol, rifampin, amikacin, ofloxacin and clofazimine against *M. avium* complex. Rastogi, N., *et al.* ..(A) 671
Antimicrobial activities of clofazimine and B669 are mediated by lysophospholipids. van Rensburg, C. E. J., *et al.* ..... (A) 312
Bioavailability and chemotherapeutic activity of clofazimine against *M. avium* complex infections in beige mice following a single implant of biodegradable polymer. Kailasam, S., *et al.* ..... (A) 465
Clinical trial of ofloxacin alone and in combination with dapsone plus clofazimine for treatment of lepromatous leprosy. Ji, B.-H., *et al.* ..... (A) 465
Clofazimine alters the energy metabolism and inhibits the growth rate of human lung-cancer cell line *in vitro* and *in vivo*. Sripathmanathan, R. M., *et al.* ..... (A) 674
Clofazimine and B669 inhibit the proliferative responses and Na+,K+ adenosine triphosphate activity of human lymphocytes by a lysophospholipid-dependent mechanism. Anderson, R. and Smith, M. J. ..... (A) 309
Clofazimine crystals and ceroid bodies in nerve; a case report. Salafia, A. and Chauhan, G. ..... (A) 158
Comparative bioavailability of clofazimine co-evaporate in the pig. Krishnan, T. R. and Abraham, I. ..... (A) 637
Evaluation of the antineoplastic activities of the riminophenazine agents clofazimine and B669 in tumor-bearing rats and mice. Van Rensburg, C. E. J., *et al.* ..... (A) 160
In vitro activity of streptomycin and clofazimine against established infections of *M. avium* complex in beige mice. Gangadharam, P. R. J. and Parish, K. ..... (A) 331
Lymphangiographic evaluation of patients with clinical lepromatous leprosy on clofazimine. Oommen, S. T., *et al.* ..... (O) 32
M. avium intracellulare–treatment with the clarithromycin clofazimine combination–18 cases. Saint Marc, T., *et al.* ..... (A) 338
The anti-proliferative riminophenazine agents clofazimine and B669 promote lysophospholipid-mediated inhibition of Na+,K+ adenosine triphosphatase activity in cancer cell lines *in vitro*. van Rensburg, C. E. J., *et al.* ..... (A) 639
The effect of simple micellar systems on the solubility and intestinal absorption of clofazimine (B663) in the anaesthetised rat. O'Reilly, J. R., *et al.* ..... (A) 638

Cloning
Chemical definition, cloning and expression of the major protein of the leprosy bacillus. Rivoire, B., *et al.* ..... (A) 652
Cloning and assessment of mycobacterial promoters by using a plasmid shuttle vector. Das Gupta, S. K., *et al.* ..... (A) 178
Cloning and B-cell-epitope mapping of Mpt64 and M. tuberculosis H37Rv. Oettinger, T. and Andersen, A. B. ..... (A) 651
Cloning and nucleotide sequence of *M. tuberculosis* gyrA and gyrB genes and detection of quinolone resistance mutations. Takiff, H. E., *et al.* ..... (A) 481
Cloning and sequency determination of the gene coding for the elongation factor Tu of *M. leprae*. Dhandayuthapani, S., *et al.* ..... (A) 648
Cloning of a *M. tuberculosis* DNA fragment associated with entry and survival inside cells. Arruda, S., *et al.* ..... (A) 189
Cloning of the gene encoding superoxidase dismutase of *M. lepraemurium*. Kashiwabara, Y., *et al.* ..... (A) 682
Detection and characterization of a lambda gt11 recombinant clone of *M. leprae* that expresses an antigenic determinant of a 64-kDa protein. Davidson, S. K. and George, G. T. ..... (O) 237
Identification and cloning of genes differentially expressed in the virulent strain of *M. tuberculosis*. Kinger, A. K. and Tyagi, J. S. ..... (A) 197
Transcription and expression analysis, using lacZ and phoA gene fusions, of *M. fortuitum* B-lactamase genes cloned from a natural isolate and a high-level B-lactamase producer. Timm, J., *et al.* ..... (A) 653

Commonwealth of Independent States (formerly **U.S.S.R.**)
Second armadillo bibliography published. ....(N) 154

Complement
A role for natural antibody in the pathogenesis of leprosy- antibody in nonimmune serum mediates C3 fixation to the *M. leprae* surface and hence phagocytosis by human mononuclear phagocytes. Schlesinger, L. S. and Horwitz, M. A. ....(A) 317
Complement receptor-mediated uptake and tumor necrosis factor alpha-mediated growth inhibition of *M. tuberculosis* by human alveolar macrophages. Hirsch, C. S., *et al.* ..(A) 316
Erythema nodosum leprosum is highly associated with deficiency of the complement isoprotein C4B (C4B*Q0). Mauff, G., *et al.* ....(A) 473

Concanavalin A (ConA)
*M. lepra*emurium itself does not interfere with the *in vitro* lymphoproliferation induced by Concanavalin A. Rojas Espinosa, O., *et al.* ....(C) 616

Congresses
34th Interscience Conference to be held. ....(N) 307
China Leprosy Association holds Third Congress. He, D. ....(N) 455
INFOLEP provides copies of papers presented at Pre-Congress Leprosy Control Workshops. ....(N) 153
Reflections on the International Leprosy Congresses and other events in research, epidemiology, and elimination of leprosy. Balina, L. M. and Valdez, R. P. ....(E) 412
XVII Biennial Conference of Indian Association of Leprologists (IAL). ....(N) 626

Control of leprosy
1992-1993 Annual Report of the Leprosy Control Project. ....(N) 306
[Correlation analysis of economic development to incidence of leprosy.] Zhao, D., *et al.* ....(A) 328
Elimination of leprosy as a public health problem. Noordeen, S. K. ....(E) 278
Hanseniasis control in Sao Paulo State, Brazil. Lombardi, C. ....(A) 187
INFOLEP provides copies of papers presented at Pre-Congress Leprosy Control Workshops. ....(N) 153
Leprosy control through general health services and/or combined programmes. Feenstra, P. ....(A) 463
Leprosy; Etiobiology of Manifestations, Treatment and Control, B. R. Chatterjee, ed. Hastings, R. C. ....(B) 452
Leprosy manual and computer program in use. ....(N) 153
Prospects of global elimination of leprosy as a public health problem by the year 2000. Bechelli, L. M. ....(E) 284
Recommendations of the International Task Force for Disease Eradication. Centers for Disease Control. ....(A) 326
Six Months' Report of Leprosy Control Project. ....(N) 459
Subclinical infection with *M. leprae*–a problem for leprosy control strategies. Baumgart, K. W., *et al.* ....(A) 165
Sustainability of leprosy control services in low-endemic situations. Feenstra, P. ....(E) 599
Understanding the attitude of multidisciplinary teams working in leprosy. Premkumar, R., *et al.* ....(A) 641

Cuba
[Completion of MDT in leprosy, City of Camaguey, Cuba, 1992.] Carranzana Hernandez, G. B. ....(A) 156
[Study of a leprosy focus in an industrial center in Cuba.] Gil Suarez, R. E., *et al.* ....(A) 655
[The history of the treatment of leprosy in Cuba.] Hernandez Angulo, M., *et al.* ....(A) 156

Cultivation
Water soluble complexes of C_{14} and C_{16} fatty acids and alcohols in media for cultivation of leprosy-derived psychrophilic mycobacteria. Kato, L., *et al.* ....(O) 75

Cutaneous
Automated Tactile Tester for evaluation of cutaneous sensibility. Horch, K., *et al.* ....(A) 658
Clinical trial of clarithromycin for cutaneous (disseminated) infection due to *M. chelonae.* Wallace, R. J., *et al.* ....(A) 204

Identification of *M. tuberculosis* DNA in five different types of cutaneous lesions by the polymerase chain reaction. Penneys, N. S., *et al.* ..... (A) 492
Lepromatous leprosy treated with recombinant interferon gamma: cutaneous histologic changes. Bottasso, O., *et al.* ..... (A) 315
Reduction in CDI positive epidermal Langerhan's cell numbers in leprosy lesions following epicutaneous application of 2:4 dinitrochlorobenzene. Narayanan, R. B., *et al.* ..... (A) 473
Treatment of the cutaneous lesions of systemic lupus erythematosus with thalidomide. Atra, E. and Sato, E. I. ..... (A) 189

Damien-Dutton Society
Damien-Dutton Society celebrates 50 years. ..... (N) 308

Dapsone (DDS)
Activity of subinhibitory concentrations of dapsone alone and in combination with cell-wall inhibitors against *M. avium* complex organisms. Rastogi, N., *et al.* ..... (A) 338
Clinical trial of ofloxacin alone and in combination with dapsone plus clofazimine for treatment of lepromatous leprosy. Ji, B.-H., *et al.* ..... (A) 465
[Comparison of DDS monotherapy with MDT in MB leprosy.] Wang, K. ..... (A) 659
Correction of thrombocytopenia with dapsone in the primary antiphospholipid syndrome. Durand, J. M., *et al.* ..... (A) 330
Dapsone induced motor polyneuropathy. Jacob, A. J. W., *et al.* ..... (A) 158
Frequency distribution of dapsone N-hydroxylase, a putative probe for P4503A4 activity, in a white population. May, D. G., *et al.* ..... (A) 637
Influence of the rapid acetylator phenotype on the emergence of DDS resistant *M. leprae.* Costa, H. C., *et al.* ..... (A) 310
Interaction of *Pneumocytis carinii* dihydropteroate synthase with sulfonamides and diaminodiphenyl sulfone (dapsone). Voeller, D., *et al.* ..... (A) 495
Loss of viability of *M. leprae* isolated from nasal secretions of lepromatous leprosy patients following daily rifampicin and DDS therapy. Habte-Mariam, H. S. and Guebre-Xabier, M. ..... (A) 311
Monoacetyldapsone inhibition of dapsone N-hydroxylation by human and rat liver microsomes. Irshaid, Y., *et al.* ..... (A) 636
N-Chlorination of sulfamethoxazole and dapsone by the myeloperoxidase system. Uetrecht, J. P., *et al.* ..... (A) 159
Pulmonary eosinophilia associated with dapsone. Janier, M., *et al.* ..... (A) 636
Rate of relapse in multibacillary patients after cessation of long-course dapsone monotherapy supplemented by a final supervised single dose of 1500 mg of rifampin. Cartel, J. L. and Naudin, J.-C ..... (O) 215
Reduction of dapsone hydroxylamine to dapsone during methaemoglobin formation in human erythrocytes *in vitro.* 2. Movement of dapsone across a semipermeable membrane into erythrocytes and plasma. Coleman, M. D. and Jacobus, D. P. ..... (A) 157
Relapse rates in patients treated with dapsone monotherapy and combinations of dapsone and thiambutosine, thiacetazone, isoniazid and streptomycin in the pre-MDT era. Smith, T. C. and Richardus, J. H. ..... (O) 353
Relapses after a single dose of rifampin in skin-smear negative multibacillary patients after dapsone monotherapy. Jamet, P., *et al.* ..... (O) 209

Deformity, disability
BLP inaugurates "Prevention of Deformity Cell." ..... (N) 151
[Demands of leprosy patients with disability.] Jiang, C., *et al.* ..... (A) 188
Disabilities among rural leprosy patients in Myanmar. Htoon, M. T. and Win, Z. ..... (E) 126
Disability pattern amongst leprosy cases in an urban area (Calcutta). Saha, S. P. and Das, K. K. ..... (A) 188
[Emotional reactions of hanseniasis patients with physical deformities.] de Oliveira, M. H. P. ..... (A) 187
[Physical disabilities in HD patients at the time of diagnosis: epidemiologic characteristics of the cases registered from 1983 to 1988 in the state of Sao Paulo, Brazil.] Trindade, M. A. B. and Nemes, M. I.B ..... (A) 483
The Surgical Management of Deformities in Leprosy and Other Peripheral Neuropathies by N. H. Antia, C. D. Enna and Daver, B. M. ..... (B) 623

Type 1 reaction, neuritis and disability. What is the current epidemiological situation? Lienhardt, C. and Fine, P. E. M. ..... (A) 656

Dehydrogenase

Alpha-ketoglutarate dehydrogenase in the *in vitro*-grown *M. lepraemurium.* Ishaque, M., *et al.* ..... (O) 399
Antimitochondrial (pryuvate dehydrogenase) antibodies in leprosy. Gilburd, B., *et al.* ..... (A) 471
Isolation and characterization of the aspartokinase and aspartate semialdehyde dehydrogenase operon from mycobacteria. Cirillo, J. D., *et al.* ..... (A) 477

Dermal

Electron microscopic observations of small unmyelinated nerve tissue proper in a dermal lesion of a relapsed lepromatous patient. Hirata, T. and Harada, N. ..... (C) 619
Electron microscopic observations of the relationship between peripheral nerve tissue proper and an endoneurial capillary in a dermal lesion of a relapses lepromatous patient. Hirata, T. and Harada, N. ..... (O) 89
Reduction in CDI positive epidermal Langerhan's cell numbers in leprosy lesions following epicutaneous application of 2:4 dinitrochlorobenzene. Narayanan, R. B., *et al.* ..... (A) 473
Ultrastructural immunohistochemistry of *M. leprae* in dermal nerves; comparison of human leprosy and nude mouse. Goto, M. and Matsuoka, M. ..... (A) 681

Dermatology

Color Atlas of Tropical Dermatology and Venereology, K. F. Schaller, ed. McDougall, A. C. ..... (B) 450
Thalidomide use in dermatology. Ochonisky, S. and Revuz, J. ..... (A) 466

DNA

An improved method for DNA diagnosis of leprosy using formaldehyde-fixed, paraffin-embedded skin biopsies. Nishimura, M., *et al.* ..... (A) 645
Characterization by automated DNA sequencing of mutations in the gene (rpoB) encoding the RNA polymerase beta subunit in rifampin-resistant *M. tuberculosis* strains from New York City and Texas. Kapur, V., *et al.* ..... (A) 489
Cloning of a *M. tuberculosis* DNA fragment associated with entry and survival inside cells. Arruda, S., *et al.* ..... (A) 189
Construction of genomic DNA library of *M. leprae* Thai-53 strain and detection of *M. leprae*-specific genes in the library by polymerase chain reaction. Chaicumpar, K., *et al.* ..... (A) 176
DNA fingerprinting of *M. xenopi* strains. Collins, D. M. ..... (A) 662
DNA polymorphisms detected in M. haemophilus by pulsed-field gel electrophoresis. Yakrus, M. A. and Straus, W. L. ..... (A) 496
Extensive DNA sequence conservation throughout the M. tuberculosis complex. Frothingham, R., *et al.* ..... (A) 648
Extraction and preliminary characterization of a mycobacteriolytic preparation (stazyme) from a staphylococcus strain–mycobacteriocidal activity and its use in rapid extraction of mycobacterial DNA. Clavel-Seres, S., *et al.* ..... (A) 176
Identification of *M. tuberculosis* DNA in a pre-Columbian Peruvian mummy. Salo, W. L., *et al.* ..... (A) 463
Identification of *M. tuberculosis* DNA in five different types of cutaneous lesions by the polymerase chain reaction. Penneys, N. Ş., *et al.* ..... (A) 492
Identification of *Mycobacterium* species by using amplified ribosomal DNA restriction analysis. Vaneechoutte, M., *et al.* ..... (A) 203
Large-scale DNA fingerprinting of *M. tuberculosis* strains as a tool for epidemiological studies of tuberculosis. Chevrel Dellagi, D., *et al.* ..... (A) 191
M. leprae DNA from ancient bone detected by PCR. Rafi, A., *et al.* ..... (A) 634
Nature of DNA polymorphism in the direct repeat cluster of *M. tuberculosis*; application for strain differentiation by a novel typing method. Groenen, P. M. A., *et al.* ..... (A) 332
Random amplified polymorphic DNA genotyping of *M. malmoense.* Kauppinen, J., *et al.* ..... (A) 666
Stability of DNA fingerprint pattern produced with IS6110 in strains of *M. tuberculosis.* Cave, M. D., *et al.* ..... (A) 329
Status of HBV DNA and HBsAg in leprosy patients. Banerjee, K., *et al.* ..... (C) 444

The diagnostic usefulness of a DNA probe for *M. tuberculosis* complex (Gen-Probe®) in BACTEC cultures versus other diagnostic methods. Telenti, M., *et al.* ..... (A) 495
Use of PCR-mediated amplification of *M. leprae* DNA in different types of clinical samples for the diagnosis of leprosy. Santos, A. R., *et al.* ..... (A) 183

DNCB
An induction of the late hypersensitivity reaction to DNCB in patients with different clinical forms of hanseniasis in Brazil. Azulay, R. D. ..... (A) 161
Reduction in CDI positive epidermal Langerhan's cell numbers in leprosy lesions following epicutaneous application of 2:4 dinitrochlorobenzene. Narayanan, R. B., *et al.* ..... (A) 473

Drugs (see also **Multidrug therapy** and specific drugs)
Activity of clarithromycin compared with those of other drugs against *M. paratuberculosis* and further enhancement of its extracellular and intracellular activities by ethambutol. Rastogi, N., *et al.* ..... (A) 337
Cerebrospinal fluid drug concentrations and the treatment of tuberculous meningitis. Ellard, G. A., *et al.* ..... (A) 194
Ethambutol inhibition of glucose methabolism in mycobacteria; a possible target of the drug. Silve, G., *et al.* ..... (A) 339
Hepatotoxicity associated with acetaminophen usage in patients receiving multiple drug therapy for tuberculosis. Nolan, C. M., *et al.* ..... (A) 491
In vitro activities of free and liposomal drugs against *M. avium-M. intracellulare* complex and *M. tuberculosis.* Mehta, R. T., *et al.* ..... (A) 335
In vivo activity of paromomycin against susceptible and multidrug-resistant *M. tuberculosis* and *M. avium* complex strains. Kanyok, T. P., *et al.* ..... (A) 489
M. avium complex develop resistance to synergistically active drug combinations during infection. Hoffner, S. E., *et al.* ..... (A) 488
Structure-analysis and structure-side-effect relationships for the quinolone antibacterials. Domagala, J. M. ..... (A) 641
Tetracycline resistance determinants in *Mycobacterium* and *Streptomyces* species. Pang, Y., *et al.* ..... (A)
The early bactericidal activity of rifabutin in patients with pulmonary tuberculosis measured by sputum viable counts: a new method of drug assessment. Sirgel, F. A., *et al.* ..... (A) 339
The rpsL gene and streptomycin resistence in single and multiple drug-resistant strains of *M. tuberculosis.* Nair, J., *et al.* ..... (A) 182

Ecuador
[Leprosy in Ecuador.] Zarate, N. O. V. ..... (A) 483

Electron microscopy (see also **Ultrastructure**)
Electron microscopic observations of small unmyelinated nerve tissue proper in a dermal lesion of a relapsed lepromatous patient. Hirata, T. and Harada, N. ..... (C) 619
Electron microscopic observations of the relationship between peripheral nerve tissue proper and an endoneurial capillary in a dermal lesion of a relapses lepromatous patient. Hirata, T. and Harada, N. ..... (O) 89

ELISA (enzyme-linked immunosorbent assay)
Clinical evaluation of rapid serodiagnosis of pulmonary tuberculosis by ELISA with cord factor (trehalose-6, 6' dimycolate) as antigen purified from *M. tuberculosis.* Maekura, R., *et al.* ..... (A) 200
[Determination of the antibody in the sera of leprosy patients with NT-P-BSA ELISA.] Song, X., *et al.* ..... (A) 475
Diagnosis of tuberculous meningitis by ELISA test. Srivastava, L., *et al.* ..... (A) 494
[On criteria for the positivity in determination of antibody against PGL-I with ELISA.] Meng, M., *et al.* ..... (A) 171

Enzyme(s)
Enzyme electrophoresis in taxonomy of mycobacteria. Ridell, M. ..... (A) 481
Rapid characterization and identification of mycobacteria using fluorogenic enzyme tests. Hamid, M. E., *et al.* ..... (A) 649

Epidemiology

An epidemiological study of leprosy infection by serology and polymerase chain reaction. van Beers, S. M., *et al.* ..... (O) 1

[Analysis of factors for leprosy endemicity with stepwise regression model.] Li, T. and Feng, X. ..... (A) 656

[Calculation of leprosy endemic trend in Heitian Prefecture with mathematical model.] Yang, Z., *et al.* ..... (A) 657

Clinical and epidemiologic characteristics of *M. haemophilum*, an emerging pathogen in immunocompromised patients. Straus, W. L., *et al.* ..... (A) 340

Epidemiologic characteristics of leprosy reactions. Scollard, D. M., *et al.* ..... (O) 559

Epidemiological studies in children of a low-endemic region, a high-endemic region, and dwellers of a leprosy colony: evaluation of anti-ND-BSA antibodies and lepromin response. Shah, D. H., *et al.* ..... (O) 539

Epidemiology and treatment of leprosy. Yoder, L. J. ..... (A) 634

[Epidemiology of Hansen's disease in Israel.] Seidenbaum, M., *et al.* ..... (A) 483

Hospital-based epidemiological study of reactions. Bwire, R. and Kawuma, J. S. ..... (A) 313

Large-scale DNA fingerprinting of *M. tuberculosis* strains as a tool for epidemiological studies of tuberculosis. Chevrel Dellagi, D., *et al.* ..... (A) 191

Leprosy spread in urban area: Part I: Epidemiological characteristics of an endemic urban area for leprosy; the county of Sao Goncalo, Rio de Janeiro State, Brazil. Andrade, V. L. G., *et al.* ..... (A) 185

Molecular epidemiology of tuberculosis in Austria. Vogetseder, W., *et al.* ..... (A) 496

[Physical disabilities in HD patients at the time of diagnosis: epidemiologic characteristics of the cases registered from 1983 to 1988 in the state of Sao Paulo, Brazil.] Trindade, M. A. B. and Nemes, M. I.B. ..... (A) 483

Reflections on the International Leprosy Congresses and other events in research, epidemiology, and elimination of leprosy. Balina, L. M. and Valdez, R. P. ..... (E) 412

Transmission of multidrug-resistant *M. tuberculosis* among persons with human immunodeficiency virus infection in an urban hospital–epidemiologic and restriction fragment length polymorphism analysis. Coronado, V. G., *et al.* ..... (A) 192

Type 1 reaction, neuritis and disability. What is the current epidemiological situation?. Lienhardt, C. and Fine, P. E. M. ..... (A) 656

Use of a repetitive element isolated from *M. tuberculosis* in hybridization studies with *M. bovis*–a new tool for epidemiological studies of bovine tuberculosis. Cousins, D. V., *et al.* ..... (A) 330

Erythema nodosum leprosum (ENL)

Erythema nodosum leprosum is highly associated with deficiency of the complement isoprotein C4B (C4B*Q0). Mauff, G., *et al.* ..... (A) 473

Group-specific component (Gc) in erythema nodosum leprosum (ENL). Ghei, S. K., *et al.* ..... (A) 168

In vitro tumor necrosis factor production by mononuclear cells from lepromatous leprosy patients and from patients with erythema nodosum leprosum. Santos, D. O., *et al.* ..... (A) 174

[Logistic regression analysis of humoral immune factors in ENL cases.] Zhang, X. and Wang, D. ..... (A) 175

Necrotizing erythema nodosum leprosum triggered by cotrimoxazole? Nishioka, S., *et al.* ..... (C) 296

The influence of thalidomide on the clinical and immunologic manifestations of erythema nodosum leprosum. Sampaio, E. P., *et al.* ..... (A) 174

Escherichia coli

Immunogenicity of mycobacterial T-cell epitope expressed in outer membrane protein PhoE of *E. coli*. Janssen, R., *et al.* ..... (A) 643

M. paratuberculosis and *E. coli* share common antigenic determinants. Gilot, P. and Misonne, M. C. ..... (A) 663

Overproduction of recombinant 85 complex of *M. leprae* in *E. coli* and their application for serodiagnosis of leprosy. Suzuki, Y., *et al.* ..... (A) 687

Structure of the *M. tuberculosis* antigen 88, a protein related to the *E. coli* PstA periplasmic phosphate permease subunit. Braibant, M., *et al.* ..... (A) 486

Ethambutol
Activities of roxithromycin used alone and in combination with ethambutol, rifampin, amikacin, ofloxacin and clofazimine against *M. avium* complex. Rastogi, N., *et al.* ..(A) 671
Activity of clarithromycin compared with those of other drugs against *M. paratuberculosis* and further enhancement of its extracellular and intracellular activities by ethambutol. Rastogi, N., *et al.* ..... (A) 337
Ethambutol inhibition of glucose metabolism in mycobacteria; a possible target of the drug. Silve, G., *et al.* ..... (A) 339

Ethionamide
inhA, a gene encoding a target for isoniazid and ethionamide in *M. tuberculosis*. Banerjee, A., *et al.* ..... (A) 321

Ethiopia
ALERT Training Calendar 1995. ..... (N) 455

Eye(s)
[Analysis of 2114 lagophthalmos cases in leprosy.] Yan, L., *et al.* ..... (A) 164
[Effect of the temporal muscle transposition on lagophthalmos in leprosy.] Wang, Z., *et al.* ..... (A) 484
Lid retraction as an indicator of lagophthalmos in leprosy; a preliminary report. Daniel, E., *et al.* ..... (C) 436
Multidrug therapy and after: changing visage of ocular leprosy. Daniel, E. ..... (C) 437
New publications on ocular leprosy. ..... (N) 306
Ocular manifestations of leprosy in a noninstitutionalized community in the United States. Dana, M. R., *et al.* ..... (A) 639
Paraylsis of facial muscles in leprosy patients with lagophthalmos. Lubbers, W. J., *et al.* ..... (O) 220
Quantitative assessment of the visibility of unmyelinated corneal nerves in leprosy. Daniel, E., *et al.* ..... (O) 374
Visual aids for training in ocular leprosy. ..... (N) 627

Face
Facial, glossopharyngeal, vagus and hypoglossal nerve palsy in a case of lepromatous leprosy. Dhar, S., *et al.* ..... (A) 162
Paraylsis of facial muscles in leprosy patients with lagophthalmos. Lubbers, W. J., *et al.* ..... (O) 220
Trigeminal neuralgia–a presenting feature of facial leprosy. Mishra, B., *et al.* ..... (A) 163

Family
An RFLP map for 2Q33-Q37 from multicase mycobacterial and leishmanial disease families–no evidence for an Lsh/Ity/Bcg gene homologue influencing susceptibility to leprosy. Shaw, M. A., *et al.* ..... (A) 474

Foot
[Effects of protective footwear on plantar ulcers.] Huang, X. ..... (A) 658
The effect of footwear on sensory testing in leprosy. Stratford, C. J. and Owen, B. M. ..... (A) 659

Foot pad(s)
Experimental transmission of human leprosy bacilli in foot pads of severe combined immunodeficient mice. Ishaque, M. and Sticht-Groh, V. ..... (C) 613

France
1991 Prix Paul Laviron. ..... (N) 150

Genetics
An RFLP map for 2Q33-Q37 from multicase mycobacterial and leishmanial disease families–no evidence for an Lsh/Ity/Bcg gene homologue influencing susceptibility to leprosy. Shaw, M. A., *et al.* ..... (A) 474
Genetic alterations in streptomycin-resistant *M. tuberculosis*: mapping of mutations conferring resistance. Meier, A., *et al.* ..... (A) 335
Genetic control of susceptibility to leprosy in French Polynesia; no evidence for linkage with markers on telomeric human chromosome 2. Levee, G., *et al.* ..... (O) 499

Implication of phagosome-lysosome fusion in restriction of *M. avium* growth in bone marrow macrophages from genetically resistant mice. Dechastellier, C., *et al.* .....(A) 193
Influence of the Ity/Lsh/Bcg gene on the development of suppressor cell precursors in the early phase of the infection of mice with *M. lepraemurium.* Gosselin, D., *et al.* .....(A) 655

Genome
Comparative analysis of the genomes of mycobacteriophages infecting saprophytic and pathogenic mycobacteria. Coene, M., *et al.* .....(A) 177
Construction of genomic DNA library of *M. leprae* Thai-53 strain and detection of *M. leprae*-specific genes in the library by polymerase chain reaction. Chaicumpar, K., *et al.* .....(A) 176
Developments from the *M. leprae* genome project: discovery, purification, characterization, gene sequence and significance of a *M. leprae* bacterioferritin. Pessolani, M. C. V., *et al.* .....(A) 685
Identification of immunologically reactive proteins specified by the recombinant phages of a lambda gt11::*M. leprae* genomic library. Gan, S. C. .....(A) 649
The genome of *M. leprae.* Cole, S. T. .....(E) 122
Use of *in vivo* complementation in *M. tuberculosis* to identify a genomic fragment associated with virulence. Pascopella, L., *et al.* .....(A) 669

Germany
28th World Conference of the IUATLD to be held. .....(N) 150

Granuloma(s)
An evaluation of the S-100 stain in the histological diagnosis of tuberculoid leprosy and other granulomatous dermatoses. Singh, N., *et al.* .....(O) 263
Detection of tumor necrosis factor alpha in saroidosis and tuberculosis granulomas using *in situ* hybridization. Myatt, N., *et al.* .....(A) 669
The 65-kDa heat-shock protein enhances bactericidal granuloma formation in mice infected with *M. leprae.* Nomaguchi, H., *et al.* .....(A) 685

Greece
Current profile of active leprosy in Greece; a five-year retrospective study (1988-1992). Kyriakis, K. P., *et al.* .....(O) 547

Hepatitis
Prevalence of antibodies to hepatitis C virus among patients with leprosy in several African countries and the Yemen. Denis, F., *et al.* .....(A) 640

Hepatotoxicity
Hepatotoxicity associated with acetaminophen usage in patients receiving multiple drug therapy for tuberculosis. Nolan, C. M., *et al.* .....(A) 491

Histoid leprosy
Pefloxacin in histoid leprosy. Mahajan, P. M., *et al.* .....(C) 297
Response by Dr. Fiallo and Dr. Nunzi ("tuberculoid contamination" in histoid hanseniasis). Fiallo, P. and Nunzi, E. .....(C) 305
"Tuberculoid contamination" in histoid hanseniasis. Corcos, M. G. and Corcos, C. D. ....(C) 301

Histopathology
A case of secondary syphilis with a remarkable resemblance in histopathologic appearance to indeterminate leprosy. Job, C. K., *et al.* .....(E) 433
[Histopathologic correlations between skin and lymph nodes in the phases of evolution of virchovian hanseniasis.] Santos, E. M. C. and Fleury, R. N. .....(A) 174
Histopathology course held in Cheng-du. Li, H.-Y. .....(N) 626

History of leprosy
[The history of the treatment of leprosy in Cuba.] Hernandez Angulo, M., *et al.* .....(A) 156

HLA (see also **Genetics**)
An atypical site in HLA-DQB1 detected in leprosy patients. Ohyama, H., *et al.* .....(C) 293
Serum antibodies from patients with ankylosing spondylitis and Reiter's syndrome are reactive with HLA-B27 cells transfected with the *M. tuberculosis* hsp60 gene. Kellner, H., *et al.* .....(A) 490
Study of HLA class-II alleles by PCR oligotyping in leprosy patients from north India. Rani, R., *et al.* .....(A) 173

Human immunodeficiency virus (HIV)
Dr. Borgdorff replies. Borgdorff, M. W. ..... (C) 612
Dr. Ponnighaus replies. Ponnighaus, J. M. ..... (C) 611
Effect of HIV-1 infection on the immune status of leprosy patients. Sampaio, E. P., *et al.* ..... (A) 686
HIV infection as a risk factor for the development of tuberculosis–a case-control study in Tanzania. Vandenbroek, J., *et al.* ..... (A) 495
HIV-1 infection and leprosy. Gormus, B. J. ..... (C) 610
Human immunodeficiency virus and leprosy–type 1 reactions, nerve damage and steroid therapy: "a case report." Bwire, R. and Kawuma, H. J. S. ..... (A) 161
Human immunodeficiency virus and leprosy. Lucas, S. ..... (A) 469
Infection with human immunodeficiency virus type 1 (HIV-1) and human T cell lymphotropic viruses among leprosy patients and contacts–correlation between HIV-1 crossreactivity and antibodies to lipoarabinomannan. Kashala, O., *et al.* ..... (A) 472
Isolation of mycobacteria from patients seropositive for the human immunodeficiency virus (HIV) in southeast England. Yates, M. D., *et al.* ..... (A) 205
Lepromatous leprosy and HIV infection. Olivares, L. M., *et al.* ..... (C) 295
Leprosy and HIV infection. de Almeida, A. M., *et al.* ..... (C) 133
Leprosy and infection with the human immunodeficiency virus in Uganda; a case-control study. Kawuma, H. J. S., *et al.* ..... (O) 521
Modulation of the effector function of human monocytes for *M. avium* by human immunodeficiency virus-1 envelope glycoprotein gp120. Shiratsuchi, H., *et al.* ..... (A) 493
Normalization of CD3 (+) T-lumphocyte depletion in patients without HIV infection treated for tuberculosis. Turrett, G. S. and Telzak, E. E. ..... (A) 675
PGL-I antibody in HIV infected patients. Gonzalez-Abreu, E., *et al.* ..... (A) 656
Prevalence of HIV infection and high-risk characteristics among leprosy patients of South India; a case-control study. Sekar, B., *et al.* ..... (O) 527
Recommendations on prophylaxis and therapy for disseminated *M. avium* complex for adults and adolescents infected with human immunodeficiency virus. ..... (A) 202
Relationship of manifestations of tuberculosis to CD4 cell counts in patients with human immunodeficiency virus infection. Jones, B. E., *et al.* ..... (A) 666
Restriction fragment length polymorphism analysis detecting a community-based tuberculosis outbreak among persons infected with human immunodeficiency virus. Tabet, S. R., *et al.* ..... (A) 341
Thalidomide inhibits the replication of human immunodeficiency virus type 1. Makonkawkeyoon, S., *et al.* ..... (A) 171
Transmission of multidrug-resistant *M. tuberculosis* among persons with human immunodeficiency virus infection in an urban hospital–epidemiologic and restriction fragment length polymorphism analysis. Coronado, V. G., *et al.* ..... (A) 192

Hypersensitivity
An induction of the late hypersensitivity reaction to DNCB in patients with different clinical forms of hanseniasis in Brazil. Azulay, R. D. ..... (A) 161

ILEP (International Federation of Anti-Leprosy Associations)
1994 ILEP catalog of training centers published. ..... (N) 154
ILEP at global MDT conference. ..... (N) 632
ILEP expenditures. ..... (N) 628
New ILEP brochure out. ..... (N) 154

IMMLEP (see **IMMYC**)

Immune complexes
Identification of myelin basic proteins in circulating immune complexes associated with lepromatous leprosy. Corsico, B., *et al.* ..... (A) 642

Immune responses
Cellular and humoral immune responses of cattle to purified *M. bovis* antigens. Fifis, T., *et al.* ..... (A) 487
Evaluation of the autoimmune response in leprosy. Kroumpouzos, G., *et al.* ..... (A) 170
Specific and nonspecific aspects of humoral immune response in leprosy. Kirsztajn, G. M., *et al.* ..... (A) 468
T-cells bearing V beta 6 T-cell receptors in the cell-mediated immune response to *M. leprae*. Wang, X. H., *et al.* ..... (A) 319

Immunoglobulins

A longitudinal study of percent agalactosyl IgG in tuberculosis patients receiving chemotherapy, with or without immunotherapy. Rook, G. A. W., *et al.* ..... (A) 338

Class-specific immunoglobulins and antibodies to mycobacterial sonicates and autoantigens in leprosy patients and contacts. Mathew, J. M. and Muthukkaruppan, V. R .. (A) 644

Development of IgG responses to mycobacterial antigens. Pilkington, C., *et al.* ..... (A) 337

IgG response to purified 65- and 70-kDa mycobacterial heat shock proteins and to antigen 85 in leprosy. Launois, P., *et al.* ..... (O) 48

Production and characterization of a monoclonal badger anti immunoglobulin G and its use in defining the specificity of *M. bovis* infection in badgers by Western blot. Goodger, J., *et al.* ..... (A) 488

[Study of the IgA antibody to PGL-I specific to *M. leprae.*] Gan, Y., *et al.* ..... (A) 167

Immunology

A longitudinal study of immunologic reactivity in leprosy patients treated with immunotherapy. Rada, E., *et al.* ..... (O) 552

Identification of immunologically reactive proteins specified by the recombinant phages of a lambda gt11::*M. leprae* genomic library. Gan, S. C. ..... (A) 649

[Immunologic evaluation of hanseniasis patients with leukoplakia.] Arruda, M. S. P., *et al.* ..... (A) 161

Immunological and functional characterization of proteins of *M. tuberculosis* antigen 85 complex using synthetic peptides. Leao, S. C., *et al.* ..... (A) 199

Immunology of leprosy: lessons from and for leprosy. Ottenhoff, T. H. M. ..... (E) 108

Leprosy 1962-1992. 3. Immunology of leprosy. Britton, W. J. ..... (A) 166

M. leprae-specific gene encoding an immunologically recognized 45 kDa protein. De Wit, T. F. R., *et al.* ..... (A) 322

M. leprae-specific gene encoding an immunologically recognized 45-kDa protein. Rinke de Wit, T. F., *et al.* ..... (A) 183

[Monitoring leprosy relapse with immunologic tests.] Weng, X., *et al.* ..... (A) 319

The influence of thalidomide on the clinical and immunologic manifestations of erythema nodosum leprosum. Sampaio, E. P., *et al.* ..... (A) 174

Immunotherapy

A longitudinal study of immunologic reactivity in leprosy patients treated with immunotherapy. Rada, E., *et al.* ..... (O) 552

A longitudinal study of percent agalactosyl IgG in tuberculosis patients receiving chemotherapy, with or without immunotherapy. Rook, G. A. W., *et al.* ..... (A) 338

Old plague, new plague, and a treatment for both? Stanford, J. L., *et al.* ..... (A) 494

Reversal reaction in multibacillary leprosy patients following MDT with and without immunotherapy with a candidate for an antileprosy vaccine, *Mycobacterium* w. Kar, H. K., *et al.* ..... (A) 170

IMMYC (WHO Immunology of Mycobacterial Diseases Scientific Working Group)

WHO IMMYC and THEMYC meetings announced. ..... (N) 628

Indeterminate leprosy

A case of secondary syphilis with a remarkable resemblance in histopathologic appearance to indeterminate leprosy. Job, C. K., *et al.* ..... (E) 433

India

1993 Annual Meeting of Voluntary Organizations and State Leprosy Officers. ..... (N) 150

1994 Erwin Stindl Memorial Oration by Tare. Chaudhury, D. S. ..... (N) 456

An eight-year field trial on antileprosy vaccines among high risk household contacts in the Calcutta metropolis. Chaudhury, S., *et al.* ..... (O) 309

BLP 1994 Antileprosy Fortnight Celebration. ..... (N) 456

BLP inaugurates "Prevention of Deformity Cell." ..... (N) 151

BLP observes World Disabled Day. Ganapati, R. ..... (N) 457

Dharmendra Award donations requested. ..... (N) 151

Dr. Vomstein gets national award. ..... (N) 306

GMLF holds first Workshop on Teaching Methodology for Trainers of Leprosy Training Centers. ..... (N) 153

Indian Journal of Leprosy's new address. ..... (N) 153

Indian Leprosy Association's 1994 Health Education Calendars on Leprosy. Jagannathan, S. A. ..... (N) 458
International Gandhi Awards 1994. Tare, S. P. ..... (N) 458
Isolation and identification of environmental mycobacteria in the *M. bovis* BCG trial area of South India. Kamala, T., *et al.* ..... (A) 650
Monocyte antimycobacterial activity before and after *M. bovis* BCG vaccination in Chingleput, India, and London. Cheng, S. H., *et al.* ..... (A) 191
NLEP goes into top gear. ..... (N) 458
National strategy for elimination of leprosy in India. Mittal, B. N. ..... (A) 327
New IAL Officers. ..... (N) 626
Prevalence of HIV infection and high-risk characteristics among leprosy patients of South India; a case-control study. Sekar, B., *et al.* ..... (O) 527
Sample survey of leprosy after three years of MDT in Bhavani taluk of Periyar District, Tamil Nadu (India). Shanker Narayan, N. P., *et al.* ..... (A) 187
Schieffelin 1994 course schedule. ..... (N) 152
Study of HLA class-II alleles by PCR oligotyping in leprosy patients from north India. Rani, R., *et al.* ..... (A) 173
Study of leprosy among slum dwellers in Pune. Part I. Prevalence. Krishnan, B. K. and Gokarn, A. ..... (A) 327
The Stanley Browne Laboratories–Miraj. ..... (N) 459
XVII Biennial Conference of Indian Association of Leprologists (IAL). ..... (N) 626

Interferon

An essential role for interferon-gamma in resistance to *M. tuberculosis* infection. Flynn, J. L., *et al.* ..... (A) 168
Disseminated tuberculosis in interferon-gamma gene-disrupted mice. Cooper, A. M., *et al.* ..... (A) 167
IFN-gamma, IL-6 and IL-4 modulate *M. leprae*-specific or PPD specific cytotoxic T cells in leprosy patients. Fink, S., *et al.* ..... (A) 315
Lepromatous leprosy treated with recombinant interferon gamma: cutaneous histologic changes. Bottasso, O., *et al.* ..... (A) 315
Mice that lack the interferon-gamma receptor have profoundly altered responses to infection with bacillus Calmette-Guerin and subsequent challenge with lipopolysaccharide. Kamijo, R., *et al.* ..... (A) 197
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330
Recombinant *M. bovis* BCG secreting functional interleukin-2 enhances gamma interferon production by splenocytes. O'Donnell, M. A., *et al.* ..... (A) 645
Treatment of refractory disseminated nontuberculous mycobacterial infection with interferon gamma–a preliminary report. Holland, S. M., *et al.* ..... (A) 642

Interleukin(s)

Activation of the interleukin 6 gene by *M. tuberculosis* of lipopolysaccharide is mediated by nuclear factors NF-IL6 and NF-$\kappa\beta$. Zhang, Y., *et al.* ..... (A) 476
IL-12 in mycobacterial infection. Sieling, P. A., *et al.* ..... (A) 687
Induction of IL-1 beta, IL-6, TNF-alpha, GM-CSF and G-CSF in human variants of *M. avium*. Fattorini, L., *et al.* ..... (A) 487
Interleukin 12 at the site of disease in tuberculosis. Zhang, M., *et al.* ..... (A) 647
Interleukin-1 is involved in mouse resistance to *M. avium*. Denis, M. and Ghadirian, E. ..... (A) 487
Interleukin-8 enhances nonoxidative intracellular killing of *M. fortuitum* by human granulocytes. Nibbering, P. H., *et al.* ..... (A) 172
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330
Primary activation of V gamma 9-expressing gamma/delta cells by *M. tuberculosis*–requirement for Th1-type CD4 T cell help and inhibition by IL-10. Pechhold, K., *et al.* ..... (A) 646

Recombinant *M. bovis* BCG secreting functional interleukin-2 enhances gamma interferon production by splenocytes. O'Donnell, M. A., *et al.* .....(A) 645

International Journal of Leprosy (IJL)
Index to Volume 62. .....(-) 697
Reviewers for Vol. 62 (1994). .....(-) 690
Special Grantors and Sustaining Members. .....(-) 695
Statement of Financial Condition. .....(-) 691
Statement of Ownership, Management and Circulation. .....(-) 674

International Leprosy Association (ILA)
Announcing the ILA FORUM. .....(N) 462
ILA Membership List addendum. .....(N) 462

Isoniazid
Catalase-peroxidase gene sequences in isoniazid-sensitive and isoniazid-resistant strains of *M. tuberculosis* from New York City. Stoeckle, M. Y., *et al.* .....(A) 203
Characterization of the katG gene encoding a catalase peroxidase required for the isoniazid susceptibility of *M. tuberculosis*. Heym, B., *et al.* .....(A) 180
inhA, a gene encoding a target for isoniazid and ethionamide in *M. tuberculosis*. Banerjee, A., *et al.* .....(A) 321
Relapse rates in patients treated with dapsone monotherapy and combinations of dapsone and thiambutosine, thiacetazone, isoniazid and streptomycin in the pre-MDT era. Smith, T. C. and Richardus, J. H. .....(O) 353

Israel
[Epidemiology of Hansen's disease in Israel.] Seidenbaum, M., *et al.* .....(A) 483

Italy
Leprosy in an Italian tourist visiting the tropics. Fiallo, P., *et al.* .....(A) 640

Japan
[Changes and present status of a Japanese National Leprosarium; analysis of smear positive rate and relapse in Hoshizuka Keiaien.] Goto, M., *et al.* .....(A) 162
[Present situation on leprosy rehabilitation activity in China; a brief report on Japan-China Leprosy Rehabilitation Symposium.] Maeda, M. .....(A) 156
U.S.-Japan Cooperative Medical Science Program Twenty-Ninth Joint Leprosy Research Conference, Kyoto, Japan, 19-22 August 1994. .....(A) 678

Kidney(s)
[Acute renal insufficiency with multidrug therapy for HD.] Gordan, P. A., *et al.* .....(A) 464
Nosocomial outbreak of tuberculosis in a renal transplant unit -application of a new technique for restriction fragment length polymorphism analysis of *M. tuberculosis* isolates. Jereb, J. A., *et al.* .....(A) 196
Renal abnormalities in leprosy. Kirsztajn, G. M., *et al.* .....(A) 163
Transport of amino acids across renal brush border membrane vesicles in *M. leprae* infected Swiss albino mice–effect of Convit vaccine. Kohli, M., *et al.* .....(A) 325

Leishmaniasis
Helper T cells without CD4: control of leishmaniasis in CD4 deficient mice. Locksley, R. M., *et al.* .....(A) 171

Lepromatous leprosy
Clinical trial of clarithromycin for lepromatous leprosy. Chan, G. P., *et al.* .....(A) 464
Clinical trial of fusidic acid for lepromatous leprosy. Franzblau, S. G., *et al.* .....(A) 635
Clinical trial of ofloxacin alone and in combination with dapsone plus clofazimine for treatment of lepromatous leprosy. Ji, B.-H., *et al.* .....(A) 465
Clinical trial of sparfloxacin for lepromatous leprosy. Chan, G. P., *et al.* .....(A) 310
Efficacy of minocycline 100 mg twice daily and an initial single 200-mg dose in the therapy of lepromatous leprosy. Gelber, R. H., *et al.* .....(A) 680
Efficacy of minocycline in single dose and at 100 mg twice daily for lepromatous leprosy. Gelber, R. H., *et al.* .....(O) 568
Facial, glossopharyngeal, vagus and hypoglossal nerve palsy in a case of lepromatous leprosy. Dhar, S., *et al.* .....(A) 162

Identification of myelin basic proteins in circulating immune complexes associated with lepromatous leprosy. Corsico, B., *et al.* ..... (A) 642
In vitro tumor necrosis factor production by mononuclear cells from lepromatous leprosy patients and from patients with erythema nodosum leprosum. Santos, D. O., *et al.* ..(A) 174
Lepromatous leprosy and HIV infection. Olivares, L. M., *et al.* ..... (C) 295
Lepromatous leprosy treated with recombinant interferon gamma: cutaneous histologic changes. Bottasso, O., *et al.* ..... (A) 315
[Lepromatous leprosy with a fatal outcome.] Terencio de las Aguas, J., *et al.* ..... (A) 312
Loss of viability of *M. leprae* isolated from nasal secretions of lepromatous leprosy patients following daily rifampicin and DDS therapy. Habte-Mariam, H. S. and Guebre-Xabier, M. ..... (A) 311
Lymphangiographic evaluation of patients with clinical lepromatous leprosy on clofazimine. Oommen, S. T., *et al.* ..... (O) 32
[Mouth involvement in two cases of lepromatous leprosy.] Achenbach, R. S., *et al.* ...(A) 160
Serum lactoferrin in lepromatous leprosy patients. Parkash, O., *et al.* ..... (A) 314
The effects of chemotherapy on antibody levels directed against PGL-I and 85A and 85B protein antigens in lepromatous leprosy patients. Drowart, A., *et al.* ..... (A) 470
Tongue involvement in lepromatous leprosy. Sharma, V. K., *et al.* ..... (A) 469

Lepromin

Epidemiological studies in children of a low-endemic region, a high-endemic region, and dwellers of a leprosy colony: evaluation of anti-ND-BSA antibodies and lepromin response. Shah, D. H., *et al.* ..... (O) 539

Lesion(s)

Demonstration of PGL-I and LAM-B antigens in paraffin sections of leprosy skin lesions. Wang, T., *et al.* ..... (A) 475
Effect of *M. leprae* in peripheral nerve trunk on the evolution of skin lesions. Ridley, M. J., *et al.* ..... (O) 99
Electron microscopic observations of small unmyelinated nerve tissue proper in a dermal lesion of a relapsed lepromatous patient. Hirata, T. and Harada, N. ..... (C) 619
Electron microscopic observations of the relationship between peripheral nerve tissue proper and an endoneurial capillary in a dermal lesion of a relapses lepromatous patient. Hirata, T. and Harada, N. ..... (O) 89
Evolution of early lesions in leprosy. Mishra, B., *et al.* ..... (A) 641
Identification of *M. tuberculosis* DNA in five different types of cutaneous lesions by the polymerase chain reaction. Penneys, N. S., *et al.* ..... (A) 492
Nerve and skin damage in leprosy is associated with increased intralesional heat shock protein. Khanolkar-Young, S., *et al.* ..... (A) 643
Phenotype and cytokine expression of intralesional cells in borderline leprosy. McClean, K., *et al.* ..... (O) 380
Reduction in CDI positive epidermal Langerhan's cell numbers in leprosy lesions following epicutaneous application of 2:4 dinitrochlorobenzene. Narayanan, R. B., *et al.* ..... (A) 473
Treatment of the cutaneous lesions of systemic lupus erythematosus with thalidomide. Atra, E. and Sato, E. I. ..... (A) 189

Lipid(s)

An integrated procedure for the direct detection of characteristic lipids in tuberculosis patients. Minnikin, D. E., *et al.* ..... (A) 480
Cellular interactions of murine immune cells exposed to live *M. intracellulare,* its whole lipid extract, and its serovar specific glycopeptidolipid. Pourshafie, M. R., *et al.* ....(A) 671
[Contents of superoxide dismutase and lipid-peroxide in the blood of leprosy patients.] Zhang, Z. and Huang, L. ..... (A) 175
Immunomodulation of human peripheral blood mononuclear cell functions by defined lipid fractions of *M. avium.* Barrow, W. W., *et al.* ..... (A) 329
In vivo effect of delipidified cell component of *M. leprae* in relation to infection with leprosy bacteria in mice. Damle, A. and Mahadevan, P. R. ..... (A) 167
Lipid composition of the stratum corneum of the sole in patients with leprosy. Lee, S. J., *et al.* ..... (O) 574
Lipid synthesis in mycobacteria: characterization of the biotin carboxyl carrier protein genes from *M. leprae* and *M. tuberculosis.* Norman, E., *et al.* ..... (A) 650

Oxidation of sphingolipids by *M. leprae.* Ishaque, M. and Sticht-Groh, V. ..... (C) 446
Physical organization of lipids in the cell wall of *M. chelonae.* Nikaido, H., *et al.* ..... (A) 182
Preservation of surface lipids and determination of ultrastructure of *M. kansasii* by freeze-substitution. Paul, T. R. and Beveridge, T. J. ..... (A) 652
Structures of the glycopeptidolipid antigens of *M. abscessus* and *M. chelonae* and possible chemical basis of the serological crossreactions in the *M. fortuitum* complex. Lopez-Marin, L. M., *et al.* ..... (A) 668
T lymphocyte reactivity of leprosy patients and healthy contacts from a leprosy-endemic population to delipidified cell components of *M. leprae.* Ilangumaran, S., *et al.* ..... (A) 643

Lipoarabinomannan (LAM)
Binding of the terminal mannosyl units of lipoarabinomannan from a virulent strain of *M. tuberculosis* to human macrophages. Schlesinger, L. S., *et al.* ..... (A) 672
Demonstration of PGL-I and LAM-B antigens in paraffin sections of leprosy skin lesions. Wang, T., *et al.* ..... (A) 475
Immunopathological stain of lipoarabinomannan-B (LAM-B) for diagnosis of leprosy. Butt, K. I., *et al.* ..... (A) 166
Infection with human immunodeficiency virus type 1 (HIV-1) and human T cell lymphotropic viruses among leprosy patients and contacts–correlation between HIV-1 crossreactivity and antibodies to lipoarabinomannan. Kashala, O., *et al.* ..... (A) 472
Lipoarabinomannan from *M. tuberculosis* modulates the generation of reactive nitrogen intermediates by gamma interferon-activated macrophages. Anthony, L. S. D., *et al.* ..... (A) 661
Regulation of murine macrophage effector functions by lipoarabinomannan from mycobacterial strains with different degrees of virulence. Adams, L. B., *et al.* ..... (A) 165
Structural definition of the nonreducing termini of mannose capped LAM from *M. tuberculosis* through selective enzymatic degradation and fast atom-bombardment mass-spectrometry. Chatterjee, D., *et al.* ..... (A) 190

Lipoprotein
The immunodominant 38-kDa lipoprotein antigen of *M. tuberculosis* is a phosphate-binding protein. Chang, Z., *et al.* ..... (A) 330

Liposome
Efficacies of liposome-encapsulated clarithromycin and ofloxacin against *M. avium-M. intracellulare* complex in human macrophages. Onyeji, C. O., *et al.* ..... (A) 491
Tuftsin-bearing liposomes as rifampin vehicles in treatment of tuberculosis in mice. Agarwal, A., *et al.* ..... (A) 484

Liver
[Hepatic involvement in reactions in Hansen's disease: a study of twenty patients.] Campbell, G. A. M., *et al.* ..... (A) 313
Hepatotoxicity associated with acetaminophen usage in patients receiving multiple drug therapy for tuberculosis. Nolan, C. M., *et al.* ..... (A) 491
Monoacetyldapsone inhibition of dapsone N-hydroxylation by human and rat liver microsomes. Irshaid, Y., *et al.* ..... (A) 636
Prevalence of antibodies to hepatitis C virus among patients with leprosy in several African countries and the Yemen. Denis, F., *et al.* ..... (A) 640

Lupus
Treatment of the cutaneous lesions of systemic lupus erythematosus with thalidomide. Atra, E. and Sato, E. I. ..... (A) 189

Lymph node(s)
[Histopathologic correlations between skin and lymph nodes in the phases of evolution of virchovian hanseniasis.] Santos, E. M. C. and Fleury, R. N. ..... (A) 174

Lymphocyte(s)
Benign rheumatoid nodules in a woman with chronic lymphocytic leukemia and borderline lepromatous leprosy. Cohen, P. R. and Kurzrock, R. ..... (A) 162
Clofazimine and B669 inhibit the proliferative responses and Na+,K+ adenosine triphosphate activity of human lymphocytes by a lysophospholipid-dependent mechanism. Anderson, R. and Smith, M. J. ..... (A) 309

Cytokine gene expression by cultures of human lymphocytes with autologous *M. tuberculosis*-infected monocyte. Johnson, B. J. and McMurray, D. N. ..... (A) 665
In vivo depletion of CD4 and CD8 T lymphocytes impairs *Mycobacterium* w vaccine-induced protection against *M. tuberculosis*. Guleria, I., *et al.* ..... (A) 195
T lymphocyte reactivity of leprosy patients and healthy contacts from a leprosy-endemic population to delipidified cell components of *M. leprae*. Ilangumaran, S., *et al.* ..... (A) 643
Th1/Th2 profiles in tuberculosis, based on the proliferation and cytokine response of blood lymphocytes to mycobacterial antigen. Surcel, H. M., *et al.* ..... (A) 494

Macrophage(s)
Analysis of induction of anti-*M. leprae* activity in macrophages. Fukutomi, Y., *et al.* ..(A) 679
Binding of the terminal mannosyl units of lipoarabinomannan from a virulent strain of *M. tuberculosis* to human macrophages. Schlesinger, L. S., *et al.* ..... (A) 672
Complement receptor-mediated uptake and tumor necrosis factor alpha-mediated growth inhibition of *M. tuberculosis* by human alveolar macrophages. Hirsch, C. S., *et al.* ..(A) 316
Differential release of tumor necrosis factor-alpha from murine peritoneal macrophages stimulated with virulent and avirulent species of mycobacteria. Falcone, V., *et al.* ..(A) 471
Efficacies of liposome-encapsulated clarithromycin and ofloxacin against *M. avium-M. intracellulare* complex in human macrophages. Onyeji, C. O., *et al.* ..... (A) 491
Implication of phagosome-lysosome fusion in restriction of *M. avium* growth in bone marrow macrophages from genetically resistant mice. Dechastellier, C., *et al.* ..... (A) 193
Induction of *M. avium* gene expression following phagocytosis by human macrophages. Plum, G. and Clark-Curtiss, J. E. ..... (A) 480
Inhibitory and bactericidal activities of levofloxacin against *M. tuberculosis in vitro* and in human macrophages. Mor, N., *et al.* ..... (A) 669
Lack of acidification in *Mycobacterium* phagosomes produced by exclusion of the vesicular proton-ATPase. Sturgill-Koszycki, S., *et al.* ..... (A) 340
Lipoarabinomannan from *M. tuberculosis* modulates the generation of reactive nitrogen intermediates by gamma intereron-activated macrophages. Anthony, L. S. D., *et al.* ....(A) 661
Modulation of peripheral blood derived monocytes/macrophages from leprosy patients using "tuftsin" for production of reactive oxygen intermediates. Khare, S., *et al.* ....(A) 170
Mycobacteria-macrophage interactions–macrophage phenotype determines the non-opsonic binding of *M. tuberculosis* to murine macrophages. Stokes, R. W., *et al.* ....(A) 339
Nature of peritoneal macrophages from DCC immunized mice. Damle, A. and Mahadevan, P. R. ..... (A) 470
Presentation of mycobacterial antigens by human dendritic cells–lack of transfer from infected macrophages. Pancholi, P., *et al.* ..... (A) 336
Regulation of murine macrophage ffector functions by lipoarabinomannan from mycobacterial strains with different degrees of virulence. Adams, L. B., *et al.* ..... (A) 165

Malawi
Extended schooling and good housing conditions are associated with reduced risk of leprosy in rural Malawi. Ponnighaus, J. M., *et al.* ..... (O) 345
Incidence rates of leprosy in Karonga District, northern Malawi: patterns by age, sex, BCG status and classification. Ponnighaus, J. M., *et al.* ..... (O) 10
Protective efficacy of BCG vaccine against leprosy in southern Malawi. Baker, D. M., *et al.* ..... (A) 186
The Karonga Prevention Trial: a leprosy and tuberculosis vaccine trial in northern Malawi. I. Methods of the vaccination phase. Ponnighaus, J. M., *et al.* ..... (A) 327

Mallorca
[The recognition of leprosy patients in late medieval Mallorca.] Contreras Mas, A. and Rossello Vaquer, R. ..... (A) 309

Metabolism
Calcium metabolism and its regulating hormones in patients with leprosy. Mautalen, C. A., *et al.* ..... (O) 581
Clofazimine alters the energy metabolism and inhibits the growth rate of human lung-cancer cell line *in vitro* and *in vivo*. Sripathmanathan, R. M., *et al.* ..... (A) 674
Inactivated products of rifampicin by pathogenic *Nocardia* spp.; structures of glycosylated and phosphorylated metabolites of rifampicin and 3-formylrifamycin. Morisaki, N., *et al.* ..... (A) 200

Mice, murine

A single mycobacterial protein (hsp65) expressed by a transgenic antigen-presenting cell vaccinates mice against tuberculosis. Silva, C. L. and Lowrie, D. B. ..... (A) 646
Active humoral immunity in the absence of cell-mediated immunity in murine leprosy: lastly an explanation. Rojas Espinosa, O. ..... (C) 143
Activities of azithromycin and clarithromycin against nontuberculous mycobacterial in beige mice. Klemens, S. P. and Cynamon, M. H. ..... (A) 667
Activity of levofloxacin in a murine model of tuberculosis. Klemens, S. P., *et al.* ..... (A) 667
Bioavailability and chemotherapeutic activity of clofaximine against *M. avium* complex infections in beige mice following a single implant of biodegradable polymer. Kailasam, S., *et al.* ..... (A) 465
Cellular interactions of murine immune cells exposed to live *M. intracellulare,* its whole lipid extract, and its serovar specific glycopeptidolipid. Pourshafie, M. R., *et al.* ..... (A) 671
Clarithromycin, minocycline, and rifabutin treatments before and after infection of C57BL/6 mice with *M. avium.* Lazard, T., *et al.* ..... (A) 334
Comparative activities of azithromycin and clarithromycin against *M. avium* infection in beige mice. Cynamon, M. H., *et al.* ..... (A) 662
Dendritic cell progenitors phagocytose particulates, including bacillus Calmette-Guerin organisms, and sensitize mice to mycobacterial antigens *in vivo.* Inaba, K., *et al.* ..... (A) 169
Differential release of tumor necrosis factor-alpha from murine peritoneal macrophages stimulated with virulent and avirulent species of mycobacteria. Falcone, V., *et al.* ..... (A) 471
Disseminated tuberculosis in interferon-gamma gene-disrupted mice. Cooper, A. M., *et al.* ..... (A) 167
Effective vaccination of mice against *M. tuberculosis* infection with a soluble mixture of secreted mycobacterial proteins. Andersen, P. ..... (A) 660
Effectiveness of rifampin, rifabutin, and rifapentine for preventive therapy of tuberculosis in mice. Ji, B.-H., *et al.* ..... (A) 665
Establishment of mouse cell lines expressing *M. leprae* genes. Nakanaga, K., *et al.* ..... (A) 684
Evaluation of the antineoplastic activities of the riminophenazine agents clofazimine and B669 in tumor-bearing rats and mice. Van Rensburg, C. E. J., *et al.* ..... (A) 160
Experimental transmission of human leprosy bacilli in foot pads of severe combined immunodeficient mice. Ishaque, M. and Sticht-Groh, V. ..... (C) 613
Further study of the effectiveness of single doses of clarithromycin and minocycline against *M. leprae* in mice. Xiong, J.-H., *et al.* ..... (O) 37
Helper T cells without CD4: control of leishmaniasis in CD4 deficient mice. Locksley, R. M., *et al.* ..... (A) 171
Host response to mycobacterial cell wall subunit during experimental tuberculosis in mice. Chugh, I. B., *et al.* ..... (A) 191
Implication of phagosome-lysosome fusion in restriction of *M. avium* growth in bone marrow macrophages from genetically resistant mice. Dechastellier, C., *et al.* ..... (A) 193
In vitro activity of streptomycin and clofazimine against established infections of *M. avium* complex in beige mice. Gangadharam, P. R. J. and Parish, K. ..... (A) 331
In vivo effect of delipidified cell component of *M. leprae* in relation to infection with leprosy bacteria in mice. Damle, A. and Mahadevan, P. R. ..... (A) 167
In vivo susceptibility of *M. leprae* to ofloxacin either singly or in combination with rifampicin and rifabutin; antileprosy activity of ofloxacin and ansamycins in mice. Dhople, A. M. and Ibanez, M. A. ..... (A) 654
Influence of the Ity/Lsh/Bcg gene on the development of suppressor cell precursors in the early phase of the infection of mice with *M. lepraemurium.* Gosselin, D., *et al.* ..... (A) 655
Interleukin-1 is involved in mouse resistance to *M. avium.* Denis, M. and Ghadirian, E. ..... (A) 487
Mapping of Th1 helper T-cell epitopes on major secreted mycobacterial antigen 85A in mice infected with live *M. bovis* BCG. Huygen, K., *et al.* ..... (A) 489
Mice that lack the interferon-gamma receptor have profoundly altered responses to infection with bacillus Calmette-Guerin and subsequent challenge with lipopolysaccharide. Kamijo, R., *et al.* ..... (A) 197
Modulation of murine cytokine responses to mycobacterial antigens by helminth-induced T-helper-2 cell responses. Pearlman, E., *et al.* ..... (A) 173
Mycobacteria-macrophage interactions–macrophage phenotype determines the non-opsonic binding of *M. tuberculosis* to murine macrophages. Stokes, R. W., *et al.* ..... (A) 339

Nature of peritoneal macrophages from DCC immunized mice. Damle, A. and Mahadevan, P. R. ..... (A) 470
Production and characterization of new murine monoclonal antibodies reactive to *M. tuberculosis*. Arya, A., *et al.* ..... (A) 661
Recognition of peptide epitopes of the 16,000-MW antigen of *M. tuberculosis* by murine T cells. Vordermeier, H. M., *et al.* ..... (A) 204
Regulation of murine macrophage effector functions by lipoarabinomannan from mycobacterial strains with different degrees of virulence. Adams, L. B., *et al.* ..... (A) 165
Selection of resistant mutants of *M. avium* in beige mice by clarithromycin monotherapy. Ji, B.-H., *et al.* ..... (A) 311
T-Helper 1-like subset selection in *M. bovis* bacillus Calmette Guerin-infected resistant and susceptible mice. Kramnik, I., *et al.* ..... (A) 644
The 65-kDa heat-shock protein enhances bactericidal granuloma formation in mice infected with *M. leprae*. Nomaguchi, H., *et al.* ..... (A) 685
Therapy of multidrug-resistant tuberculosis: lessions from studies from mice. Klemens, S. P., *et al.* ..... (A) 198
Transport of amino acids across renal brush border membrane vesicles in *M. leprae* infected Swiss albino mice–effect of Convit vaccine. Kohli, M., *et al.* ..... (A) 325
Tuftsin-bearing liposomes as rifampin vehicles in treatment of tuberculosis in mice. Agarwal, A., *et al.* ..... (A) 484

Mice, nude

[A study of multiple route inoculation of *M. leprae* to nude mouse.] Wang, H., *et al.* ..(A) 482
Therapeutic efficacy of a newly synthesized benzoxazinorifamycin KRM-1648, combined with other antimicrobials against *M. leprae* infection induced in nude mice. Saito, H., *et al.* ..... (A) 467
Therapeutic efficacy of benzoxazinorifamycin, KRM-1648, in combination with other antimicrobials against *M. leprae* infection induced in nude mice. Saito, H., *et al.* ...(O) 43
Transmission of leprosy in nude mice through thorn pricks. Job, C. K., *et al.* .....(O) 395
Ultrastructural immunohistochemistry of *M. leprae* in dermal nerves; comparison of human leprosy and nude mouse. Goto, M. and Matsuoka, M. ..... (A) 681

Microbiology

[Identification of cultures obtained from leprosy specimen.] Wu., W., *et al.* .....(A) 185
Leprosy 1962-1992. 2. The microbiology of *M. leprae*; progress in the last 30 years. Colston, M. J. ..... (A) 177
The microbiology of *M. leprae*, Part II. Reflections on major developments and those responsible for them. Brennan, P. J. ..... (E) 594

Microscopy

[Fluorescence microscopy as a method of performing the bacilloscopic examination in hanseniasis.] Martins, M. C., *et al.* ..... (A) 163

Minocycline

Clarithromycin, minocycline, and rifabutin treatments before and after infection of C57BL/6 mice with *M. avium*. Lazard, T., *et al.* ..... (A) 334
Efficacy of minocycline 100 mg twice daily and an initial single 200-mg dose in the therapy of lepromatous leprosy. Gelber, R. H., *et al.* ..... (A) 680
Efficacy of minocycline in single dose and at 100 mg twice daily for lepromatous leprosy. Gelber, R. H., *et al.* ..... (O) 568
Further study of the effectiveness of single doses of clarithromycin and minocycline against *M. leprae* in mice. Xiong, J.-H., *et al.* ..... (O) 37

Mitsuda reaction

[Clinical and histologic evaluation of the Mitsuda reaction in consanguineous and non-consanguineous contacts of patients with bacilliferous forms of hanseniasis.] Trindade, M. A. B., *et al.* ..... (A) 175

Molecular biology

Diagnosis of rifampin resistance in pathogenic mycobacteria by molecular techniques. Williams, D. L. and Gillis, T. P. ..... (A) 688
Molecular basis of streptomycin resistance in *M. tuberculosis*: alterations of the ribo-

somal protein S12 gene and point mutations within a functional 16S ribosomal RNA pseudoknot. Finken, M., *et al.* ..... (A) 179
Molecular definition of unique species status of *Mycobacterium* w; a candidate leprosy vaccine strain. Reddi, P. P., *et al.* ..... (O) 229
Molecular epidemiology of tuberculosis in Austria. Vogetseder, W., *et al.* ..... (A) 496
Search for the molecular basis of morphological variation in *M. avium*. Prinzis, S., *et al.* ..... (A) 671

Monocyte(s)
An *in vitro* model of resistance in leprosy: apoptosis, but no necrosis of mycobacteria-infected monocytes is coupled with killing of intracellular mycobacteria. Laochumroonvorapong, P., *et al.* ..... (A) 683
Antigen-coated latex particles as a model system for probing monocyte responses in leprosy. Hasan, R. S., *et al.* ..... (A) 169
Apparent killing of *M. tuberculosis* by cytokine-activated human monocytes can be an artefact of a cytotoxic effect on the monocytes. Warwick-Davies, J., *et al.* ..... (A) 647
Cytokine gene expression by cultures of human lymphocytes with autologous *M. tuberculosis*-infected monocyte. Johnson, B. J. and McMurray, D. N. ..... (A) 665
Modulation of peripheral blood derived monocytes/macrophages from leprosy patients using "tuftsin" for production of reactive oxygen intermediates. Khare, S., *et al.* ..... (A) 170
Modulation of the effector function of human monocytes for *M. avium* by human immunodeficiency virus-1 envelope glycoprotein gp120. Shiratsuchi, H., *et al.* ..... (A) 493
Monocyte antimycobacterial activity before and after *M. bovis* BCG vaccination in Chingleput, India, and London. Cheng, S. H., *et al.* ..... (A) 191

Morbidity
Estimates of future global tuberculosis morbidity and mortality. Dolin, P. J., *et al.* ..... (A) 193
Should aid organizations be calculating the cost of death? ..... (N) 629

Mouth
[Mouth involvement in two cases of lepromatous leprosy.] Achenbach, R. S., *et al.* ..... (A) 160

Multidrug therapy (MDT)
[Acute renal insufficiency with multidrug therapy for HD.] Gordan, P. A., *et al.* ..... (A) 464
[Comparison of DDS monotherapy with MDT in MB leprosy.] Wang, K. ..... (A) 659
[Completion of MDT in leprosy, City of Camaguey, Cuba, 1992.] Carranzana Hernandez, G. B. ..... (A) 156
[Determination of anti-PGL-I antibody in the blood of leprosy patients who completed MDT and their contacts.] Sun, X., *et al.* ..... (A) 475
Does the introduction of WHO-MDT influence trends in the incidence of leprosy? Boerrigter, G. and Ponnighaus, J. M. ..... (A) 186
[Effect of MDT on 1139 cases of leprosy.] Chen, D. ..... (A) 634
Efficacy and safety of multidrug therapy in paucibacillary leprosy in Singapore. Lim, J. T. E. and Tan, T. ..... (A) 465
[Efficacy of MDT for the treatment of paucibacillary hanseniasis patients–preliminary results.] Avelleira, J. C., *et al.* ..... (A) 156
Field trials on the use of *Mycobacterium* w vaccine in conjunction with multidrug therapy in leprosy patients for immunotherapeutic and immunoprophylactic purposes. Walia, R., *et al.* ..... (A) 328
Further observations on MDT blister-calendar packs in vertical leprosy eradication programmes–a multicentre study (Phase II). Revankar, C. R., *et al.* ..... (A) 158
ILEP at global MDT conference. ..... (N) 632
Impact of multidrug therapy on health personnel in their level of job satisfaction. Premkumar, R. and Dave, S. L. ..... (A) 466
[Incidence of leprosy in the contacts after implementation of MDT.] Wu, X. and Ning, Y. ..... (A) 657
Lack of response to WHO/MDT; a case report by Habtemariam and Xabier. Pannikar, V. K. ..... (C) 443
Multidrug therapy and after: changing visage of ocular leprosy. Daniel, E. ..... (C) 437
Response to comments by Dr. Pannikar. Habte Mariam, H. S. ..... (C) 443
Reversal reaction in multibacillary leprosy patients following MDT with and without

immunotherapy with a candidate for an antileprosy vaccine, *Mycobacterium* w. Kar, H. K., *et al.* ..... (A) 170
Sample survey of leprosy after three years of MDT in Bhavani taluk of Periyar District, Tamil Nadu (India). Shanker Narayan, N. P., *et al.* ..... (A) 187
Side effects of Isoprodian compared with WHO/MDT in rural Nepal. van Brakel, W. H. and Drever, W. ..... (A) 639

Muscle(s)
Denatured muscle grafts for nerve repair in an experimental model of nerve damage in leprosy. 2. Recovery of peripheral peptide-containing nerves assessed by quantitative immunohistochemical study. Santamaria, L., *et al.* ..... (O) 64
Denatured muscle grafts for nerve repair in an experimental model of nerve damage in leprosy. 1. A functional and morphometric study. de Blaquiere, G. E., *et al.* ..... (O) 55
[Effect of the temporal muscle transposition on lagophthalmos in leprosy.] Wang, Z., *et al.* ..... (A) 484
Paraylsis of facial muscles in leprosy patients with lagophthalmos. Lubbers, W. J., *et al.* ..... (O) 220

Myanmar (formerly **Burma**)
Disabilities among rural leprosy patients in Myanmar. Htoon, M. T. and Win, Z. ..... (E) 126

Mycobacteria (see also individual ***Mycobacterium*** species)
A single mycobacterial protein (hsp65) expressed by a transgenic antigen-presenting cell vaccinates mice against tuberculosis. Silva, C. L. and Lowrie, D. B. ..... (A) 646
Activities of azithromycin and clarithromycin against nontuberculous mycobacteria in beige mice. Klemens, S. P. and Cynamon, M. H. ..... (A) 667
Amplification and nucleotide sequence of the quinolone resistance-determining region of the gyrA gene of mycobacteria. Cambau, E., *et al.* ..... (A) 476
An RFLP map for 2Q33-Q37 from multicase mycobacterial and leishmanial disease families–no evidence for an Lsh/Ity/Bcg gene homologue influencing susceptibility to leprosy. Shaw, M. A., *et al.* ..... (A) 474
An *in vitro* model of resistance in leprosy: apoptosis, but no necrosis of mycobacteria-infected monocytes is coupled with killing of intracellular mycobacteria. Laochumroonvorapong, P., *et al.* ..... (A) 683
Analysis of the replication region of a mycobacterial plasmid, pMSC262. Qin, M. H., *et al.* ..... (A) 324
Antibody response to recombinant 65-kDa, 70-kDa and 18-kDa mycobacterial antigens in leprosy patients and healthy contacts in a leprosy-endemic population. Ilangumaran, S., *et al.* ..... (O) 245
Class-specific immunoglobulins and antibodies to mycobacterial sonicates and autoantigens in leprosy patients and contacts. Mathew, J. M. and Muthukkaruppan, V. R ..(A) 644
Clonging and assessment of mycobacterial promoters by using a plasmid shuttle vector. Das Gupta, S. K., *et al.* ..... (A) 178
Close correlations between Daudi and mycobacterial antigen recognition by human-gamma/delta-encoded T cells and expression of V9JPC1-delta/V2DJC-delta-encoded T-cell receptors. Davodeau, F., *et al.* ..... (A) 167
Comparative analysis of the genomes of mycobacteriophages infecting saprophytic and pathogenic mycobacteria. Coene, M., *et al.* ..... (A) 177
Construction and use of integrative vectors to express foreign genes in mycobacteria. Dellagostin, O. A., *et al.* ..... (A) 321
Construction of a bioluminescent mycobacterium and its use for assay of antimycobacterial agents. Andrew, P. W. and Roberts, I. S. ..... (A) 176
Dendritic cell progenitors phagocytose particulates, including bacillus Calmette-Guerin organisms, and sensitize mice to mycobacterial antigens *in vivo.* Inaba, K., *et al.* ....(A) 169
Detection and characterization of atypical mycobacteria by the polymerase chain reaction. Cook, S. M., *et al.* ..... (A) 477
Detection and species identification of mycobacteria from paraffin sections of lung biopsy specimens by the polymerase chain reaction. Perosio, P. M. and Frank, T. S. ..... (A) 337
Development of IgG responses to mycobacterial antigens. Pilkington, C., *et al.* ..... (A) 337
Diagnosis of mycobacterial diseases, including leprosy, by PCR with nested primers on 16S rRNA sequence. De Beenhouwer, H., *et al.* ..... (A) 478

Diagnosis of rifampin resistance in pathogenic mycobacteria by molecular techniques. Williams, D. L. and Gillis, T. P. ..... (A) 688
Differential mycobacterial 65-kDa heat shock protein T cell epitope recognition after adjuvant arthritis-inducing or protective immunization protocols. Anderton, S. M., *et al.* ..... (A) 469
Differential rat T cell recognition of cathepsin D-released fragments of mycobacterial 65 kDa heat-shock protein after immunization with either the recombinant protein or whole mycobacteria. van Noort, J. M., *et al.* ..... (A) 676
Differential release of tumor necrosis factor-alpha from murine peritoneal macrophages stimulated with virulent and avirulent species of mycobacteria. Falcone, V., *et al.* ..(A) 471
Dr. Mukherjee, *et al.* respond to Dr. Deo (leprosy vaccines from cultivable mycobacteria). Mukherjee, A., *et al.* ..... (C) 132
Effective vaccination of mice against *M. tuberculosis* infection with a soluble mixture of secreted mycobacterial proteins. Andersen, P. ..... (A) 660
Efficient transposition of mycobacteria–construction of *M. smegmatis* insertional mutant libraries. Guilhot, C., *et al.* ..... (A) 323
Enzyme electrophoresis in taxonomy of mycobacteria. Ridell, M. ..... (A) 481
Ethambutol inhibition of glucose methabolism in mycobacteria; a possible target of the drug. Silve, G., *et al.* ..... (A) 339
Evidence of previous infection with *M. avium-M. intracellulare* complex among healthy subjects–an international study of dominant mycobacterial skin test reactions. von Reyn, C. F., *et al.* ..... (A) 341
Evidence of selection for protein introns in the recAs of pathogenic mycobacteria. Davis, E. O., *et al.* ..... (A) 477
Extraction and preliminary characterization of a mycobacteriolytic preparation (stazyme) from a staphylococcus strain–mycobacteriocidal activity and its use in rapid extraction of mycobacterial DNA. Clavel-Seres, S., *et al.* ..... (A) 176
Fast atom bombardment mass spectrometry of mycobacterial phenolic glycolipids. Hartmann, S., *et al.* ..... (A) 649
Genotypic identification of mycobacteria by nucleic acid sequence determination: report of a 2-year experience in a clinical laboratory. Kirschner, P., *et al.* ..... (A) 181
Host response to mycobacterial cell wall subunit during experimental tuberculosis in mice. Chugh, I. B., *et al.* ..... (A) 191
Human T cells recognize mycobacterial heat shock proteins in the context of multiple HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae.* Mustafa, A. S., *et al.* ..... (A) 317
IL-12 in mycobacterial infection. Sieling, P. A., *et al.* ..... (A) 687
Identification of genes involved in the ferric exochelin biosynthetic pathway for the sequestration of iron in mycobacteria. Fiss, E. H. and Jacobs, W. R., Jr. ..... (A) 679
Identification of the leprosy bacillus and related mycobacteria by analysis of mycocerosate proflies. Minnikin, D. E., *et al.* ..... (A) 480
IgG response to purified 65- and 70-kDa mycobacterial heat shock proteins and to antigen 85 in leprosy. Launois, P., *et al.* ..... (O) 48
Immunity to mycobacteria. Orme, I. M. ..... (A) 201
Immunoblot studies in the differential diagnosis of porcine brucellosis–an immunodominant 62 kDa protein is related to the mycobacterial 65 kDa heat shock protein (HSP-65). Spencer, S. A., *et al.* ..... (A) 653
Immunogenicity of mycobacterial T-cell epitope expressed in outer membrane protein PhoE of *E. coli.* Janssen, R., *et al.* ..... (A) 643
In vitro activities of quinolones against mycobacteria. Garcia-Rodriguez, J. A. and Gomez-Garcia, A. C. ..... (A) 310
In vitro inhibition of mycobacteria by Rwandese medicinal plants. van Puyvelde, L., *et al.* ..... (A) 676
Inability to detect mycobactin in mycobacteria-infected tissues suggests an alternative iron acquisition mechanism by mycobacteria *in vivo.* Lambrecht, R. S. and Collins, M. T. ..... (A) 181
Induction of mycobacterial proteins during phagocytosis and heat shock: a time interval analysis. Alavi, M. R. and Affronti, L. F. ..... (A) 660
Isolation and characterization of the aspartokinase and aspartate semialdehyde dehydrogenase operon from mycobacteria. Cirillo, J. D., *et al.* ..... (A) 477

Isolation and identification of environmental mycobacteria in the *M. bovis* BCG trial area of South India. Kamala, T., *et al.* ..... (A) 650
Isolation of mycobacteria from patients seropositive for the human immunodeficiency virus (HIV) in southeast England. Yates, M. D., *et al.* ..... (A) 205
Leprosy vaccines from cultivable mycobacteria. Deo, M. G. ..... (C) 131
Lipid synthesis in mycobacteria: characterization of the biotin carboxyl carrier protein genes from *M. leprae* and *M. tuberculosis.* Norman, E., *et al.* ..... (A) 650
MHC-independent presentation of mycobacteria to human gamma delta T cells. Holoshitz, J., *et al.* ..... (A) 316
Mapping of Th1 helper T-cell epitopes on major secreted mycobacterial antigen 85A in mice infected with live *M. bovis* BCG. Huygen, K., *et al.* ..... (A) 489
[Modification of Harada's method for rapid staining of mycobacteria.] Kawatsu, K., *et al.* ..... (A) 317
Modulation of murine cytokine responses to mycobacterial antigens by helminth-induced T-helper-2 cell responses. Pearlman, E., *et al.* ..... (A) 173
Monocyte antimycobacterial activity before and after *M. bovis* BCG vaccination in Chingleput, India, and London. Cheng, S. H., *et al.* ..... (A) 191
MycDB: an integrated mycobacterial database. Bergh, S. and Cole, S. T ..... (A) 648
Mycobacteria induce CD4+ T cells that are cytotoxic and display Th1-like cytokine secretion profile–heterogeneity in cytotoxic activity and cytokine secretion levels. Mutis, T., *et al.* ..... (A) 172
Mycobacteria-macrophage interactions–macrophage phenotype determines the non-opsonic binding of *M. tuberculosis* to murine macrophages. Stokes, R. W., *et al.* ..... (A) 339
Mycobacterial spindle-cell pseudotumor of the spleen. Suster, S., *et al.* ..... (A) 674
Nucleic acid sequence-based amplification (NASBA) for the identification of mycobacteria. Vandervliet, G. M. E., *et al.* ..... (A) 184
Nucleotide sequence and secondary structures of precursor 16S rRNA of slow-growing mycobacteria. Ji, Y. E., *et al.* ..... (A) 649
Nucleotide sequence of the leader region of transcripts of the rrn operon of mycobacteria. Ji, Y., *et al.* ..... (A) 478
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330
Presentation of mycobacterial antigens by human dendritic cells–lack of transfer from infected macrophages. Pancholi, P., *et al.* ..... (A) 336
Rapid characterization and identification of mycobacteria using fluorogenic enzyme tests. Hamid, M. E., *et al.* ..... (A) 649
Rapid identification of mycolic acid patterns of mycobacteria by high-performance liquid chromatography using pattern recognition software and a *Mycobacterium* library. Glickman, S. E., *et al.* ..... (A) 332
Rapid, early and specific diagnosis of tuberculosis and other mycobacterial diseases in Burundi. Barihuta, T., *et al.* ..... (A) 484
Regulation of murine macrophage ffector functions by lipoarabinomannan from mycobacterial strains with different degrees of virulence. Adams, L. B., *et al.* ..... (A) 165
Stimulation of human gamma/delta T cells by nonpeptidic mycobacterial ligands. Constant, P., *et al.* ..... (A) 470
Streptomycin resistance in mycobacteria. Honore, N. and Cole, S. T. ..... (A) 488
Successful primate immunization with peptides conjugated to purified protein derivative or mycobacterial heat shock proteins. Perraut, R., *et al.* ..... (A) 201
Synthesis of methyl (Z)-tetracos-5-enoate and both enantiomers of ethyl (E)-6-methyl-tetracos-4-enoate–possible intermediates in the biosynthesis of mycolic acids in mycobacteria. Besra, G. S., *et al.* ..... (A) 321
Systematic study of the 3-hydroxy fatty acid composition of mycobacteria. Alugupalli, S., *et al.* ..... (A) 647
T-Cell fibronectin and mycobacterial adversarial strategy. Godfrey, H. P. ..... (A) 169
Th1/Th2 profiles in tuberculosis, based on the proliferation and cytokine response of blood lymphocytes to mycobacterial antigen. Surcel, H. M., *et al.* ..... (A) 494
Transformation of mycobacterial species using hygromycin resistance as selectable marker. Garbe, T. R., *et al.* ..... (A) 323

Treatment of refractory disseminated nontuberculous mycobacterial infection with interferon gamma–a preliminary report. Holland, S. M., *et al.* ....(A) 642
Water soluble complexes of C_{14} and C_{16} fatty acids and alcohols in media for cultivation of leprosy-derived psychrophilic mycobacteria. Kato, L., *et al.* ....(O) 75

Mycobacterium abscessus
Structures of the glycopeptidolipid antigens of *M. abscessus* and *M. chelonae* and possible chemical basis of the serological crossreactions in the *M. fortuitum* complex. Lopez-Marin, L. M., *et al.* ....(A) 668

Mycobacterium avium
Clarithromycin, minocycline, and rifabutin treatments before and after infection of C57BL/6 mice with *M. avium*. Lazard, T., *et al.* ....(A) 334
Comparative activities of azithromycin and clarithromycin against *M. avium* infection in beige mice. Cynamon, M. H., *et al.* ....(A) 662
Comparison of the 23S ribosomal RNA genes and the spacer region between the 16S and 23S rRNA genes of the closely related *M. avium* and *M. paratuberculosis* and the fast growing *M. phlei*. van der Giessen, J. W. B., *et al.* ....(A) 675
Evaluation of the rpoB gene in rifampin-susceptible and -resistant *M. avium* and *M. intracellulare*. Guerrero, C., *et al.* ....(A) 464
Immunomodulation of human peripheral blood mononuclear cell functions by defined lipid fractions of *M. avium*. Barrow, W. W., *et al.* ....(A) 329
Implication of phagosome-lysosome fusion in restriction of *M. avium* growth in bone marrow macrophages from genetically resistant mice. Dechastellier, C., *et al.* ....(A) 193
Induction of IL-1 beta, IL-6, TNF-alpha, GM-CSF and G-CSF in human variants of *M. avium*. Fattorini, L., *et al.* ....(A) 487
Induction of *M. avium* gene expression following phagocytosis by human macrophages. Plum, G. and Clark-Curtiss, J. E. ....(A) 480
Interleukin-1 is involved in mouse resistance to *M. avium*. Denis, M. and Ghadirian, E. ....(A) 487
M. avium antigenuria in patients with AIDS and disseminated *M. avium* disease. Sippola, A. A., *et al.* ....(A) 203
M. avium strains resistant to clarithromycin and azithromycin. Heifets, L. B., *et al.* ....(A) 195
Modulation of the effector function of human monocytes for *M. avium* by human immunodeficiency virus-1 envelope glycoprotein gp120. Shiratsuchi, H., *et al.* ....(A) 493
Persistent colonisation of potable water as a source of *M. avium* infection in AIDS. von Reyn, C. F., *et al.* ....(A) 677
Rapid broth macrodilution method for determination of MICs for *M. avium* isolates. Siddiqi, S. H., *et al.* ....(A) 184
Search for the molecular basis of morphological variation in *M. avium*. Prinzis, S., *et al.* ....(A) 671
Selection of resistant mutants of *M. avium* in beige mice by clarithromycin monotherapy. Ji, B.-H., *et al.* ....(A) 311

***Mycobacterium avium* complex**
Activities of roxithromycin used alone and in combination with ethambutol, rifampin, amikacin, ofloxacin and clofazimine against *M. avium* complex. Rastogi, N., *et al.* ....(A) 671
Activity of subinhibitory concentrations of dapsone alone and in combination with cell-wall inhibitors against *M. avium* complex organisms. Rastogi, N., *et al.* ....(A) 338
Assessment of new therapies for infection due to *M. avium* complex–appropriate use of *in vitro* and *in vivo* testing. Grosset, J.-H. ....(A) 664
Bioavailability and chemotherapeutic activity of clofaximine against *M. avium* complex infections in beige mice following a single implant of biodegradable polymer. Kailasam, S., *et al.* ....(A) 465
Comparative *in vivo* activities of rifabutin and rifapentine against *M. avium* complex. Klemens, S. P., *et al.* ....(A) 333
Factors affecting invasion of HT–29 and HEP-2 epithelial cells by organisms of the *M. avium* complex. Bermudez, L. E. and Young, L. S. ....(A) 662
In vitro activity of streptomycin and clofazimine against established infections of *M. avium* complex in beige mice. Gangadharam, P. R. J. and Parish, K. ....(A) 331
In vivo activity of paromomycin against susceptible and multidrug-resistant *M. tuberculosis* and *M. avium* complex strains. Kanyok, T. P., *et al.* ....(A) 489

M. avium complex develop resistance to synergistically active drug combinations during infection. Hoffner, S. E., *et al.* ..... (A) 488
Orally administered clarithromycin for the treatment of systemic *M. avium* complex infection in children with acquired immunodeficiency syndrome. Husson, R. N., *et al.* ..... (A) 665
Polyclonal infections due to *M. avium* complex in patients with AIDS detected by pulsed-field gel electrophoresis of sequential clinical isolates. Slutsky, A. M., *et al.* ..... (A) 673
Recommendations on prophylaxis and therapy for disseminated *M. avium* complex for adults and adolescents infected with human immunodeficiency virus. ..... (A) 202
Treatment of disseminated disease due to the *M. avium* complex in patients with AIDS. Benson, C. A. ..... (A) 661

Mycobacterium bovis (see also **BCG**)
Badgers (*Meles-meles*), cattle and bovine tuberculosis (*M. bovis*)–a hypothesis to explain the influence of habitat on the risk of disease transmission in southwest England. White, P. C. L., *et al.* ..... (A) 204
Cellular and humoral immune responses of cattle to purified *M. bovis* antigens. Fifis, T., *et al.* ..... (A) 487
Characterization of the antigen 85 complex fibronectin-binding proteins derived from age culture filtrates of *M. bovis* BCG, Tice substrain. Oner, F., *et al.* ..... (A) 651
Human T cells recognize mycobacterial heat shock proteins in the context of multiple HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae*. Mustafa, A. S., *et al.* ..... (A) 317
Identification of bovine T-cell epitopes for three *M. bovis* antigens: MPS700, 19,000 MW and MPB57. Pollock, J. M., *et al.* ..... (A) 670
Isolation and identification of environmental mycobacteria in the *M. bovis* BCG trial area of South India. Kamala, T., *et al.* ..... (A) 650
Mapping of Th1 helper T-cell epitopes on major secreted mycobacterial antigen 85A in mice infected with live *M. bovis* BCG. Huygen, K., *et al.* ..... (A) 489
Monocyte antimycobacterial activity before and after *M. bovis* BCG vaccination in Chingleput, India, and London. Cheng, S. H., *et al.* ..... (A) 191
Production and characterization of a monoclonal badger anti immunoglobulin G and its use in defining the specificity of *M. bovis* infection in badgers by Western blot. Goodger, J., *et al.* ..... (A) 488
Recombinant *M. bovis* BCG secreting functional interleukin-2 enhances gamma interferon production by splenocytes. O'Donnell, M. A., *et al.* ..... (A) 645
Structure and antigenicity of lipoarabinomannan from *M. bovis* BCG. Prinzis, S., *et al.* ..... (A) 201
T and B cell response to purified filtrate antigen 85 from *M. bovis* BCG in leprosy patients and their contacts. Huygen, K., *et al.* ..... (A) 471
T-Helper 1-like subset selection in *M. bovis* bacillus Calmette Guerin-infected resistant and susceptible mice. Kramnik, I., *et al.* ..... (A) 644
The *M. bovis* 32-kilodalton protein antigen induces human cytotoxic T-cell responses. Munk, M. E., *et al.* ..... (A) 480
The uraA locus and homologous recombination in *M. bovis*. Aldovini, A., *et al.* ..... (A) 176
Use of a repetitive element isolated from *M. tuberculosis* in hybridization studies with *M. bovis*–a new tool for epidemiological studies of bovine tuberculosis. Cousins, D. V., *et al.* ..... (A) 330
Zoonotic aspects of *M. bovis* infection. Grange, J. M. and Yates, M. D. ..... (A) 663

***Mycobacterium cheloni* (*chelonae*)**
Clinical trial of clarithromycin for cutaneous (disseminated) infection due to *M. chelonae*. Wallace, R. J., *et al.* ..... (A) 204
Physical organization of lipids in the cell wall of *M. chelonae*. Nikaido, H., *et al.* ..... (A) 182
Structures of the glycopeptidolipid antigens of *M. abscessus* and *M. chelonae* and possible chemical basis of the serological crossreactions in the *M. fortuitum* complex. Lopez-Marin, L. M., *et al.* ..... (A) 668

Mycobacterium fortuitum
Comparison of topical antibiotics for treating *M. fortuitum* keratitis in an animal model. Helm, C. J., *et al.* ..... (A) 332
Interleukin-8 enhances nonoxidative intracellular killing of *M. fortuitum* by human granulocytes. Nibbering, P. H., *et al.* ..... (A) 172

Structures of the glycopeptidolipid antigens of *M. abscessus* and *M. chelonae* and possible chemical basis of the serological crossreactions in the *M. fortuitum* complex. Lopez-Marin, L. M., *et al.* ..... (A) 668
Transcription and expression analysis, using lacZ and phoA gene fusions, of *M. fortuitum* B-lactamase genes cloned from a natural isolate and a high-level B-lactamase producer. Timm, J., *et al.* ..... (A) 653
Use of the chromosomal class A B-lacatamase of *M. fortuitum* D316 to study potentially poor substrates and inhibitory B lactam compounds. Galleni, M., *et al.* ..... (A) 663

Mycobacterium genavense
M. genavense sp. nov. Bottger, E. C., *et al.* ..... (A) 190

Mycobacterium haemophilum
Biochemical properties and fatty acid composition of *M. haemophilum*–study of 16 isolates from Australian patients. Portaels, F., *et al.* ..... (A) 173
Clinical and epidemiologic characteristics of *M. haemophilum,* an emerging pathogen in immunocompromised patients. Straus, W. L., *et al.* ..... (A) 340
Restriction fragment length polymorphism analysis of clinical isolates of *M. haemophilum.* Kikuchi, K., *et al.* ..... (A) 667

Mycobacterium intracellulare
Cellular interactions of murine immune cells exposed to live *M. intracellulare,* its whole lipid extract, and its serovar specific glycopeptidolipid. Pourshafie, M. R., *et al.* .... (A) 671
Evaluation of rpoB gene in rifampin-susceptible and resistant *M. avium* and *M. intracellulare.* Guerrero, C., *et al.* ..... (A) 464

Mycobacterium kansasii
Identification of an insertion sequence-like element in a subspecies of *M. kansasii.* Yang, M., *et al.* ..... (A) 205
Preservation of surface lipids and determination of ultrastructure of *M. kansasii* by freeze-substitution. Paul, T. R. and Beveridge, T. J. ..... (A) 652
Tentative evidence of AIDS-associated biotype of *M. kansasii.* Tortoli, E., *et al.* ..... (A) 675

Mycobacterium leprae
A colorimetric PCR method for the detection of *M. leprae* in skin biopsies from leprosy patients. Jamil, S., *et al.* ..... (O) 512
A role for natural antibody in the pathogenesis of leprosy- antibody in nonimmune serum mediates C3 fixation to the *M. leprae* surface and hence phagocytosis by human mononuclear phagocytes. Schlesinger, L. S. and Horwitz, M. A. ..... (A) 317
[A study of multiple route inoculation of *M. leprae* to nude mouse.] Wang, H., *et al.* .. (A) 482
Activity of two doses of rifampin against *M. leprae.* Husser, J. A., *et al.* ..... (O) 359
An immunodominant 30-kDa antigen of a candidate antileprosy vaccine, *Mycobacterium w,* shares T- and B-cell determinants with *M. leprae* and *M. tuberculosis.* Yadava, A. and Mukherjee, R. ..... (A) 175
Analysis of induction of anti-*M. leprae* activity in macrophages. Fukutomi, Y., *et al.* .. (A) 679
Assessment of the purity of *M. leprae* preparations from tissues of leprosy-infected laboratory animals. Dyachina, M. N., *et al.* ..... (C) 299
Bacillaemia and *M. leprae* cell wall antigen in paucibacillary leprosy. Kaur, I., *et al.* ... (A) 181
Bactericidal action of ampicillin-subactam against *M. leprae.* Randhawa, B., *et al.* .... (A) 638
Characterization of a *M. leprae* antigen related to the secreted *M. tuberculosis* protein Mpt32. Wieles, B., *et al.* ..... (A) 325
Cloning and sequency determination of the gene coding for the elongation factor Tu of *M. leprae.* Dhandayuthapani, S., *et al.* ..... (A) 648
Competency of human-derived *M. leprae* to use palmitic acid in the synthesis of phenolic glycolipid-I and phthiocerol dimycocerosate and to release CO_2 in axenic culture. Shannon, E. J., *et al.* ..... (A) 325
Constrasting evolutionary rates in the duplicate chaperonin genes of *M. tuberculosis* and *M. leprae.* Hughes, A. L. ..... (A) 324
Construction of genomic DNA library of *M. leprae* Thai-53 strain and detection of *M. leprae*-specific genes in the library by polymerase chain reaction. Chaicumpar, K., *et al.* ..... (A) 176
Detection and characterization of a lambda gt11 recombinant clone of *M. leprae* that

expresses an antigenic determinant of a 64-kDa protein. Davidson, S. K. and George, G. T. ..... (O) 237
Detection of *M. leprae* by the polymerase chain reaction in nasal swabs of contacts of leprosy patients. Pattyn, S. R., *et al.* ..... (A) 482
Detection of *M. leprae* in nasal secretions of household contacts of multibacillary patients. Gillis, T. P., *et al.* ..... (A) 681
Detection of *M. leprae* in nasal swab specimens. Klatser, P. R., *et al.* ..... (A) 482
Detection of *M. leprae* in tissue and blood by polymerase chain reaction. Lee, K. S., *et al.* ..... (C) 139
Detection of *M. leprae* nasal carriers in populations for which leprosy is endemic. Klatser, P. R., *et al.* ..... (A) 186
Determination of *M. leprae* viability by polymerase chain reaction amplification of 71-kDa heat-shock protein. Patel, B. K. R., *et al.* ..... (A) 182
Developments from the *M. leprae* genome project: discovery, purification, characterization, gene sequence and significance of a *M. leprae* bacterioferritin. Pessolani, M. C. V., *et al.* ..... (A) 685
Diversity among isolates of *M. leprae* detected by polymerase chain eaction with arbitrary primers. Matsuoka, M., *et al.* ..... (A) 684
Effect of *M. leprae* in peripheral nerve trunk on the evoluation of skin lesions. Ridley, M. J., *et al.* ..... (O) 99
Establishment of mouse cell lines expressing *M. leprae* genes. Nakanaga, K., *et al.* ..... (A) 684
Evaluation of BACTEC 460 TB system for measurement of *in vitro* anti-*M. leprae* activity of varous antimicrobials. Tomioka, H., *et al.* ..... (A) 654
Expression of *M. leprae* 18-kDa antigen in yeast in a GPI anchored form. Amorim, A. G., *et al.* ..... (A) 648
Further study of the effectiveness of single doses of clarithromycin and minocycline against *M. leprae* in mice. Xiong, J.-H., *et al.* ..... (O) 37
Human T cells recognize mycobacterial heat shock proteins in the context of multiple HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae*. Mustafa, A. S., *et al.* ..... (A) 317
IFN-gamma, IL-6 and IL-4 modulate *M. leprae*-specific or PPD specific cytotoxic T cells in leprosy patients. Fink, S., *et al.* ..... (A) 315
Identification of an antigenic domain on *M. leprae* protein antigen 85B, which is specifically recognized by antibodies from patients with leprosy. Filley, E., *et al.* ..... (A) 322
Identification of human T cell epitopes in the *M. leprae* heat shock protein 70-kDa antigen. Adams, E., *et al.* ..... (A) 320
Identification of immunologically reactive proteins specified by the recombinant phages of a lambda gt11::*M. leprae* genomic library. Gan, S. C. ..... (A) 649
Immunohistochemical demonstration of *M. leprae* in the nervous system of long-term cured leprosy patients using a *M. leprae* specific anti-PGL antibody. Goto, M., *et al.* ..... (A) 471
In vivo effect of delipidified cell component of *M. leprae* in relation to infection with leprosy bacteria in mice. Damle, A. and Mahadevan, P. R. ..... (A) 167
In vivo susceptibility of *M. leprae* to ofloxacin either singly or in combination with rifampincin and rifabutin– antileprosy activity of ofloxacin and ansamycins in mice. Dhople, A. M. and Ibanez, M. A. ..... (A) 654
In-vitro activity of three new fluoroquinolones and synergy with ansamycins against *M. leprae*. Dhople, A. M. and Ibanez, M. A. ..... (A) 179
Influence of the rapid acetylator phenotype on the emergence of DDS resistant *M. leprae*. Costa, H. C., *et al.* ..... (A) 310
Investigations into the growth of *M. leprae* in a medium with palmitic acid under different gaseous environments. Ishaque, M. and Sticht-Groh, V. ..... (A) 180
Leprosy 1962-1992. 2. The microbiology of *M. leprae*; progress in the last 30 years. Colston, M. J. ..... (A) 177
Lipid synthesis in mycobacteria: characterization of the biotin carboxyl carrier protein genes from *M. leprae* and *M. tuberculosis*. Norman, E., *et al.* ..... (A) 650
Long-lasting T-cell reactivity to *M. leprae* antigens in human volunteers vaccinated with killed *M. leprae*. Mustafa, A. S. and Oftung, F. ..... (A) 171
Loss of viability of *M. leprae* isolated from nasal secretions of lepromatous leprosy patients following daily rifampicin and DDS therapy. Habte-Mariam, H. S. and Guebre-Xabier, M. ..... (A) 311

M. leprae DNA from ancient bone detected by PCR. Rafi, A., *et al.* ..... (A) 634
M. leprae–behaviour in fat cells undergoing adipose differentiation *in vitro*. Godard, C. M. ..... (A) 323
M. leprae-specific gene encoding an immunologically recognized 45 kDa protein. De Wit, T. F. R., *et al.* ..... (A) 322
M. leprae-specific gene encoding an immunologically recognized 45-kDa protein. Rinke de Wit, T. F., *et al.* ..... (A) 183
Minimal bactericidal concentration of clarithromycin against *M. leprae*. Gelber, R. H., *et al.* ..... (C) 140
Non-acid-fast fluorescent *M. leprae* (?) in skin smears from leprosy patients. Bramhne, H. G., *et al.* ..... (A) 476
Nucleotide sequence of *M. leprae* elongation factor (EF-Tu) gene. Silbaq, F. and Bercovier, H. ..... (A) 652
Overproduction of recombinant 85 complex of *M. leprae* in *E. coli* and their application for serodiagnosis of leprosy. Suzuki, Y., *et al.* ..... (A) 687
Oxidation of insoluble palmitic acid and water soluble palmitic acid and water soluble acid-methylated cyclodextrin complex by *M. leprae* and *M. phlei*. Ishaque, M. and Sticht Groh, V. ..... (A) 180
Oxidation of sphingolipids by *M. leprae*. Ishaque, M. and Sticht-Groh, V. ..... (C) 446
Proliferative responses of leprosy patients, healthy contacts and BCG vaccinees to a major native 12-kDa protein of *M. leprae*. Handzel, Z. H., *et al.* ..... (A) 315
Role of soluble fibronectin and beta 1 integrin receptors in the binding of *M. leprae* to nasal epithelial cells. Byrd, S. R., *et al.* ..... (A) 321
Sequence and expression of the *M. leprae* dnaJ gene. Harvey, S. S., *et al.* ..... (A) 180
Sera of leprosy patients with type 2 reactions recognize selective sequences in *M. leprae* recombinant LST protein. Singh, S., *et al.* ..... (A) 318
[Specific identification of *M. leprae* with the polymerase chain reaction technique.] Hackel, C. ..... (A) 179
[Study of the IgA antibody to PGL-I specific to *M. leprae*.] Gan, Y., *et al.* ..... (A) 167
Subclinical infection with *M. leprae*–a problem for leprosy control strategies. Baumgart, K. W., *et al.* ..... (A) 165
T lymphocyte reactivity of leprosy patients and healthy contacts from a leprosy-endemic population to delipidified cell components of *M. leprae*. Ilangumaran, S., *et al.* ..... (A) 643
T-cells bearing V beta 6 T-cell receptors in the cell-mediated immune response to *M. leprae*. Wang, X. H., *et al.* ..... (A) 319
The 65-kDa heat-shock protein enhances bactericidal granuloma formation in mice infected with *M. leprae*. Nomaguchi, H., *et al.* ..... (A) 685
The *M. leprae* antigen-85 complex gene family–identification of the genes for the 85A, 85C, and related MPT51 proteins. De Wit, T. F. R., *et al.* ..... (A) 179
The genome of *M. leprae*. Cole, S. T. ..... (E) 122
The microbiology of *M. leprae*, Part II. Reflections on major developments and those responsible for them. Brennan, P. J. ..... (E) 594
Therapeutic efficacy of a newly synthesized benzoxazinorifamycin KRM-1648, combined with other antimicrobials against *M. leprae* infection induced in nude mice. Saito, H., *et al.* ..... (A) 467
Therapeutic efficacy of benzoxazinorifamycin, KRM-1648, in combination with other antimicrobials against *M. leprae* infection induced in nude mice. Saito, H., *et al.* ..... (O) 43
Transport of amino acids across renal brush border membrane vesicles in *M. leprae* infected Swiss albino mice–effect of Convit vaccine. Kohli, M., *et al.* ..... (A) 325
Ultrastructural immunohistochemistry of *M. leprae* in dermal nerves; comparison of human leprosy and nude mouse. Goto, M. and Matsuoka, M. ..... (A) 681
Use of PCR-mediated amplification of *M. leprae* DNA in different types of clinical samples for the diagnosis of leprosy. Santos, A. R., *et al.* ..... (A) 183

Mycobacterium lepraemurium

Alpha-ketoglutarate dehydrogenase in the *in vitro*-grown *M. lepraemurium*. Ishaque, M., *et al.* ..... (O) 399
Cloning of the gene encoding superoxidase dismutase of *M. lepraemurium*. Kashiwabara, Y., *et al.* ..... (A) 682
Influence of the Ity/Lsh/Bcg gene on the development of suppressor cell precursors in the early phase of the infection of mice with *M. lepraemurium*. Gosselin, D., *et al.* ..... (A) 655

M. lepraemurium itself does not interfere with the *in vitro* lymphoproliferation induced by Concanavalin A. Rojas Espinosa, O., *et al.* ..... (C) 616
[Specific odor component produced by *M. lepraemurium* in Ogawa yolk medium.] Mori, T. and Aishima, T. ..... (A) 324

Mycobacterium malmoense
RFLP analysis of *M. malmoense* strains using ribosomal RNA gene probes–an additional tool to examine intraspecies variation. Kauppinen, J., *et al.* ..... (A) 666
Random amplified polymorphic DNA genotyping of *M. malmoense.* Kauppinen, J., *et al.* ..... (A) 666

Mycobacterium marinum
Antibiotic susceptibility of *M. marinum.* Forsgren, A. ..... (A) 331

Mycobacterium paratuberculosis
Activity of clarithromycin compared with those of other drugs against *M. paratuberculosis* and further enhancement of its extracellular and intracellular activities by ethambutol. Rastogi, N., *et al.* ..... (A) 337
Comparison of the 23S ribosomal RNA genes and the spacer region between the 16S and 23S rRNA genes of the closely related *M. avium* and *M. paratuberculosis* and the fast growing *M. phlei.* van der Giessen, J. W. B., *et al.* ..... (A) 675
Detection of *M. paratuberculosis* by polymerase chain reaction in children with Crohn's disease. Dellisola, B., *et al.* ..... (A) 487
M. paratuberculosis and *E. coli* share common antigenic determinants. Gilot, P. and Misonne, M. C. ..... (A) 663

Mycobacterium phlei
Comparison of the 23S ribosomal RNA genes and the spacer region between the 16S and 23S rRNA genes of the closely related *M. avium* and *M. paratuberculosis* and the fast growing *M. phlei.* van der Giessen, J. W. B., *et al.* ..... (A) 675
Oxidation of insoluble palmitic acid and water soluble palmitic acid and water soluble acid-methylated cyclodextrin complex by *M. leprae* and *M. phlei.* Ishaque, M. and Sticht Groh, V. ..... (A) 180

Mycobacterium smegmatis
Efficient transposition of mycobacteria–construction of *M. smegmatis* insertional mutant libraries. Guilhot, C., *et al.* ..... (A) 323
Isolation and characterization of a novel glucuronosyl diacylglycerol from *M. smegmatis.* Wolucka, B. A., *et al.* ..... (A) 205
Isolation and characterization of sugar nucleotides from *M. smegmatis.* Singh, S. and Hogan, S. E. ..... (A) 673

Mycobacterium terrae
Model tests for the efficiency of disinfectants on surfaces. 3. Communication–Dependence on test results upon the kind of the active substances and the test germs (*Staphylococcus aureus, M. terrae*)–review. Peters, J. and Spicher, G. ..... (A) 492
Mycobacterium tuberculosis A more reliable PCR for detection of *M. tuberculosis* in clinical samples. Kox, L. F. F., *et al.* ..... (A) 333
Activation of the interleukin 6 gene by *M. tuberculosis* of lipopolysaccharide is mediated by nuclear factors NF-IL6 and NF-$\kappa\beta$. Zhang, Y., *et al.* ..... (A) 476
An essential role for interferon-gamma in resistance to *M. tuberculosis* infection. Flynn, J. L., *et al.* ..... (A) 168
An immunodominant 30-kDa antigen of a candidate antileprosy vaccine, *Mycobacterium* w, shares T- and B-cell determinants with *M. leprae* and *M. tuberculosis.* Yadava, A. and Mukherjee, R. ..... (A) 175
Apparent killing of *M. tuberculosis* by cytokine-activated human monocytes can be an artefact of a cytotoxic effect on the monocytes. Warwick-Davies, J., *et al.* ..... (A) 647
Binding of the terminal mannosyl units of lipoarabinomannan from a virulent strain of *M. tuberculosis* to human macrophages. Schlesinger, L. S., *et al.* ..... (A) 672
Catalase-peroxidase gene sequences in isoniazid-sensitive and isoniazid-resistant strains of *M. tuberculosis* from New York City. Stoeckle, M. Y., *et al.* ..... (A) 203
Characterization of a *M. leprae* antigen related to the secreted *M. tuberculosis* protein Mpt32. Wieles, B., *et al.* ..... (A) 325
Characterization of an IS-like element from *M. tuberculosis.* Mariani, F., *et al.* ..... (A) 200

Characterization of the katG gene encoding a catalase peroxidase required for the isoniazid susceptibility of *M. tuberculosis*. Heym, B., *et al.* ..... (A) 180
Charcterization by automated DNA sequencing of mutations in the gene (rpoB) encoding the RNA polymerase beta subunit in rifampin-resistant *M. tuberculosis* strains from New York City and Texas. Kapur, V., *et al.* ..... (A) 489
Clinical evaluation of a serological assay using a monoclonal antibody (TB72) to the 38 kDa antigen of *M. tuberculosis*. Bothamley, G. H. and Rudd, R. M. ..... (A) 486
Clinical evaluation of rapid serodiagnosis of pulmonary tuberculosis by ELISA with cord factor (trehalose-6, 6' dimycolate) as antigen purified from *M. tuberculosis*. Maekura, R., *et al.* ..... (A) 200
Cloning and B-cell-epitope mapping of Mpt64 and *M. tuberculosis* H37Rv. Oettinger, T. and Andersen, A. B. ..... (A) 651
Cloning and nucleotide sequence of *M. tuberculosis* gyrA and gyrB genes and detection of quinolone resistance mutations. Takiff, H. E., *et al.* ..... (A) 481
Cloning of a *M. tuberculosis* DNA fragment associated with entry and survival inside cells. Arruda, S., *et al.* ..... (A) 189
Comparison of three primer sets for the detection of *M. tuberculosis* in clinical samples by polymer chain reaction. Zambardi, G., *et al.* ..... (A) 342
Complement receptor-mediated uptake and tumor necrosis factor alpha-mediated growth inhibition of *M. tuberculosis* by human alveolar macrophages. Hirsch, C. S., *et al.* ..... (A) 316
Constrasting evolutionary rates in the duplicate chaperonin genes of *M. tuberculosis* and *M. leprae*. Hughes, A. L. ..... (A) 324
Cytokine gene expression by cultures of human lymphocytes with autologous *M. tuberculosis*-infected monocyte. Johnson, B. J. and McMurray, D. N. ..... (A) 665
Detection of *M. tuberculosis* in clinical specimens by polymerase chain reaction and Gen-Probe Amplified *Mycobacterium tuberculosis* Direct Test. Abe, C., *et al.* ..... (A) 189
Direct detection of *M. tuberculosis* complex in respiratory specimens by a target-amplified test system. Pfyffer, G. E., *et al.* ..... (A) 492
Direct, automated detection of rifampin-resistant *M. tuberculosis* by polymerase chain reaction and single-strand conformation polymorphism analysis. Telenti, A., *et al.* ..... (A) 184
Effective vaccination of mice against *M. tuberculosis* infection with a soluble mixture of secreted mycobacterial proteins. Andersen, P. ..... (A) 660
Enzymatic evidence for the presence of a critical terminal hexa-arabinoside in the cells walls of *M. tuberculosis*. McNeil, M. R., *et al.* ..... (A) 669
Evaluation of Gen-Probe Amplified *Mycobacterium tuberculosis* Direct Test and PCR for direct detection of *M. tuberculosis* in clinical specimens. Miller, N., *et al.* ..... (A) 336
Extensive DNA sequence conservation throughout the *M. tuberculosis* complex. Frothingham, R., *et al.* ..... (A) 648
Genetic alterations in streptomycin-resistant *M. tuberculosis*: mapping of mutations conferring resistance. Meier, A., *et al.* ..... (A) 335
Identification and cloning of genes differentially expressed in the virulent strain of *M. tuberculosis*. Kinger, A. K. and Tyagi, J. S. ..... (A) 197
Identification of *M. tuberculosis* DNA in a pre-Columbian Peruvian mummy. Salo, W. L., *et al.* ..... (A) 463
Identification of *M. tuberculosis* DNA in five different types of cutaneous lesions by the polymerase chain reaction. Penneys, N. S., *et al.* ..... (A) 492
Immunological and functional characterization of proteins of *M. tuberculosis* antigen 85 complex using synthetic peptides. Leao, S. C., *et al.* ..... (A) 199
In vitro activities of free and liposomal drugs against *M. avium-M. intracellulare* complex and *M. tuberculosis*. Mehta, R. T., *et al.* ..... (A) 335
In vivo activity of paromomycin against susceptible and multidrug-resistant *M. tuberculosis* and *M. avium* complex strains. Kanyok, T. P., *et al.* ..... (A) 489
In vivo depletion of CD4 and CD8 T lymphocytes impairs *Mycobacterium w* vaccine-induced protection against *M. tuberculosis*. Guleria, I., *et al.* ..... (A) 195
inhA, a gene encoding a target for isoniazid and ethionamide in *M. tuberculosis*. Banerjee, A., *et al.* ..... (A) 321
Inhibitory and bactericidal activities of levofloxacin against *M. tuberculosis in vitro* and in human macrophages. Mor, N., *et al.* ..... (A) 669
Large-scale DNA fingerprinting of *M. tuberculosis* strains as a tool for epidemiological studies of tuberculosis. Chevrel Dellagi, D., *et al.* ..... (A) 191
Large-scale use of polymerase chain reaction for detection of *M. tuberculosis* in a routine mycobacteriology laboratory. Clarridge, J. E., *et al.* ..... (A) 192

Lipid synthesis in mycobacteria: characterization of the biotin carboxyl carrier protein genes from *M. leprae* and *M. tuberculosis.* Norman, E., *et al.* ..... (A) 650
Lipoarabinomannan from *M. tuberculosis* modulates the generation of reactive nitrogen intermediates by gamma intereron-activated macrophages. Anthony, L. S. D., *et al.* .... (A) 661
M. smegmatis strain for detection of *M. tuberculosis* by PCR used as internal control for inhibition of amplification and for quantification of bacteria. Kolk, A. H. J., *et al.* ..... (A) 650
M. tuberculosis alters expression of adhesion molecules on monocytic cells. Ramirez, G. M. L., *et al.* ..... (A) 646
Molecular basis of streptomycin resistance in *M. tuberculosis*: alterations of the ribosomal protein S12 gene and point mutations within a functional 16S ribosomal RNA pseudoknot. Finken, M., *et al.* ..... (A) 179
Multiplex PCR assay specific for the multidrug-resistant strain W of *M. tuberculosis.* Plikaytis, B. B., *et al.* ..... (A) 670
Mycobacteria-macrophage interactions–macrophage phenotype determines the non-opsonic binding of *M. tuberculosis* to murine macrophages. Stokes, R. W., *et al.* .... (A) 339
Nature of DNA polymorphism in the direct repeat cluster of *M. tuberculosis*; application for strain differentiation by a novel typing method. Groenen, P. M. A., *et al.* ..... (A) 332
Nosocomial outbreak of tuberculosis in a renal transplant unit; application of a new technique for restriction fragment length polymorphism analysis of *M. tuberculosis* isolates. Jereb, J. A., *et al.* ..... (A) 196
Oligonucleotide (GTG)5 as a marker for *M. tuberculosis* strain identification. Wiid, I. J. F., *et al.* ..... (A) 654
Polymerase chain reaction for detection of *M. tuberculosis* in sputum. Andersen, A. B., *et al.* ..... (A) 329
Production and characterization of new murine monoclonal antibodies reactive to *M. tuberculosis.* Arya, A., *et al.* ..... (A) 661
Rapid, amplification-based fingerprinting of *M. tuberculosis.* Plikaytis, B. B., *et al.* .... (A) 201
Recognition of peptide epitopes of the 16,000-MW antigen of *M. tuberculosis* by murine T cells. Vordermeier, H. M., *et al.* ..... (A) 204
Risk factors for transmission of *M. tuberculosis* in a primary school outbreak–lack of racial difference in susceptibility to infection. Hoge, C. W., *et al.* ..... (A) 664
Risk of infection with *M. tuberculosis* among children and mothers in Somalia. Peltola, H., *et al.* ..... (A) 491
Sensitivity and specificity of PCR for detection of *M. tuberculosis:* a blind comparison study among seven laboratories. Noordhoek, G. T., *et al.* ..... (A) 336
Serodiagnostic efficiency of phospholipid associated protein of *M. tuberculosis* H37Rv. Kaushik, N. K., *et al.* ..... (A) 333
Serum antibodies from patients with ankylosing spondylitis and Reiter's syndrome are reactive with HLA-B27 cells transfected with the *M. tuberculosis* hsp60 gene. Kellner, H., *et al.* ..... (A) 490
Stability of DNA fingerprint pattern produced with IS6110 in strains of *M. tuberculosis.* Cave, M. D., *et al.* ..... (A) 329
Structural definition of the nonreducing termini of mannose capped LAM from *M. tuberculosis* through selective enzymatic degradation and fast atom-bombardment mass-spectrometry. Chatterjee, D., *et al.* ..... (A) 190
Structural elucidation of new phenolic glycolipids from *M. tuberculosis.* Watanabe, M., *et al.* ..... (A) 496
Structural features of the exocellular polysaccharides of *M. tuberculosis.* Lemassu, A. and Daffe, M. ..... (A) 490
Structure of the *M. tuberculosis* antigen 88, a protein related to the *E. coli* PstA periplasmic phosphate permease subunit. Braibant, M., *et al.* ..... (A) 486
The diagnostic usefulness of a DNA probe for *M. tuberculosis* complex (Gen-Probe®) in BACTEC cultures versus other diagnostic methods. Telenti, M., *et al.* ..... (A) 495
The immunodominant 38-kDa lipoprotein antigen of *M. tuberculosis* is a phosphate-binding protein. Chang, Z., *et al.* ..... (A) 330
The rpoB gene of *M. tuberculosis.* Miller, L. P., *et al.* ..... (A) 479
The rpsL gene and streptomycin resistence in single and multiple drug-resistant strains of *M. tuberculosis.* Nair, J., *et al.* ..... (A) 182
Transmission of multidrug-resistant *M. tuberculosis* among persons with human immunodeficiency virus infection in an urban hospital–epidemiologic and restriction fragment length polymorphism analysis. Coronado, V. G., *et al.* ..... (A) 192

Use of a repetitive element isolated from *M. tuberculosis* in hybridization studies with *M. bovis*–a new tool for epidemiological studies of bovine tuberculosis. Cousins, D. V., *et al.* ..... (A) 330
Use of *in vivo* complementation in *M. tuberculosis* to identify a genomic fragment associated with virulence. Pascopella, L., *et al.* ..... (A) 669

Mycobacterium w
An immunodominant 30-kDa antigen of a candidate antileprosy vaccine, *Mycobacterium w*, shares T- and B-cell determinants with *M. leprae* and *M. tuberculosis*. Yadava, A. and Mukherjee, R. ..... (A) 175
Field trials on the use of *Mycobacterium w* vaccine in conjunction with multidrug therapy in leprosy patients for immunotherapeutic and immunoprophylactic purposes. Walia, R., *et al.* ..... (A) 328
In vivo depletion of CD4 and CD8 T lymphocytes impairs *Mycobacterium w* vaccine-induced protection against *M. tuberculosis*. Guleria, I., *et al.* ..... (A) 195
Molecular definition of unique species status of *Mycobacterium w*; a candidate leprosy vaccine strain. Reddi, P. P., *et al.* ..... (O) 229
Reversal reaction in multibacillary leprosy patients following MDT with and without immunotherapy with a candidate for an antileprosy vaccine, *Mycobacterium w*. Kar, H. K., *et al.* ..... (A) 170

Mycobacterium xenopi
DNA fingerprinting of *M. xenopi* strains. Collins, D. M. ..... (A) 662

Mycobactin
Inability to detect mycobactin in mycobacteria-infected tissues suggests an alternative iron acquisition mechanism by mycobacteria *in vivo*. Lambrecht, R. S. and Collins, M. T. ..... (A) 181
Nepal
1992-1993 Annual Report of the Leprosy Control Project. ..... (N) 306
Mass survey of leprosy in Lalitpur District, Nepal. Theuvenet, W. J., *et al.* ..... (O) 256
Side effects of Isoprodian compared with WHO/MDT in rural Nepal. van Brakel, W. H. and Drever, W. ..... (A) 639
Six Months' Report of Leprosy Control Project. ..... (N) 459

Nerve(s)
Clofazimine crystals and ceroid bodies in nerve; a case report. Salafia, A. and Chauhan, G. ..... (A) 158
Damage and regeneration of peripheral nerves in advanced treated leprosy. Miko, T. L., *et al.* ..... (A) 163
Denatured muscle grafts for nerve repair in an experimental model of nerve damage in leprosy. 2. Recovery of peripheral peptide-containing nerves assessed by quantitative immunohistochemical study. Santamaria, L., *et al.* ..... (O) 64
Denatured muscle grafts for nerve repair in an experimental model of nerve damage in leprosy. 1. A functional and morphometric study. de Blaquiere, G. E., *et al.* ..... (O) 55
Effect of *M. leprae* in peripheral nerve trunk on the evolution of skin lesions. Ridley, M. J., *et al.* ..... (O) 99
Electron microscopic observations of small unmyelinated nerve tissue proper in a dermal lesion of a relapsed lepromatous patient. Hirata, T. and Harada, N. ..... (C) 619
Electron microscopic observations of the relationship between peripheral nerve tissue proper and an endoneurial capillary in a dermal lesion of a relapses lepromatous patient. Hirata, T. and Harada, N. ..... (O) 89
Evaluation of nerve compression with the Automated Tactile Tester. Hardy, M., *et al.* ..... (A) 658
Facial, glossopharyngeal, vagus and hypoglossal nerve palsy in a case of lepromatous leprosy. Dhar, S., *et al.* ..... (A) 162
Gangliosides (cronassial) and nerve regeneration in leprosy; a multicenter clinical trial. Salafia, A. and Chauhan, G. ..... (A) 164
Human immunodeficiency virus and leprosy–type 1 reactions, nerve damage and steroid therapy: "a case report." Bwire, R. and Kawuma, H. J. S. ..... (A) 161
Nerve abscess in leprosy: a retrospective study. Siddalingaswamy, M. K. and Rao, K. S. ..... (A) 328

Nerve and skin damage in leprosy is associated with increased intralesional heat shock protein. Khanolkar-Young, S., *et al.* ....(A) 643
Quantitative assessment of the visibility of unmyelinated corneal nerves in leprosy. Daniel, E., *et al.* ....(O) 374
Regeneration of the predilective damage sites of nerve trunks in treated leprosy. Miko, T. L., *et al.* ....(A) 328
Study of nerve conduction velocity, somatosensory-evoked potential and late responses (H-reflex and F-wave) of posterior tibial nerve in leprosy. Gupta, B. K. and Kochar, D. K. ....(O) 586
Trigeminal neuralgia–a presenting feature of facial leprosy. Mishra, B., *et al.* ....(A) 163
Ultrastructural immunohistochemistry of *M. leprae* in dermal nerves; comparison of human leprosy and nude mouse. Goto, M. and Matsuoka, M. ....(A) 681

Netherlands, The
Editorial of Special Issue on Leprosy of Tropical and Geographical Medicine. Naafs, B. ...(B) 624
INFOLEP provides copies of papers presented at Pre-Congress Leprosy Control Workshops. ....(N) 153
New publications on ocular leprosy. ....(N) 306
Visual aids for training in ocular leprosy. ....(N) 627

Neuritis
[Early detection and treatment of silent neuritis in leprosy.] Zhao, A., *et al.* ....(A) 642
Type 1 reaction, neuritis and disability. What is the current epidemiological situation?. Lienhardt, C. and Fine, P. E. M. ....(A) 656

Neuropathy
Dapsone induced motor polyneuropathy. Jacob, A. J. W., *et al.* ....(A) 158
Perineurial involvement of leprous neuropathy. Kimura, T., *et al.* ....(A) 682
Severe pan-sensory neuropathy in leprosy. Pandya, S. S. and Bhatki, W. S. ....(O) 24
Thalidomide neuropathy incidence and clinico electrophysiologic findings in 42 patients. Ochonisky, S., *et al.* ....(A) 312

New Zealand
The effects of World Health Organization chemotherapy on imported leprosy in Auckland, New Zealand, 1983-1990. Cornwall, J., *et al.* ....(A) 157

Nigeria
Inventory of skin smear practices in 6 leprosy control programmes in Nigeria. Awofeso, N. ....(A) 467

Nose
Detection of *M. leprae* by the polymerase chain reaction in nasal swabs of contacts of leprosy patients. Pattyn, S. R., *et al.* ....(A) 482
Detection of *M. leprae* in nasal secretions of household contacts of multibacillary patients. Gillis, T. P., *et al.* ....(A) 681
Detection of *M. leprae* in nasal swab specimens. Klatser, P. R., *et al.* ....(A) 482
Detection of *M. leprae* nasal carriers in populations for which leprosy is endemic. Klatser, P. R., *et al.* ....(A) 186
Loss of viability of *M. leprae* isolated from nasal secretions of lepromatous leprosy patients following daily rifampicin and DDS therapy. Habte-Mariam, H. S. and Guebre-Xabier, M. ....(A) 311
Role of soluble fibronectin and beta 1 integrin receptors in the binding of *M. leprae* to nasal epithelial cells. Byrd, S. R., *et al.* ....(A) 321

Obituaries
Cardama, Jose Esteban. Balina, L. M. ....(Ob) 448
Chaudhury, Sachin. Hajra, S. K. and Saha, K. ....(Ob) 449
Fite, George Liddle. Trautman, J. R. ....(Ob) 148

Ofloxacin
Activities of roxithromycin used alone and in combination with ethambutol, rifampin, amikacin, ofloxacin and clofazimine against *M. avium* complex. Rastogi, N., *et al.* ..(A) 671
Clinical trial of ofloxacin alone and in combination with dapsone plus clofazimine for treatment of lepromatous leprosy. Ji, B.-H., *et al.* ....(A) 465

Efficacies of liposome-encapsulated clarithromycin and ofloxacin against *M. avium-M. intracellulare* complex in human macrophages. Onyeji, C. O., *et al.* ..... (A) 491
In vivo susceptibility of *M. leprae* to ofloxacin either singly or in combination with rifampicin and rifabutin– antileprosy activity of ofloxacin and ansamycins in mice. Dhople, A. M. and Ibanez, M. A. ..... (A) 654

Pathology
Histopathology course held in Cheng-du. Li, H.-Y. ..... (N) 626
National Training Course on Pathology of Leprosy held in Nanjing. Wang, T. ..... (N) 150

Pefloxacin
Pefloxacin in histoid leprosy. Mahajan, P. M., *et al.* ..... (C) 297

Peroxidase
Catalase-peroxidase gene sequences in isoniazid-sensitive and isoniazid-resistant strains of *M. tuberculosis* from New York City. Stoeckle, M. Y., *et al.* ..... (A) 203
Characterization of the katG gene encoding a catalase peroxidase required for the isoniazid susceptibility of *M. tuberculosis.* Heym, B., *et al.* ..... (A) 180
N-Chlorination of sulfamethoxazole and dapsone by the myeloperoxidase system. Uetrecht, J. P., *et al.* ..... (A) 159

Peru
Identification of *M. tuberculosis* DNA in a pre-Columbian Peruvian mummy. Salo, W. L., *et al.* ..... (A) 463

Phagocyte(s)
A role for natural antibody in the pathogenesis of leprosy; antibody in nonimmune serum mediates C3 fixation to the *M. leprae* surface and hence phagocytosis by human mononuclear phagocytes. Schlesinger, L. S. and Horwitz, M. A. ..... (A) 317

Pharmacokinetic(s)
Influence of rifampin on fleroxacin pharmacokinetics. Schrenzel, J., *et al.* ..... (A) 159
Time course of the changes in prednisolone pharmacokinetics after co-administration or discontinuation of rifampin. Lee, K. H., *et al.* ..... (A) 158

Phenolic glycolipid(s)
Competency of human-derived *M. leprae* to use palmitic acid in the synthesis of phenolic glycolipid-I and phthiocerol dimycocerosate and to release CO_2 in axenic culture. Shannon, E. J., *et al.* ..... (A) 325
Demonstration of PGL-I and LAM-B antigens in paraffin sections of leprosy skin lesions. Wang, T., *et al.* ..... (A) 475
[Determination of anti-PGL-I antibody in the blood of leprosy patients who completed MDT and their contacts.] Sun, X., *et al.* ..... (A) 475
Fast atom bombardment mass spectrometry of mycobacterial phenolic glycolipids. Hartmann, S., *et al.* ..... (A) 649
Immunohistochemical demonstration of *M. leprae* in the nervous system of long-term cured leprosy patients using a *M. leprae* specific anti-PGL antibody. Goto, M., *et al.* ..... (A) 471
[On criteria for the positivity in determination of antibody against PGL-I with ELISA.] Meng, M., *et al.* ..... (A) 171
PGL-I antibody in HIV infected patients. Gonzalez-Abreu, E., *et al.* ..... (A) 656
Structural elucidation of new phenolic glycolipids from *M. tuberculosis.* Watanabe, M., *et al.* ..... (A) 496
[Study of the IgA antibody to PGL-I specific to *M. leprae.*] Gan, Y., *et al.* ..... (A) 167
The effects of chemotherapy on antibody levels directed against PGL-I and 85A and 85B protein antigens in lepromatous leprosy patients. Drowart, A., *et al.* ..... (A) 470

Phenotype(s)
Acetylation phenotype and genotype in Aboriginal leprosy patients from the North-West Region of Western Australia. Ilett, K. F., *et al.* ..... (A) 311
Influence of the rapid acetylator phenotype on the emergence of DDS resistant *M. leprae.* Costa, H. C., *et al.* ..... (A) 310
Mycobacteria-macrophage interactions–macrophage phenotype determines the non-opsonic binding of *M. tuberculosis* to murine macrophages. Stokes, R. W., *et al.* ..... (A) 339
Phenotype and cytokine expression of intralesional cells in borderline leprosy. McClean, K., *et al.* ..... (O) 380

Phospholipid(s)
Antimicrobial activities of clofazimine and B669 are mediated by lysophospholipids. van Rensburg, C. E. J., *et al.* ..... (A) 312
Clofazimine and B669 inhibit the proliferative responses and Na+,K+ adenosine triphosphate activity of human lymphocytes by a lysophospholipid-dependent mechanism. Anderson, R. and Smith, M. J. ..... (A) 309
Correction of thrombocytopenia with dapsone in the primary antiphospholipid syndrome. Durand, J. M., *et al.* ..... (A) 330
Phospholipids of *M. intracellulare* inhibit T cell blastogenesis. Tomioka, H. and Saito, H. ..... (A) 674
Serodiagnostic efficiency of phospholipid associated protein of *M. tuberculosis* H37Rv. Kaushik, N. K., *et al.* ..... (A) 333
The anti-proliferative riminophenazine agents clofazimine and B669 promote lysophospholipid-mediated inhibition of Na+,K+ adenosine triphosphatase activity in cancer cell lines *in vitro*. van Rensburg, C. E. J., *et al.* ..... (A) 639

Phthiocerol
Competency of human-derived *M. leprae* to use palmitic acid in the synthesis of phenolic glycolipid-I and phthiocerol dimycocerosate and to release CO_2 in axenic culture. Shannon, E. J., *et al.* ..... (A) 325

Phytohemagglutinin (PHA)
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330

Polymerase chain reaction (PCR)
A colorimetric PCR method for the detection of *M. leprae* in skin biopsies from leprosy patients. Jamil, S., *et al.* ..... (O) 512
A more reliable PCR for detection of *M. tuberculosis* in clinical samples. Kox, L. F. F., *et al.* ..... (A) 333
Accurate diagnosis of tuberculosis meningitis using polymerase chain reaction. Amin, A. G., *et al.* ..... (C) 614
An epidemiological study of leprosy infection by serology and polymerase chain reaction. van Beers, S. M., *et al.* ..... (O) 1
Construction of genomic DNA library of *M. leprae* Thai-53 strain and detection of *M. leprae*-specific genes in the library by polymerase chain reaction. Chaicumpar, K., *et al.* ..... (A) 176
Detection and characterization of atypical mycobacteria by the polymerase chain reaction. Cook, S. M., *et al.* ..... (A) 477
Detection and species identification of mycobacteria from paraffin sections of lung biopsy specimens by the polymerase chain reaction. Perosio, P. M. and Frank, T. S. ..... (A) 337
Detection of *M. leprae* by the polymerase chain reaction in nasal swabs of contacts of leprosy patients. Pattyn, S. R., *et al.* ..... (A) 482
Detection of *M. leprae* in tissue and blood by polymerase chain reaction. Lee, K. S., *et al.* ..... (C) 139
Detection of *M. paratuberculosis* by polymerase chain reaction in children with Crohn's disease. Dellisola, B., *et al.* ..... (A) 487
Detection of *M. tuberculosis* in clinical specimens by polymerase chain reaction and Gen-Probe Amplified *Mycobacterium tuberculosis* Direct Test. Abe, C., *et al.* ..... (A) 189
Determination of *M. leprae* viability by polymerase chain reaction amplification of 71-kDa heat-shock protein. Patel, B. K. R., *et al.* ..... (A) 182
Diagnosis of mycobacterial diseases, including leprosy, by PCR with nested primers on 16S rRNA sequence. De Beenhouwer, H., *et al.* ..... (A) 478
Direct, automated detection of rifampin-resistant *M. tuberculosis* by polymerase chain reaction and single-strand conformation polymorphism analysis. Telenti, A., *et al.* ..... (A) 184
Diversity among isolates of *M. leprae* detected by polymerase chain reaction with arbitrary primers. Matsuoka, M., *et al.* ..... (A) 684
Evaluation of Gen-Probe Amplified *Mycobacterium tuberculosis* Direct Test and PCR for direct detection of *M. tuberculosis* in clinical specimens. Miller, N., *et al.* ..... (A) 336
Follow-up of tuberculosis patients undergoing standard antituberculosis chemotherapy by using a polymerase chain reaction. Levee, G., *et al.* ..... (A) 668

Identification of *M. tuberculosis* DNA in five different types of cutaneous lesions by the polymerase chain reaction. Penneys, N. S., *et al.* ..... (A) 492
Large-scale use of polymerase chain reaction for detection of *M. tuberculosis* in a routine mycobacteriology laboratory. Clarridge, J. E., *et al.* ..... (A) 192
M. leprae DNA from ancient bone detected by PCR. Rafi, A., *et al.* ..... (A) 634
M. smegmatis strain for detection of *M. tuberculosis* by PCR used as internal control for inhibition of amplification and for quantification of bacteria. Kolk, A. H. J., *et al.* ..... (A) 650
Multiplex PCR assay specific for the multidrug-resistant strain W of *M. tuberculosis.* Plikaytis, B. B., *et al.* ..... (A) 670
Polymerase chain reaction for detection of *M. tuberculosis* in sputum. Andersen, A. B., *et al.* ..... (A) 329
Polymerase chain reaction in the diagnosis of tuberculous meningitis. Donald, P. R., *et al.* ..... (A) 194
Quantitative determination of PCR products by colorimetric method. Dayanghirang, J. A. and Matsuoka, M. ..... (A) 178
Sensitivity and specificity of PCR for detection of *M. tuberculosis*: a blind comparison study among seven laboratories. Noordhoek, G. T., *et al.* ..... (A) 336
[Specific identification of *M. leprae* with the polymerase chain reaction technique.] Hackel, C. ..... (A) 179
Study of HLA class-II alleles by PCR oligotyping in leprosy patients from north India. Rani, R., *et al.* ..... (A) 173
Use of PCR-mediated amplification of *M. leprae* DNA in different types of clinical samples for the diagnosis of leprosy. Santos, A. R., *et al.* ..... (A) 183
Use of polymerase chain reaction to assess efficacy of leprosy chemotherapy. Jamil, S., *et al.* ..... (A) 181

Polynesia

Genetic control of susceptibility to leprosy in French Polynesia; no evidence for linkage with markers on telomeric human chromosome 2. Levee, G., *et al.* ..... (O) 499

Pregnancy

An historical and clinical review of the interaction of leprosy and pregnancy: a cycle to be broken. Duncan, M. E. ..... (A) 313

Protein(s)

A single mycobacterial protein (hsp65) expressed by a transgenic antigen-presenting cell vaccinates mice against tuberculosis. Silva, C. L. and Lowrie, D. B. ..... (A) 646
Characterization of a *M. leprae* antigen related to the secreted *M. tuberculosis* protein Mpt32. Wieles, B., *et al.* ..... (A) 325
Characterization of the antigen 85 complex fibronectin-binding proteins derived from age culture filtrates of *M. bovis* BCG, Tice substrain. Oner, F., *et al.* ..... (A) 651
Chemical definition, cloning and expression of the major protein of the leprosy bacillus. Rivoire, B., *et al.* ..... (A) 652
Detection and characterization of a lambda gt11 recombinant clone of *M. leprae* that expresses an antigenic determinant of a 64-kDa protein. Davidson, S. K. and George, G. T. ..... (O) 237
Determination of *M. leprae* viability by polymerase chain reaction amplification of 71-kDa heat-shock protein. Patel, B. K. R., *et al.* ..... (A) 182
Differential mycobacterial 65-kDa heat shock protein T cell epitope recognition after adjuvant arthritis-inducing or protective immunization protocols. Anderton, S. M., *et al.* ..... (A) 469
Differential rat T cell recognition of cathepsin D-released fragments of mycobacterial 65 kDa heat-shock protein after immunization with either the recombinant protein or whole mycobacteria. van Noort, J. M., *et al.* ..... (A) 676
Effective vaccination of mice against *M. tuberculosis* infection with a soluble mixture of secreted mycobacterial proteins. Andersen, P. ..... (A) 660
Erythema nodosum leprosum is highly associated with deficiency of the complement isoprotein C4B (C4B*Q0). Mauff, G., *et al.* ..... (A) 473
Evidence of selection for protein introns in the recAs of pathogenic mycobacteria. Davis, E. O., *et al.* ..... (A) 477

Human T cells recognize mycobacterial heat shock proteins in the context of multiple HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae*. Mustafa, A. S., *et al.* ..... (A) 317
Identification of an antigenic domain on *M. leprae* protein antigen 85B, which is specifically recognized by antibodies from patients with leprosy. Filley, E., *et al.* ..... (A) 322
Identification of human T cell epitopes in the *M. leprae* heat shock protein 70-kDa antigen. Adams, E., *et al.* ..... (A) 320
Identification of immunologically reactive proteins specified by the recombinant phages of a lambda gt11::*M. leprae* genomic library. Gan, S. C. ..... (A) 649
Identification of myelin basic proteins in circulating immune complexes associated with lepromatous leprosy. Corsico, B., *et al.* ..... (A) 642
IgG response to purified 65- and 70-kDa mycobacterial heat shock proteins and to antigen 85 in leprosy. Launois, P., *et al.* ..... (O) 48
Immunoblot studies in the differential diagnosis of porcine brucellosis–an immunodominant 62 kDa protein is related to the mycobacterial 65 kDa heat shock protein (HSP-65). Spencer, S. A., *et al.* ..... (A) 653
Immunogenicity of mycobacterial T-cell epitope expressed in outer membrane protein PhoE of *E. coli*. Janssen, R., *et al.* ..... (A) 643
Immunological and functional characterization of proteins of *M. tuberculosis* antigen 85 complex using synthetic peptides. Leao, S. C., *et al.* ..... (A) 199
Induction of mycobacterial proteins during phagocytosis and heat shock: a time interval analysis. Alavi, M. R. and Affronti, L. F. ..... (A) 660
Lipid synthesis in mycobacteria: characterization of the biotin carboxyl carrier protein genes from *M. leprae* and *M. tuberculosis*. Norman, E., *et al.* ..... (A) 650
M. leprae-specific gene encoding an immunologically recognized 45 kDa protein. De Wit, T. F. R., *et al.* ..... (A) 322
M. leprae-specific gene encoding an immunologically recognized 45-kDa protein. Rinke de Wit, T. F., *et al.* ..... (A) 183
Modulation of the effector function of human monocytes for *M. avium* by human immunodeficiency virus-1 envelope glycoprotein gp120. Shiratsuchi, H., *et al.* ..... (A) 493
Molecular basis of streptomycin resistance in *M. tuberculosis*: alterations of the ribosomal protein S12 gene and point mutations within a functional 16S ribosomal RNA pseudoknot. Finken, M., *et al.* ..... (A) 179
Nerve and skin damage in leprosy is associated with increased intralesional heat shock protein. Khanolkar-Young, S., *et al.* ..... (A) 643
Proliferative responses of leprosy patients, healthy contacts and BCG vaccinees to a major native 12-kDa protein of *M. leprae*. Handzel, Z. H., *et al.* ..... (A) 315
Sera of leprosy patients with type 2 reactions recognize selective sequences in *M. leprae* recombinant LST protein. Singh, S., *et al.* ..... (A) 318
Serodiagnostic efficiency of phospholipid associated protein of *M. tuberculosis* H37Rv. Kaushik, N. K., *et al.* ..... (A) 333
Structure of the *M. tuberculosis* antigen 88, a protein related to the *E. coli* PstA periplasmic phosphate permease subunit. Braibant, M., *et al.* ..... (A) 486
Successful primate immunization with peptides conjugated to purified protein derivative or mycobacterial heat shock proteins. Perraut, R., *et al.* ..... (A) 201
The 65-kDa heat-shock protein enhances bactericidal granuloma formation in mice infected with *M. leprae*. Nomaguchi, H., *et al.* ..... (A) 685
The *M. bovis* 32-kilodalton protein antigen induces human cytotoxic T-cell responses. Munk, M. E., *et al.* ..... (A) 480
The *M. leprae* antigen-85 complex gene family–identification of the genes for the 85A, 85C, and related MPT51 proteins. De Wit, T. F. R., *et al.* ..... (A) 179
The effects of chemotherapy on antibody levels directed against PGL-I and 85A and 85B protein antigens in lepromatous leprosy patients. Drowart, A., *et al.* ..... (A) 470
The immunodominant 38-kDa lipoprotein antigen of *M. tuberculosis* is a phosphate-binding protein. Chang, Z., *et al.* ..... (A) 330

Psychosocial

[Emotional reactions of hanseniasis patients with physical deformities.] de Oliveira, M. H. P. ..... (A) 187
[Impact of leprosy on the patients' marriage.] Wu, X., *et al.* ..... (A) 641
[Psychology of leprosy patients.] Yi, S., *et al.* ..... (A) 188

Purification

Developments from the *M. leprae* genome project: discovery, purification, characterization, gene sequence and significance of a *M. leprae* bacterioferritin. Pessolani, M. C. V., *et al.* ..... (A) 685

Purified protein derivative (PPD)

IFN-gamma, IL-6 and IL-4 modulate *M. leprae*-specific or PPD specific cytotoxic T cells in leprosy patients. Fink, S., *et al.* ..... (A) 315

Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ..... (A) 330

Successful primate immunization with peptides conjugated to purified protein derivative or mycobacterial heat shock proteins. Perraut, R., *et al.* ..... (A) 201

Rat(s)

Differential rat T cell recognition of cathepsin D-released fragments of mycobacterial 65 kDa heat-shock protein after immunization with either the recombinant protein or whole mycobacteria. van Noort, J. M., *et al.* ..... (A) 676

Monoacetyldapsone inhibition of dapsone N-hydroxylation by human and rat liver microsomes. Irshaid, Y., *et al.* ..... (A) 636

The effect of simple micellar systems on the solubility and intestinal absorption of clofazimine (B663) in the anaesthetised rat. O'Reilly, J. R., *et al.* ..... (A) 638

Reaction, leprosy

Application of gene probes and gene amplification techniques to early diagnosis and relapses/reactions in leprosy. Katoch, V. M., *et al.* ..... (A) 479

Epidemiologic characteristics of leprosy reactions. Scollard, D. M., *et al.* ..... (O) 559

Hepatic involvement in reactions in Hansen's disease: a study of twenty patients.] Campbell, G. A. M., *et al.* ..... (A) 313

Hospital-based epidemiological study of reactions. Bwire, R. and Kawuma, J. S ..... (A) 313

Human immunodeficiency virus and leprosy–type 1 reactions, nerve damage and steroid therapy: "a case report." Bwire, R. and Kawuma, H. J. S. ..... (A) 161

Reaction in leprosy: acute phase reactant response during and after remission. Sehgal, V. N., *et al.* ..... (A) 314

Reversal reaction in multibacillary leprosy patients following MDT with and without immunotherapy with a candidate for an antileprosy vaccine, *Mycobacterium* w. Kar, H. K., *et al.* ..... (A) 170

Sera of leprosy patients with type 2 reactions recognize selective sequences in *M. leprae* recombinant LST protein. Singh, S., *et al.* ..... (A) 318

Type 1 reaction, neuritis and disability. What is the current epidemiological situation?. Lienhardt, C. and Fine, P. E. M. ..... (A) 656

Rehabilitation

[Present situation on leprosy rehabilitation activity in China; a brief report on Japan-China Leprosy Rehabilitation Symposium.] Maeda, M. ..... (A) 156

[Summarization of the Cooperations Project (1990-1992) of Chinese MOPH and TLMI in Leprosy Rehabilitation.] Leading Team ..... (A) 659

Relapse(s)

[A survey of relapse in 20,091 persons whose leprosy has been cured.] Pan, Y., *et al.* ..(A) 466

Application of gene probes and gene amplification techniques to early diagnosis and relapses/reactions in leprosy. Katoch, V. M., *et al.* ..... (A) 479

[Changes and present status of a Japanese National Leprosarium; analysis of smear positive rate and relapse in Hoshizuka Keiaien.] Goto, M., *et al.* ..... (A) 162

Electron microscopic observations of small unmyelinated nerve tissue proper in a dermal lesion of a relapsed lepromatous patient. Hirata, T. and Harada, N. ..... (C) 619

Electron microscopic observations of the relationship between peripheral nerve tissue proper and an endoneurial capillary in a dermal lesion of a relapses lepromatous patient. Hirata, T. and Harada, N. ..... (O) 89

[Monitoring leprosy relapse with immunologic tests.] Weng, X., *et al.* ..... (A) 319

Rate of relapse in multibacillary patients after cessation of long-course dapsone mon-

otherapy supplemented by a final supervised single dose of 1500 mg of rifampin. Cartel, J. L. and Naudin, J.-C. ..... (O) 215
Relapse rates in patients treated with dapsone monotherapy and combinations of dapsone and thiambutosine, thiacetazone, isoniazid and streptomycin in the pre-MDT era. Smith, T. C. and Richardus, J. H. ..... (O) 353
Relapses after a single dose of rifampin in skin-smear negative multibacillary patients after dapsone monotherapy. Jamet, P., *et al.* ..... (O) 209
[Relapses in leprosy–personal experience.] Terencio de las Aguas, J. ..... (A) 312
Risk of relapse in leprosy. WHO Leprosy Unit. ..... (A) 637

Rifampin

Activities of roxithromycin used alone and in combination with ethambutol, rifampin, amikacin, ofloxacin and clofazimine against *M. avium* complex. Rastogi, N., *et al.* ..... (A) 671
Activity of two doses of rifampin against *M. leprae*. Husser, J. A., *et al.* ..... (O) 359
Characterization by automated DNA sequencing of mutations in the gene (rpoB) encoding the RNA polymerase beta subunit in rifampin-resistant *M. tuberculosis* strains from New York City and Texas. Kapur, V., *et al.* ..... (A) 489
Diagnosis of rifampin resistance in pathogenic mycobacteria by molecular techniques. Williams, D. L. and Gillis, T. P. ..... (A) 688
Diffusion of rifampin and vancomycin through a *Staphylococcus epidermidis* biofilm. Dunne, W. M., *et al.* ..... (A) 322
Direct, automated detection of rifampin-resistant *M. tuberculosis* by polymerase chain reaction and single-strand conformation polymorphism analysis. Telenti, A., *et al.* ..... (A) 184
Effectiveness of rifampin, rifabutin, and rifapentine for preventive therapy of tuberculosis in mice. Ji, B.-H., *et al.* ..... (A) 665
In vivo susceptibility of *M. leprae* to ofloxacin either singly or in combination with rifampicin and rifabutin– antileprosy activity of ofloxacin and ansamycins in mice. Dhople, A. M. and Ibanez, M. A. ..... (A) 654
Inactivated products of rifampicin by pathogenic *Nocardia* spp.; structures of glycosylated and phosphorylated metabolites of rifampicin and 3-formylrifamycin. Morisaki, N., *et al.* ..... (A) 200
Influence of rifampin on fleroxacin pharmacokinetics. Schrenzel, J., *et al.* ..... (A) 159
Loss of viability of *M. leprae* isolated from nasal secretions of lepromatous leprosy patients following daily rifampicin and DDS therapy. Habte-Mariam, H. S. and Guebre-Xabier, M. ..... (A) 311
Rate of relapse in multibacillary patients after cessation of long-course dapsone monotherapy supplemented by a final supervised single dose of 1500 mg of rifampin. Cartel, J. L. and Naudin, J.-C. ..... (O) 215
Relapses after a single dose of rifampin in skin-smear negative multibacillary patients after dapsone monotherapy. Jamet, P., *et al.* ..... (O) 209
Rifampicin resistance of Mu lysogenic strains by rpoB mutations. Kirschbaum, T. M. and Gotte, R. F. C. ..... (A) 198
[Side effects and toxicity of rifampin in the treatment of leprosy.] Terencio de las Aguas, J., *et al.* ..... (A) 312
Spectrophotometric determination of rifampin in the presence of its degradation products in pharmaceutical preparations. Walash, M. I., *et al.* ..... (A) 160
Time course of the changes in prednisolone pharmacokinetics after co-administration or discontinuation of rifampin. Lee, K. H., *et al.* ..... (A) 158
Tuftsin-bearing liposomes as rifampin vehicles in treatment of tuberculosis in mice. Agarwal, A., *et al.* ..... (A) 484

Rifamycin

In vivo antileprosy activity of benzoxazinorifamycin KRM-1648 in combination with other microbials. Saito, H., *et al.* ..... (A) 686
Inactivated products of rifampicin by pathogenic *Nocardia* spp.; structures of glycosylated and phosphorylated metabolites of rifampicin and 3-formylrifamycin. Morisaki, N., *et al.* ..... (A) 200
Therapeutic efficacy of a newly synthesized benzoxazinorifamycin KRM-1648, combined with other antimicrobials against *M. leprae* infection induced in nude mice. Saito, H., *et al.* ..... (A) 467

Therapeutic efficacy of benzoxazinorifamycin, KRM-1648, in combination with other antimicrobials against *M. leprae* infection induced in nude mice. Saito, H., *et al.* ...(O) 43

Saudi Arabia

Divorce among Saudi female leprotic patients: an experience at Ibn Sina Hospital. Ediarous, A. H., *et al.* ....(A) 463

Senegal

Institut de Leprologie de Dakar Rapport Annuel 1993. ....(N) 459

Serodiagnosis

A latex agglutination test for rapid serodiagnosis of leprosy in the field. Oettinger, T., *et al.* ....(C) 135

Clinical evaluation of rapid serodiagnosis of pulmonary tuberculosis by ELISA with cord factor (trehalose-6, 6' dimycolate) as antigen purified from *M. tuberculosis.* Maekura, R., *et al.* ....(A) 200

Overproduction of recombinant 85 complex of *M. leprae* in *E. coli* and their application for serodiagnosis of leprosy. Suzuki, Y., *et al.* ....(A) 687

Serum

A role for natural antibody in the pathogenesis of leprosy; antibody in nonimmune serum mediates C3 fixation to the *M. leprae* surface and hence phagocytosis by human mononuclear phagocytes. Schlesinger, L. S. and Horwitz, M. A. ....(A) 317

[Determination of the antibody in the sera of leprosy patients with NT-P-BSA ELISA.] Song, X., *et al.* ....(A) 475

Sera of leprosy patients with type 2 reactions recognize selective sequences in *M. leprae* recombinant LST protein. Singh, S., *et al.* ....(A) 318

Serum antibodies from patients with ankylosing spondylitis and Reiter's syndrome are reactive with HLA-B27 cells transfected with the *M. tuberculosis* hsp60 gene. Kellner, H., *et al.* ....(A) 490

Serum lactoferrin in lepromatous leprosy patients. Parkash, O., *et al.* ....(A) 314

Serum zinc, sodium, calcium, magnesium and potassium levels and standard diet in leprosy patients. Mennen, U., *et al.* ....(A) 469

Singapore

Efficacy and safety of multidrug therapy in paucibacillary leprosy in Singapore. Lim, J. T. E. and Tan, T. ....(A) 465

Skin

A colorimetric PCR method for the detection of *M. leprae* in skin biopsies from leprosy patients. Jamil, S., *et al.* ....(O) 512

An improved method for DNA diagnosis of leprosy using formaldehyde-fixed, paraffin-embedded skin biopsies. Nishimura, M., *et al.* ....(A) 645

Demonstration of PGL-I and LAM-B antigens in paraffin sections of leprosy skin lesions. Wang, T., *et al.* ....(A) 475

Effect of *M. leprae* in peripheral nerve trunk on the evolution of skin lesions. Ridley, M. J., *et al.* ....(O) 99

[Histopathologic correlations between skin and lymph nodes in the phases of evolution of virchovian hanseniasis.] Santos, E. M. C. and Fleury, R. N. ....(A) 174

Nerve and skin damage in leprosy is associated with increased intralesional heat shock protein. Khanolkar-Young, S., *et al.* ....(A) 643

Skin smear(s)

Inventory of skin smear practices in 6 leprosy control programmes in Nigeria. Awofeso, N. ....(A) 467

Non-acid-fast fluorescent *M. leprae* (?) in skin smears from leprosy patients. Bramhne, H. G., *et al.* ....(A) 476

Relapses after a single dose of rifampin in skin-smear negative multibacillary patients after dapsone monotherapy. Jamet, P., *et al.* ....(O) 209

Skin test(s)

[Clinical and histologic evaluation of the Mitsuda reaction in consanguineous and non-consanguineous contacts of patients with bacilliferous forms of hanseniasis.] Trindade, M. A. B., *et al.* ....(A) 175

Epidemiological studies in children of a low-endemic region, a high-endemic region, and dwellers of a leprosy colony: evaluation of anti-ND-BSA antibodies and lepromin response. Shah, D. H., *et al.* ....(O) 539
Evidence of previous infection with *M. avium-M. intracellulare* complex among healthy subjects–an international study of dominant mycobacterial skin test reactions. von Reyn, C. F., *et al.* ....(A) 341

Somalia
Risk of infection with *M. tuberculosis* among children and mothers in Somalia. Peltola, H., *et al.* ....(A) 491

Spain
1994 Fontilles' cursos. ....(N) 461
[Oral status of a Hansen's population in Spain.] Ceballos, A., *et al.* ....(A) 162
Queen Fabiola visits Fontilles. ....(N) 627

Spleen
Mycobacterial spindle-cell pseudotumor of the spleen. Suster, S., *et al.* ....(A) 674

Stain(s)
An evaluation of the S-100 stain in the histological diagnosis of tuberculoid leprosy and other granulomatous dermatoses. Singh, N., *et al.* ....(O) 263
Immunopathological stain of lipoarabinomannan-B (LAM-B) for diagnosis of leprosy. Butt, K. I., *et al.* ....(A) 166
[Modification of Harada's method for rapid staining of mycobacteria.] Kawatsu, K., *et al.* ....(A) 317

Steroid(s)
Human immunodeficiency virus and leprosy–type 1 reactions, nerve damage and steroid therapy: "a case report." Bwire, R. and Kawuma, H. J. S. ....(A) 161

Streptomycin
Genetic alterations in streptomycin-resistant *M. tuberculosis*: mapping of mutations conferring resistance. Meier, A., *et al.* ....(A) 335
In vitro activity of streptomycin and clofazimine against established infections of *M. avium* complex in beige mice. Gangadharam, P. R. J. and Parish, K. ....(A) 331
Molecular basis of streptomycin resistance in *M. tuberculosis*: alterations of the ribosomal protein S12 gene and point mutations within a functional 16S ribosomal RNA pseudoknot. Finken, M., *et al.* ....(A) 179
Relapse rates in patients treated with dapsone monotherapy and combinations of dapsone and thiambutosine, thiacetazone, isoniazid and streptomycin in the pre-MDT era. Smith, T. C. and Richardus, J. H. ....(O) 353
Streptomycin resistance in mycobacteria. Honore, N. and Cole, S. T. ....(A) 488
The rpsL gene and streptomycin resistence in single and multiple drug-resistant strains of *M. tuberculosis.* Nair, J., *et al.* ....(A) 182

Subclinical
Subclinical infection with *M. leprae*–a problem for leprosy control strategies. Baumgart, K. W., *et al.* ....(A) 165

Superoxide
[Contents of superoxide dismutase and lipid-peroxide in the blood of leprosy patients.] Zhang, Z. and Huang, L. ....(A) 175

Switzerland
Should aid organizations be calculating the cost of death? ....(N) 629
TDR regional networks offer training in tropical disease research. ....(N) 627
WHO IMMYC and THEMYC meetings announced. ....(N) 628

Syphilis
A case of secondary syphilis with a remarkable resemblance in histopathologic appearance to indeterminate leprosy. Job, C. K., *et al.* ....(E) 433

Taiwan
Autoantibodies and related immunity of leprosy patients from leprosarium in Taiwan. Wang, C. R., *et al.* ....(A) 475

Tanzania
HIV infection as a risk factor for the development of tuberculosis–a case-control study in Tanzania. Vandenbroek, J., *et al.* ....(A) 495

Testes
Testicular alterations in Hansen's disease. Arruda, H. O., *et al.* ....(A) 165

Testing
Assessment of new therapies for infection due to *M. avium* complex–appropriate use of *in vitro* and *in vivo* testing. Grosset, J.-H. ....(A) 664
[Potential of gelatin agglutination test in the study of leprosy.] Wu, Q., *et al.* ....(A) 320
The effect of footwear on sensory testing in leprosy. Stratford, C. J. and Owen, B. M. ....(A) 659

Tetanus
Number of interleukin-4- and interferon-gamma-secreting human T cells reactive with tetanus toxoid and the mycobacterial antigen PPD or phytohemagglutinin–distinct response profiles depending on the type of antigen used for activation. Elghazali, G. E. B., *et al.* ....(A) 330

Thailand
Leprosy in northern Thailand: 1951-1990. Smith, T. C. and Richardus, J. H. ....(A) 657

Thalidomide
Embryotoxic effects of thalidomide derivatives in the nonhuman primate Callithrix jacchus. 5. Lack of teratogenic effects of phthalimidophthalimide. Klug, S., *et al.* ....(A) 636
Enhancement of phorbol ester-induced production of tumor necrosis factor alpha by thalidomide. Nishimura, K., *et al.* ....(A) 644
Inhibition of tumor necrosis factor-alpha by thalidomide in magnesium deficiency. Weglicki, W. B., *et al.* ....(A) 677
Investigations on the *in vitro* racemization of thalidomide by high-performance liquid chromatography. Knoche, B. and Blaschke, G. ....(A) 637
Successful treatment of adults Langerhans' cell histiocytosis with thalidomide–report of 2 cases and literature review. Thomas, L., *et al.* ....(A) 203
Thalidomide inhibits the replication of human immunodeficiency virus type 1. Makonkawkeyoon, S., *et al.* ....(A) 171
Thalidomide is an inhibitor of angiogenesis. Damato, R. J., *et al.* ....(A) 635
Thalidomide neuropathy incidence and clinico electrophysiologic findings in 42 patients. Ochonisky, S., *et al.* ....(A) 312
Thalidomide use in dermatology. Ochonisky, S. and Revuz, J. ....(A) 466
The influence of thalidomide on the clinical and immunologic manifestations of erythema nodosum leprosum. Sampaio, E. P., *et al.* ....(A) 174
Treatment of the cutaneous lesions of systemic lupus erythematosus with thalidomide. Atra, E. and Sato, E. I. ....(A) 189

THELEP (see **THEMYC**)

THEMYC (WHO Chemotherapy of Mycobacterial Diseases Scientific Working Group)
WHO IMMYC and THEMYC meetings announced. ....(N) 628

Therapy (see also **Chemotherapy** and **Multidrug therapy**)
A longitudinal study of immunologic reactivity in leprosy patients treated with immunotherapy. Rada, E., *et al.* ....(O) 552
A longitudinal study of percent agalactosyl IgG in tuberculosis patients receiving chemotherapy, with or without immunotherapy. Rook, G. A. W., *et al.* ....(A) 338
[Comparison of DDS monotherapy with MDT in MB leprosy.] Wang, K. ....(A) 659
Disseminated *M. genavense* infection–clinical and microbiological features and response to therapy–short communication. Bessesen, M. T., *et al.* ....(A) 190
Effectiveness of rifampin, rifabutin, and rifapentine for preventive therapy of tuberculosis in mice. Ji, B.-H., *et al.* ....(A) 665
Efficacy of minocycline 100 mg twice daily and an initial single 200-mg dose in the therapy of lepromatous leprosy. Gelber, R. H., *et al.* ....(A) 680
Human immunodeficiency virus and leprosy–type 1 reactions, nerve damage and steroid therapy: "a case report." Bwire, R. and Kawuma, H. J. S. ....(A) 161

Initial therapy for tuberculosis in the era of multidrug resistance–recommendations of the Advisory Council for the Elimination of Tuberculosis. ....(A) 196
Loss of viability of *M. leprae* isolated from nasal secretions of lepromatous leprosy patients following daily rifampicin and DDS therapy. Habte-Mariam, H. S. and Guebre-Xabier, M. ....(A) 311
Rate of relapse in multibacillary patients after cessation of long-course dapsone monotherapy supplemented by a final supervised single dose of 1500 mg of rifampin. Cartel, J. L. and Naudin, J.-C. ....(O) 215
Recommendations on prophylaxis and therapy for disseminated *M. avium* complex for adults and adolescents infected with human immunodeficiency virus. ....(A) 202
Relapse rates in patients treated with dapsone monotherapy and combinations of dapsone and thiambutosine, thiacetazone, isoniazid and streptomycin in the pre-MDT era. Smith, T. C. and Richardus, J. H. ....(O) 353
Relapses after a single dose of rifampin in skin-smear negative multibacillary patients after dapsone monotherapy. Jamet, P., *et al.* ....(O) 209
Selection of resistant mutants of *M. avium* in beige mice by clarithromycin monotherapy. Ji, B.-H., *et al.* ....(A) 311
Therapy of multidrug-resistant tuberculosis: lessons from studies from mice. Klemens, S. P., *et al.* ....(A) 198

Thiacetazone
Relapse rates in patients treated with dapsone monotherapy and combinations of dapsone and thiambutosine, thiacetazone, isoniazid and streptomycin in the pre-MDT era. Smith, T. C. and Richardus, J. H. ....(O) 353

Tissue(s)
Assessment of the purity of *M. leprae* preparations from tissues of leprosy-infected laboratory animals. Dyachina, M. N., *et al.* ....(C) 299
Autosensitization to connective tissue elements and endogenous adaptation hormones in mycobacterioses. Balybin, E. S. and Vinnick, L. A. ....(O) 225
Detection of *M. leprae* in tissue and blood by polymerase chain reaction. Lee, K. S., *et al.* ....(C) 139
Electron microscopic observations of small unmyelinated nerve tissue proper in a dermal lesion of a relapsed lepromatous patient. Hirata, T. and Harada, N. ....(C) 619
Electron microscopic observations of the relationship between peripheral nerve tissue proper and an endoneurial capillary in a dermal lesion of a relapses lepromatous patient. Hirata, T. and Harada, N. ....(O) 89
Inability to detect mycobactin in mycobacteria-infected tissues suggests an alternative iron acquisition mechanism by mycobacteria *in vivo.* Lambrecht, R. S. and Collins, M. T. ....(A) 181

Tongue
Tongue involvement in lepromatous leprosy. Sharma, V. K., *et al.* ....(A) 469

Training
1994 ILEP catalog of training centers published. ....(N) 154
ALERT Training Calendar 1995. ....(N) 455
GMLF holds first Workshop on Teaching Methodology for Trainers of Leprosy Training Centers. ....(N) 153
National Training Course on Pathology of Leprosy held in Nanjing. Wang, T. ....(N) 150
TDR regional networks offer training in tropical disease research. ....(N) 627
Teaching Tools for Health Professionals by Luc G. Van Parijs and Betsy Abraham. ....(B) 451
Visual aids for training in ocular leprosy. ....(N) 627

Transmission
Badgers (*Meles-meles*), cattle and bovine tuberculosis (*M. bovis*)–a hypothesis to explain the influence of habitat on the risk of disease transmission in southwest England. White, P. C. L., *et al.* ....(A) 204
Experimental transmission of human leprosy bacilli in foot pads of severe combined immunodeficient mice. Ishaque, M. and Sticht-Groh, V. ....(C) 613
New approach to curb the transmission of leprosy. Prabhakar, M. C., *et al.* ....(A) 164
Risk factors for transmission of *M. tuberculosis* in a primary school outbreak–lack of racial difference in susceptibility to infection. Hoge, C. W., *et al.* ....(A) 664

Transmission of leprosy in nude mice through thorn pricks. Job, C. K., *et al.* .....(O) 395
Transmission of multidrug-resistant *M. tuberculosis* among persons with human immunodeficiency virus infection in an urban hospital–epidemiologic and restriction fragment length polymorphism analysis. Coronado, V. G., *et al.* .....(A) 192

Trial(s)

A randomized clinical trial of two single-dose treatments for paucibacillary leprosy. Pattyn, S. R., *et al.* .....(A) 638
An eight-year field trial on antileprosy vaccines among high risk household contacts in the Calcutta metropolis. Chaudhury, S., *et al.* .....(O) 309
Clinical trial of clarithromycin for cutaneous (disseminated) infection due to *M. chelonae.* Wallace, R. J., *et al.* .....(A) 204
Clinical trial of clarithromycin for lepromatous leprosy. Chan, G. P., *et al.* .....(A) 464
Clinical trial of fusidic acid for lepromatous leprosy. Franzblau, S. G., *et al.* .....(A) 635
Clinical trial of ofloxacin alone and in combination with dapsone plus clofazimine for treatment of lepromatous leprosy. Ji, B.-H., *et al.* .....(A) 465
Clinical trial of sparfloxacin for lepromatous leprosy. Chan, G. P., *et al.* .....(A) 310
Field trials on the use of *Mycobacterium* w vaccine in conjunction with multidrug therapy in leprosy patients for immunotherapeutic and immunoprophylactic purposes. Walia, R., *et al.* .....(A) 328
Gangliosides (cronassial) and nerve regeneration in leprosy; a multicenter clinical trial. Salafia, A. and Chauhan, G. .....(A) 164
Isolation and identification of environmental mycobacteria in the *M. bovis* BCG trial area of South India. Kamala, T., *et al.* .....(A) 650
The Karonga Prevention Trial: a leprosy and tuberculosis vaccine trial in northern Malawi. I. Methods of the vaccination phase. Ponnighaus, J. M., *et al.* .....(A) 327

Tuberculoid leprosy

An evaluation of the S-100 stain in the histological diagnosis of tuberculoid leprosy and other granulomatous dermatoses. Singh, N., *et al.* .....(O) 263
[Plantar ulcer occurring in a 15-year-old tuberculoid leprosy patient.] Mouira, R., *et al.* ...(A) 641

Tuberculosis

A distinctive cytologic pattern for diagnosing tuberculosis lymphadenitis in AIDS. Llatjos, M., *et al.* .....(A) 335
A longitudinal study of percent agalactosyl IgG in tuberculosis patients receiving chemotherapy, with or without immunotherapy. Rook, G. A. W., *et al.* .....(A) 338
A single mycobacterial protein (hsp65) expressed by a transgenic antigen-presenting cell vaccinates mice against tuberculosis. Silva, C. L. and Lowrie, D. B. .....(A) 646
Accurate diagnosis of tuberculosis meningitis using polymerase chain reaction. Amin, A. G., *et al.* .....(C) 614
Activity of levofloxacin in a murine model of tuberculosis. Klemens, S. P., *et al.* .....(A) 667
An integrated procedure for the direct detection of characteristic lipids in tuberculosis patients. Minnikin, D. E., *et al.* .....(A) 480
Badgers (*Meles-meles*), cattle and bovine tuberculosis (*M. bovis*)–a hypothesis to explain the influence of habitat on the risk of disease transmission in southwest England. White, P. C. L., *et al.* .....(A) 204
Circulating adhesion molecules in tuberculosis. Lai, C. K. W., *et al.* .....(A) 334
Clinical evaluation of rapid serodiagnosis of pulmonary tuberculosis by ELISA with cord factor (trehalose-6, 6' dimycolate) as antigen purified from *M. tuberculosis.* Maekura, R., *et al.* .....(A) 200
Detection of tumor necrosis factor alpha in saroidosis and tuberculosis granulomas using *in situ* hybridization. Myatt, N., *et al.* .....(A) 669
Disseminated tuberculosis in interferon-gamma gene-disrupted mice. Cooper, A. M., *et al.* .....(A) 167
Effectiveness of rifampin, rifabutin, and rifapentine for preventive therapy of tuberculosis in mice. Ji, B.-H., *et al.* .....(A) 665
Elevated concentrations of circulating ICA-1 in far advanced and miliary tuberculosis. Shijubo, N., *et al.* .....(A) 673
Erythema nodosum and abdominal tuberculosis. Pastrana, J. and Espana, A. .....(A) 670
Estimates of future global tuberculosis morbidity and mortality. Dolin, P. J., *et al.* ....(A) 193

Focusing tuberculosis contact tracing by smear grading of index cases. Liipo, K. K., *et al.* ..... (A) 200
Follow-up of tuberculosis patients undergoing standard antituberculosis chemotherapy by using a polymerase chain reaction. Levee, G., *et al.* ..... (A) 668
Global tuberculosis incidence and mortality during 1990-2000. Dolin, P. J., *et al.* ..... (A) 662
HIV infection as a risk factor for the development of tuberculosis–a case-control study in Tanzania. Vandenbroek, J., *et al.* ..... (A) 495
Heat-stable opsonins in tuberculosis and leprosy. Blair, A. L., *et al.* ..... (A) 166
Hepatotoxicity associated with acetaminophen usage in patients receiving multiple drug therapy for tuberculosis. Nolan, C. M., *et al.* ..... (A) 491
Host response to mycobacterial cell wall subunit during experimental tuberculosis in mice. Chugh, I. B., *et al.* ..... (A) 191
Initial therapy for tuberculosis in the era of multidrug resistance–recommendations of the Advisory Council for the Elimination of Tuberculosis. ..... (A) 196
Interleukin 12 at the site of disease in tuberculosis. Zhang, M., *et al.* ..... (A) 647
Large scale DNA fingerprinting of *M. tuberculosis* strains as a tool for epidemiological studies of tuberculosis. Chevrel Dellagi, D., *et al.* ..... (A) 191
Modelling the efficacy of prophylactic and curative therapies for preventing the spread of tuberculosis in Africa. Heymann, S. J. ..... (A) 195
Molecular epidemiology of tuberculosis in Austria. Vogetseder, W., *et al.* ..... (A) 496
Nationwide survey of drug-resistant tuberculosis in the United States. Bloch, A. B., *et al.* ..... (A) 485
Normalization of CD3 (+) T-lumphocyte depletion in patients without HIV infection treated for tuberculosis. Turrett, G. S. and Telzak, E. E. ..... (A) 675
Nosocomial outbreak of tuberculosis in a renal transplant unit; application of a new technique for restriction fragment length polymorphism analysis of *M. tuberculosis* isolates. Jereb, J. A., *et al.* ..... (A) 196
Protective effect of BCG against tuberculous meningitis and miliary tuberculosis; a meta-analysis. Rodriques, L., *et al.* ..... (A) 493
Rapid, early and specific diagnosis of tuberculosis and other mycobacterial diseases in Burundi. Barihuta, T., *et al.* ..... (A) 484
Relationship of manifestations of tuberculosis to CD4 cell counts in patients with human immunodeficiency virus infection. Jones, B. E., *et al.* ..... (A) 666
Restriction fragment length polymorphism analysis detecting a community-based tuberculosis outbreak among persons infected with human immunodeficiency virus. Tabet, S. R., *et al.* ..... (A) 341
Role of cytokines in tuberculosis. Flesch, I. E. A. and Kaufmann, S. H. E. ..... (A) 331
Th1/Th2 profiles in tuberculosis, based on the proliferation and cytokine response of blood lymphocytes to mycobacterial antigen. Surcel, H. M., *et al.* ..... (A) 494
The Karonga Prevention Trial: a leprosy and tuberculosis vaccine trial in northern Malawi. I. Methods of the vaccination phase. Ponnighaus, J. M., *et al.* ..... (A) 327
The early bactericidal activity of rifabutin in patients with pulmonary tuberculosis measured by sputum viable counts: a new method of drug assessment. Sirgel, F. A., *et al.* ..... (A) 339
The presence of CD5(LOW+) Nk cells in normal controls and patients with pulmonary tuberculosis. Ishiyama, T., *et al.* ..... (A) 196
Therapy of multidrug-resistant tuberculosis: lessions from studies from mice. Klemens, S. P., *et al.* ..... (A) 198
Treatment of multidrug-resistant tuberculosis. Iseman, M. D. ..... (A) 196
Trends in the susceptibility of tuberculosis in New York City. Sepkowitz, K. A., *et al.* ..... (A) 672
Tuberculosis and the health care worker–a historical perspective. Sepkowitz, K. A. ..... (A) 339
Tuberculosis in the 1990s. Barnes, P. F. and Barrows, S. A. ..... (A) 189
Tuberculosis symposium–emerging problems and promise. Ellner, J. J., *et al.* ..... (A) 194
Tuberculosis–new strategies for the development of diagnostic tests and vaccines. Leao, S. C. ..... (A) 199
Tuftsin-bearing liposomes as rifampin vehicles in treatment of tuberculosis in mice. Agarwal, A., *et al.* ..... (A) 484
Use of a repetitive element isolated from *M. tuberculosis* in hybridization studies with *M. bovis*–a new tool for epidemiological studies of bovine tuberculosis. Cousins, D. V., *et al.* ..... (A) 330

Uganda
Leprosy and infection with the human immunodeficiency virus in Uganda; a case-control study. Kawuma, H. J. S., *et al.* ....(O) 521

U.K. (United Kingdom)
1994 ILEP catalog of training centers published. ....(N) 154
Badgers (*Meles-meles*), cattle and bovine tuberculosis (*M. bovis*)–a hypothesis to explain the influence of habitat on the risk of disease transmission in southwest England. White, P. C. L., *et al.* ....(A) 204
Care before and after cure: can research help? ....(N) 461
ILEP expenditures. ....(N) 628
Isolation of mycobacteria from patients seropositive for the human immunodeficiency virus (HIV) in southeast England. Yates, M. D., *et al.* ....(A) 205
New ILEP brochure out. ....(N) 154
Robert Cochrane Fund for Leprosy. ....(N) 307

Ulcer(s)
[Effects of protective footwear on plantar ulcers.] Huang, X. ....(A) 658
Malignant transformation of plantar ulcers in leprosy. Bobhate, S. K., *et al.* ....(A) 161
Management of plantar ulcers–theory or practice? Kazen, R. O. ....(A) 658
[Plantar ulcer occurring in a 15-year-old tuberculoid leprosy patient.] Mouira, R., *et al.* ....(A) 641
[Results of controlling plantar ulcers for three years.] Yan, L., *et al.* ....(A) 659
Squamous cell carcinoma in plantar ulcers in leprosy; a case control study. Richardus, J. H. and Smith, T. C. ....(A) 164

Ultrastructure (see also **Electron Microscopy**)
Preservation of surface lipids and determination of ultrastructure of *M. kansasii* by freeze-substitution. Paul, T. R. and Beveridge, T. J. ....(A) 652

U.S.A. (United States of America)
34th Interscience Conference to be held. ....(N) 307
ALM's Tom Frist steps down. ....(N) 461
Characterization by automated DNA sequencing of mutations in the gene (rpoB) encoding the RNA polymerase beta subunit in rifampin-resistant *M. tuberculosis* strains from New York City and Texas. Kapur, V., *et al.* ....(A) 489
Damien-Dutton Society celebrates 50 years. ....(N) 308
Federally funded and private sector or state sources of HD treatment. ....(N) 630
Hansen's disease in Hawaii. Maruyama, M. ....(N) 631
Leprosy Research Foundation research paper request. ....(N) 462
Nationwide survey of drug-resistant tuberculosis in the United States. Bloch, A. B., *et al.* ....(A) 485
Ocular manifestations of leprosy in a noninstitutionalized community in the United States. Dana, M. R., *et al.* ....(A) 639
PAHO reports on Health Education in the Americas. ....(N) 155
Twenty-Ninth Joint Leprosy Research Conference 1994, closing remarks. Brennan, P. J. ....(A) 688
U.S.-Japan Cooperative Medical Science Program Twenty-Ninth Joint Leprosy Research Conference, Kyoto, Japan, 19-22 August 1994. ....(A) 678

U.S.S.R. (see **Commonwealth of Independent States**)

Vaccine(s), vaccination
A single mycobacterial protein (hsp65) expressed by a transgenic antigen-presenting cell vaccinates mice against tuberculosis. Silva, C. L. and Lowrie, D. B. ....(A) 646
An eight-year field trial on antileprosy vaccines among high risk household contacts in the Calcutta metropolis. Chaudhury, S., *et al.* ....(O) 309
An immunodominant 30-kDa antigen of a candidate antileprosy vaccine, *Mycobacterium* w, shares T- and B-cell determinants with *M. leprae* and *M. tuberculosis*. Yadava, A. and Mukherjee, R. ....(A) 175
Dr. Mukherjee, *et al.* respond to Dr. Deo (leprosy vaccines from cultivable mycobacteria). Mukherjee, A., *et al.* ....(C) 132
Effective vaccination of mice against *M. tuberculosis* infection with a soluble mixture of secreted mycobacterial proteins. Andersen, P. ....(A) 660

Field trials on the use of *Mycobacterium* w vaccine in conjunction with multidrug therapy in leprosy patients for immunotherapeutic and immunoprophylactic purposes. Walia, R., *et al.* ..... (A) 328
Human T cells recognize mycobacterial heat shock proteins in the context of multiple HLA-Dr molecules–studies with healthy subjects vaccinated with *M. bovis* BCG and *M. leprae.* Mustafa, A. S., *et al.* ..... (A) 317
In vivo depletion of CD4 and CD8 T lymphocytes impairs *Mycobacterium* w vaccine-induced protection against *M. tuberculosis.* Guleria, I., *et al.* ..... (A) 195
Leprosy vaccines from cultivable mycobacteria. Deo, M. G. ..... (C) 131
Long-lasting T-cell reactivity to *M. leprae* antigens in human volunteers vaccinated with killed *M. leprae.* Mustafa, A. S. and Oftung, F. ..... (A) 171
Molecular definition of unique species status of *Mycobacterium* w; a candidate leprosy vaccine strain. Reddi, P. P., *et al.* ..... (O) 229
Monocyte antimycobacterial activity before and after *M. bovis* BCG vaccination in Chingleput, India, and London. Cheng, S. H., *et al.* ..... (A) 191
Proliferative responses of leprosy patients, healthy contacts and BCG vaccinees to a major native 12-kDa protein of *M. leprae.* Handzel, Z. H., *et al.* ..... (A) 315
Protective efficacy of BCG vaccine against leprosy in southern Malawi. Baker, D. M., *et al.* ..... (A) 186
Reversal reaction in multibacillary leprosy patients following MDT with and without immunotherapy with a candidate for an antileprosy vaccine, *Mycobacterium* w. Kar, H. K., *et al.* ..... (A) 170
The Karonga Prevention Trial: a leprosy and tuberculosis vaccine trial in northern Malawi. I. Methods of the vaccination phase. Ponnighaus, J. M., *et al.* ..... (A) 327
Transport of amino acids across renal brush border membrane vesicles in *M. leprae* infected Swiss albino mice–effect of Convit vaccine. Kohli, M., *et al.* ..... (A) 325
Tuberculosis–new strategies for the development of diagnostic tests and vaccines. Leao, S. C. ..... (A) 199

Viet Nam

ILEP at global MDT conference. ..... (N) 632
International Symposium to be held in Hanoi. ..... (N) 308
Protective effect of BCG against leprosy and its subtypes; a case-control study in southern Vietnam. Thuc, N. V., *et al.* ..... (O) 532

World Health Organization (WHO)

[Determination of anti-PGL-I antibody in the blood of leprosy patients who completed MDT and their contacts.] Sun, X., *et al.* ..... (A) 475
Global Strategy for the Elimination of Leprosy as a Public Health Problem by WHO Leprosy Unit ..... (B) 623
Lack of response to WHO/MDT; a case report by Habtemariam and Xabier. Pannikar, V. K. ..... (C) 443
Side effects of Isoprodian compared with WHO/MDT in rural Nepal. van Brakel, W. H. and Drever, W. ..... (A) 639
The effects of World Health Organization chemotherapy on imported leprosy in Auckland, New Zealand, 1983-1990. Cornwall, J., *et al.* ..... (A) 157
WHO IMMYC and THEMYC meetings announced. ..... (N) 628

Yemen

Prevalence of antibodies to hepatitis C virus among patients with leprosy in several African countries and the Yemen. Denis, F., *et al.* ..... (A) 640

Zinc

Serum zinc, sodium, calcium, magnesium and potassium levels and standard diet in leprosy patients. Mennen, U., *et al.* ..... (A) 469