### NFWS and NOTES

This department furnishes information concerning institutions, organizations, and individuals engaged in work on leprosy and other mycobacterial diseases, and makes note of scientific meetings and other matters of interest.

Calendar of Meetings and Events

Day	mm/yy	Location	Details	Contact	E-mail
4–7	Mar-04	Cancun	11th International Congress on Infectious Diseases		www.isid.org/11th_icid
15–17	Apr-04	Quebec City	12th Annual Rural and Remote Medicine Conference		www.srpc.ca/cme.html
19–22	May-04	Beijing	IX International Congress of Dermatology	ICD Secretariat	
18–23	Jul-04	Montreal	12th International Congress of Immunology		immuno2004@nrc.ca
30–2	Oct/Nov-04	Washington, D.C.	44th Interscience Conference on Antimicrobial Agents and Chemotherapy		
7–11	Nov-04	Miami	53rd Annual Meeting of the American Society of Tropical Medicine & Hygiene	ASTMH	
17–21	Nov-04	Florence, Italy	13th Congress of the European Academy of Dermatology and Venerology	EADV 2004 Florence	
1–5	Dec-04	Bangkok	9th Western Pacific Congress on Chemotherapy and Infectious Diseases	Congress Secretariat	wpccid2004@idthai.org

**Notice.** The following announcement was received from the Pan American Health and Education Foundation.

Call for Nominations. 2004 Fred L. Soper Award for Excellence in Health Literature. The Pan American Health and Education Foundation, a non-profit U.S. based public foundation, collaborating partner of the Pan American Health Organization (PAHO) is accepting nominations of outstanding scientific journal articles of public health in the Region of the Americas that were published in 2003.

To be nominated, an article must have been published in a scientific journal that is listed in the Index Medicus (MEDLINE). Authors must have a principle affiliation with a teaching, research or service institution located in the Region of the Americas. Preference is given to studies involving more than on discipline and to papers related to infectious disease.

Eligible papers may consist of a report, an analysis of new data (experimental or observational), or a new approach to analyzing available data. The award consists of a certificate of merit and a cash prize of U.S.\$2,500.

Nominations must be received not later than 30 June 2004.

Address for sending nominations: Fred L. Soper Award Committee, Pan American Health and Education Foundation, 525 Twenty-third Street, N.W. Washington, D.C. 20037. Phone: 202-974-3416. E-mail: foundation@paho.org

The following grants were announced in the New Awards section of the October 2003 issue of TDR News.

- Gareth Wyn Griffths, European Molecular Biology Labratory, Heidelberg, Germany. Analysis and manipulation of mycobacterial phagosome signalling networks. (Budget: U.S.\$35,000)
- Stewart Thomas Cole, Institut Pasteur, Unite Genetique Moleculaire Bacterienne, France. Post-genomic leprosy diagnostics. (Budget: U.S.\$33,500)
- Mariane Martins de Araujo Stefani,

Federla University of Goias, Instituto de Patologia Tropicale e Saude Publica. Characterization of novel *M. leprae* secreted proteins and potential diagnostic application for early leprosy infection. (Budget: U.S.\$21,000)

Brazil. Hansen's Disease Annual Meeting was held in Brasília from 3-4 November, sponsored by the Brazilian Ministry of Health (MoH). Participants were from Control Programs at National and State level, Pan-American Health Organization, World Health Organization (WHO), National Hansen's Disease Committee, Non-Governmental Organization—ILEP, MOR-HAN-Movimento de Reintegração de Pacientes de Hanseníase, Directors of National Reference Centers and Research Institutes. We are presenting a short report on the meeting and its main recommendations in consonance with the Executive Summary.

- 1. In opening session, Dr Jarbas Barbosa da Silva Junior, Chief Director of "National Surveillance Secretariat" branch, reinforced the political commitment of the Brazilian government towards Hansen's Disease elimination. He also stated the relevance of Hansen's Disease Annual Meeting for evaluating the elimination progress and to set priorities for control and research activities in the context of the infectious disease.
- Current Hansen's Disease epidemio*logical situation*: Brazil is the most endemic country in Latin American congregation almost 90% of the newly detected cases (NDC). Hansen's Disease epidemiological situation is still considered endemic at State level with a large variation in prevalence and detection rates among regions. In 2002, the point prevalence was 4.4 per 10,000 inhabitants and more than forty thousand of news cases were registered (2.40 per 10,000 inhab). In the last decade, trends in prevalence declined sharp but detection rates remained stable in the same period. Although, there is an effort to detect cases as early as possible around 6% of the NDC still have grade II disability. Nearly 10,000 annual Hansen's Disease hidden cases were estimated which could underestimate the preva-

lence figures. Since 1996, the Brazilian Hansen's information system is on-line, http://hanseniase.datasus.gov.br/hans/hans. htm, providing data by municipality for epidemiological and management purposes.

- 3. World Hansen's Disease Rank: For the first year, the WHO ranked Brazil as the top Hansen's Disease country according to the prevalence rate. However, the use of the prevalence as the solely indicator of Hansen's Disease elimination has raised several methodological issues and controversies. Little attention has been given to the differences in the inclusion and exclusion criteria of patients in the Hansen's Disease register making the prevalence rates among countries incomparable. For example, in Brazil the prevalence rate would fall by half (2.1 per 10,000 inhab.) if calculated according to WHO parameters. This meeting recommended incorporating NCD rates and NCD rates among children as additional indicators to monitor Hansen's Disease elimination in Brazil.
- 4. Current operational aspects: There was an effort to decentralize the Hansen's Disease control program by integrating its activities practice and in the primary care (family doctors) in the general health services. Within all health system, we acknowledge that there are many skilled health workers engaged in Hansen's Disease control activities at all levels. However, poorly structured health system/inadequately funded makes this integration process slow and uneven throughout the country.
- 5. Research recommendations: Two main recommendations were made: (i) to build-up a research network to strengthen operational studies and also to bridge basic research with field priorities; (ii) the Brazilian independent U-MDT proposal was presented/discussed and considered a research priority by MoH. Another research proposal MDT-A was discussed and the MoH restated its previous position to use non-supervised regimens, as an exception, only in remote areas of the country.

Finally, the Brazilian Ministry of Health has an official Scientific Committee to support its policies and recommendations. The current members are: Joseney Raimundo Pires dos Santos—MoH; Gerson Fernando Mendes Pereira—MoH; Euzenir Nunes

Sarno—FIOCRUZ/MOH; Maria Leide Wand-Del-Rey de Oliveira—UFRJ; Celina Maria Turchi Martelli—UFGO; Sinésio Talhari—UFAM; Gerson Oliveira Penna—Brazilian Society of Dermatology; Norma T. Foss—Brazilian Society of Hansenology; Maria da Graça Souza Cunha—FUAM; Diltor Vladimir de Araújo Opromolla—ILSL; Heitor de Sá Gonçalves—Centro Referência D. Libânia/CE; Maria Madalena—SES/DF; Clóvis Lombardi—PAHO/WHO.

—Dr. Gerson Fernando Pereira, Director Brazilian Hansen's Disease Control Program

# Un nouvel atlas de la lèpre—the French version of "A new atlas of leprosy"

A new atlas of leprosy, by Drs. A. C. Mc-Dougall and Yo Yuasa, has been demonstrated to be a very useful material for teaching and self-learning of leprosy among health workers in the field. Now the Atlas has been translated into French by Dr. Pierre Bobin, and sponsored jointly for publication by the Sasakawa Memorial Health Foundation and the Association Française Raoul Follereau.

Copies of the French version Atlas can be ordered, free of charge, from the Association Française Raoul Follereau by post (Madame Bénédicte de Charette, Association Française Raoul Follereau, 31 rue de Dantzig, 75722 Paris Cedex 15, France) or by e-mail (direction-aide@raoul-follereau.org).

# ILA Global Project on the History of Leprosy

The ILA Global Project on the History of Leprosy convened three sessions at the 6th European Association for the History of Medicine and Health Conference in Oslo, 3–7 September 2003. The theme for the conference was "Health Between the Private and the Public—Shifting Approaches."

The first panel "Mapping the Geography of Leprosy: the Politics of Bodies and Boundaries" consisted of six papers which traced the connections between bodies determined by disease and spaces determined by policy. The histories and the medical geographies of leprosy in the United States,

Canada, Colombia, South Africa, and Eastern Nigeria indicated that while late nineteenth century and early twentieth century policies of exclusion, isolation, and segregation impacted on individual bodies, the same policies were instrumental in delineating society and the nation.

The second panel presented papers from Brazil. This panel considered leprosy as a public health issue. Initially it focussed on the proposals of the "Comissão de Profilaxia da Lepra" (conducted in 1915 and 1919) and the Inspetoria de Profilaxia da Lepra e Doenças Venéreas (established in 1920); then it described the influential policies adopted against leprosy in 1930 in the State of São Paulo that resulted in an authoritarian and arbitrary prophylactic model of fighting leprosy. Finally, the life of Adolpho Lutz and the controversies regarding leprosy transmission in Brazil were examined.

Then the panel on leprosy in India located the shifts and changes associated with leprosy over the 1850–2001 period viewing the disease from colonial medical, social and oral history perspectives. The first paper examined the nuances of colonial enumeration in western India. The subsequent papers focussed on the leprosy patient: firstly, in the period from 1900 to 1955 in Orissa, in eastern India and then from the point of view of oral evidence of leprosy patients.

The project also held the inaugural meeting of the history of leprosy academic network. Future strategies for the network include establishing an electronic discussion forum, encouraging the submission of papers to history of medicine conferences, and developing possible collaborations amongst members of the network as a result of the intention of the Wellcome Unit for the History of Medicine at Oxford to make the history of leprosy one of its priority research areas in its latest bid for funding from the Wellcome Trust.

#### **ABSTRACTS**

# Leprosy and its Meanings: the Body and Society. Jo Robertson

This paper considers the consequences of leprosy's accumulated representational his-

tory as its meanings circulate endlessly between individual bodies and within the complexities of the medical and the social spheres. The idea of the disease triggers off a whole range of extremely complex associations: not only is leprosy abhorred, it is also sentimentalised, exoticised, romanticised, and orientalised. In addition, leprosy is appropriated in different ways, often for political purposes, over time, so that the representational force of leprosy shifts, merges with other diseases and discourses, and seems to vanish, but inevitably reemerges reinforced with revivified symbolic resonance. In order to explore some of the reasons for the obdurate and unyielding imaginings attached to the disease, bearing in mind that these have very real consequences for people with leprosy, this paper draws upon Mary Douglas's argument that leprosy is used to contain and express social disruption and reorganisation. Trying to contain the representation of leprosy, that is trying to control the way it is used, is therefore, if not a futile, a never-ending task.

### The Leprosy Patient, Society and History: Orissa 1900–1950. Chandi P. Nanda and Biswamoy Pati

This paper begins by examining popular, adivasi (viz. tribal) perceptions of leprosy and the initiatives undertaken by the ruling chiefs of Keonjhar, including the structure of legitimacy and incorporation/cooption of adivasis by the princely state of Keonjhar. It then describes how the colonial health establishment located leprosy within a concern for public health, and delineates the ambiguities and inner conflicts related to leprosy interventions in Orissa within the colonial establishment. These conflicts resulted in a low priority being given to the disease, and demonstrate how, in many ways, colonial intervention reinforced the inherited perception of leprosy as god's curse. Finally, the paper examines the life of the people inside the leprosy asylum at Cuttack, (established in 1919), and unravels some of the complexities involved in the way they negotiated it. These negotiations were influenced by shifts and changes linked to discoveries related to the cure of leprosy in the 1920's, and were also reinforced by Gandhian efforts to work for the dignity of those affected by the disease.

While these developments opened up new possibilities, they nevertheless did not do away with the problem of "confinement." Viewed from the point of view of those affected by the disease, this suggests a continuity, that seems to be visible in post-colonial Orissa. In fact, as emphasised, the report of an inmate's suicide in 1953 demonstrates the agonised existence and alienation suffered inside the asylum.

### Nineteenth Century Indian Leper Censuses and the Doctors. Shubhada S. Pandya

[The word "leper" is used solely because of its historical accuracy; there is no intention to disparage people with leprosy].

This paper focuses on two instances of medical analysis of leprosy census data in 19th century colonial India: the first, the Bombay Presidency leper census of 1867 by Henry Vandyke Carter; the second, the national decennial censuses of 1871 to 1891 (in which lepers were also enumerated) by the Leprosy Commission, which visited India 1890 to 1891. The paper questions the relationship between the medical preconceptions about leprosy and their conclusions based on the analyses. It has been suggested that periodic counting, classification and categorization of the Indian population enabled British colonialism to "know" and control, its subjects. In this instance, enumeration of lepers was proposed by the authorities as a prerequisite for disease containment.

The Bombay Presidency Leper Returns of 1867 listed the name, age, sex, caste and place of residence of over 10,000 lepers, and also indicated whether or not a leper had a similarly afflicted relative. All castes were found to be prone to leprosy. Henry Vandyke Carter was already a supporter of the hereditary theory of causation when he set about his analysis. He invested the notion of the hereditary transmission with power over every character of leprosy revealed in the census returns, from widely varied regional and sub-regional prevalence rates, to variable sex ratios, to the rare instances where a great grand-parent was listed as a leper. He was undaunted by the inconvenient fact that over 80% of the listed lepers had denied a family history, attributing it to a reluctance on their part to admit the "truth." Like his colonial contemporaries who viewed Indians through the ethno-sociological prism of caste, Carter made the Indian leper "comprehensible" through his fixed place in the caste map and the customary practice of caste endogamy. In this scenario, the leper's body, burdened with the leprous seed from pre-history, inexorably shackled by caste exclusivity and caste endogamy, could never free itself of the hereditary "taint." Indian leprosy became a paradigm of biological determinism.

Bureaucrats supervising the decennial imperial census operations in the later decades of the 19th century were aware from the outset that the leper statistics that had been generated were, for various reasons, too flawed for definite conclusions to be drawn. The strongest member of the Leprosy Commission that visited India during the panic and lepraphobia engulfing Europe in the Damien aftermath, was Beaven Rake. He was exceptional in being an avowed skeptic of the contagion theory, even in the case of Damien. The Commission felt obliged to respond to alarmists who alleged that uncontrolled Indian leprosy posed an "Imperial Danger." In order to achieve their objective, the members showed fewer reservations than the bureaucrats about using questionable census statistics. They calculated leprosy trends in selected districts using anomalous figures, and demonstrated to their satisfaction that Indian leprosy was *not* increasing, and if anything, decreasing.

Thus in both instances, analysis of census data provided an avenue to embellish and legitimate the preconceived notions of the physicians about the nature of leprosy in India. Despite the official claim that leper censuses were necessary for disease control, the data generated never resulted in systematic measures towards this end in India.

### Meditation and Social Rehabilitation of Leprosy Affected? An Oral History Study of this Unique Project in Contemporary India. Sanjiv Kakar

The paper looks at the developments in leprosy intervention strategies in India during the last two decades, specifically at the success in leprosy control. This is substantiated by the decline in prevalence from 51 cases per 10,000 in 1981 to 4.2 per 10,000 in March 2002.

The intervention of MDT from the 1980's, with a very concrete message that leprosy is easily curable heralded a new era for leprosy control, cure and rehabilitation. The decline in prevalence and the large numbers of visibly cured patients combine to create a wholly different environment.

With a view to examining social rehabilitation, we ask to what extent these interventions have made a dent on public prejudice (urban and rural) against leprosy; whether prejudice continues to be directed against cured patients, (both with and without physical deformities); and we examine the situation of patients who are undergoing treatment, and of their families.

The paper looks at one Indian approach to social rehabilitation, the unique philosophy of the "Art of Living Foundation," which offers programs with yoga breathing and simple meditation to remove stress ("breathe out stress"), enhance self esteem, and increase self confidence and self reliance. Similar programs have already been offered in India and overseas for the visually challenged, for those who are socially deprived, for those involved with substance abuse and for prison inmates. (Information on this nonprofit foundation, which works with ECO-SOC of the United Nations, may be found on their website http://artofliving.org ). Oral History is used to document this leprosy and meditation project of the Art of Living Foundation, and, in the process, the uses of oral history are critically examined.

### The State, Physicians and Leprosy in Modern Colombia. Diana Obregón

In the early twentieth century, leprosy became an obstacle for the civilizing and modernizing project of the Colombian elites. The Colombian government, with the expert assistance of the medical community, started to take control of lazarettos, and physicians began to medicalise leprosy. The government enacted extremely severe laws in order to control lazarettos. Their main purpose was to block the social and economic links between the town-lazarettos and the external world. The rationale for this was to arrest the spread of the disease. The government also attempted to expel from the lazarettos a large population free of leprosy, mainly composed of relatives of leprosy sufferers, who were confined within

leprosaria. The period in which the Colombian State began to control leprosaria coincided with the formation/modernization of the Colombian State. Refinement of the arts of government, definition of citizenry (for example, through the establishment of such obligations as denouncing victims of leprosy), and exclusion of a social group defined as "lepers" came together. A diseaseapart approach was institutionalized by establishing two distinct domains of public health: a special official agency was set up for leprosy, while all other diseases were handled through a different department. However, in spite of the efforts of physicians and the government, leprosy was not thoroughly medicalized. Patients actively opposed compulsory segregation with attempts at converting lazarettos into prisonasylums. Non-leprosy sufferers remained at the lazarettos, and scientific medicine competed with popular healers, herbalists, and charlatans within these institutions. After all, these had been ordinary towns until the state took control of them in the early twentieth century. Since leprosaria were not hospitals, physicians were unable to order treatments. The medicalization of leprosy was only partially accomplished because of its demarcation as a disease-apart.

# The Spaces of Exclusion in American Public Health: The Case of Leprosy. D. George Joseph

"Only when history and geography are integrated," wrote Erwin Ackerknecht, "will they reveal a genuinely true picture of conditions are they are" (Geschichte und Geographie der Wichtigsten Krankheiten, 1963, p. 2). Historians of medicine, however, have largely neglected geography in their social studies of disease and public health, and only recently, have spaces and places emerged as a discursive and analytical category among historians. The anthropologist Mary Douglas has described the human experience with leprosy in terms of the associations of moral contamination, defilement of the physical body, and pollution of the environment. In bringing together Ackerknecht's idea of place in historical understanding with Douglas' ideas about the stigma of leprosy, it becomes clear that discussions of geography and space-real and perceived, whether the physical space of the sufferer's body or the physical grounds of the leprosarium or the physical and social exclusion from the community sufferers endure-must enter into any complete examination of leprosy's history.

This paper considers American efforts to control leprosy in the late nineteenth and early twentieth centuries in three different geographic and socio-political contexts: (i) Penikese Island, Massachusetts, reflecting the attempt in one locality to segregate patients before the creation of a national program of leprosy control; (ii) Carville, Louisiana, emblematic of a federal program of leprosy quarantine; and (iii) Molokai, Hawaii, reflecting acts of exclusion and segregation within a wider imperial agenda. A comparison of the three sites reveal that the leprosaria were spaces in which its residents were subject to exclusion, classification, and inquisition and that there was a fluid exchanges of ideas and practices between the geographic and socio-political contexts. The leprosaria also served as "moral architecture" as these attempts at leprosy control involved the physical and social re-ordering of bodies and geographic spaces to achieve their social and medical goals of eliminating the dangers of contagion and delineating the boundaries and the distance between the sick and healthy, the dangerous and safe, and the pure and impure.

# Isolation and social exclusion within a segregated society: a case study of Westfort Leper Institution, South Africa, 1898–1948. Simonne Horwitz

Seven miles west of Pretoria, South Africa's administrative capital, on a tract of 1200 acres of semi-arid land, lies the remains of the Westfort Leper Institution. The new millennium saw plans being put in place to convert the shell of the leprosarium into a top tourist attraction with a casino, lavish hotel, and an adjoining community housing project. This use of the site, as a vibrant and inclusive social center, is in sharp contrast to a history that was marked by isolation, segregation, and social exclusion. This paper argues that, during the first half of the twentieth century, segregation and exclusion at Westfort Leper Institution operated on multiple levels. Not only were patients isolated from the outside world, but they were internally segregated according to gender, class, and race. Through detailed case studies, this paper demonstrates how these factors influenced the daily lives of those living with the disease, the way in which they were managed, and importantly, their access to facilities and resources. These divisions were highlighted by the fact that Westfort catered for male and female patients and was one of only two multiracial government-run leprosaria in South Africa. Unlike the leprosarium on Robben Island, Westfort was planned and built under a Boer and not a colonial government that, as this paper suggests, lead to a very different political and historical trajectory. With the closure of the leprosy asylum on Robben Island in 1931, Westfort became the only remaining multiracial leprosy asylum during the critical period when South Africa was becoming an increasingly racially segregated state. An examination of the institution during this period shows that segregation and social exclusion were increasingly seen not only in the way patients were treated and in the leprosy legislation, but in the physical construction and reconstruction of the institution, hence reinforcing the focus on segregation as opposed to curative approaches to the disease.

#### Leprosy Control and Medical Politics in Ogoja Province, Nigeria, 1945–1967. John Manton

This paper attempts to reproduce, in outline, a discursive space in which ambiguities relating to leprosy and its control, within the northern and eastern sections of colonial Ogoja Province, Nigeria, can be fielded. Leprosy control in this area was administered on behalf of the Nigerian government by the Roman Catholic Mission (RCM), through a series of central settlements and satellite segregation villages, the first of which were founded in 1945. It is difficult to convincingly reconstruct either a history or a geography of leprosy prevalence in Ogoja Province, an area largely marginal to British colonial concerns, whose demographic and linguistic patterns were poorly understood by administrators and missionaries alike. One of the main purposes of this paper, then, is to outline a cognitive map of Ogoja Province according to which the confusing diversity of statements about leprosy can be interpreted as

constituting and reflecting a political arena encompassing the desires and needs of leprosy sufferers, African communities, Catholic missionaries and British colonial administrators.

How were colonial and missionary misapprehensions of Ogoja politics and society manifested in the evolution of leprosy control? The contention surrounding issues of taxation, wages, markets and charging for medical services, and the extent to which these issues, incompletely distinguished one from the other, emerged as facets of essentially the same administrative problem, provides one of the clearest indications of the epistemological crises at the core of colonial medicine and administration in Ogoja. I examine the social construction of destitution with regard to colonial expectations of customary family duty, the issue of payment for leprosy services and the evolution of competing and accompanying RCM-run "clean" dispensary services, and the recurrent theme of leprosy-patient access to local market facilities.

This paper exemplifies a broader concern with role of the RCM, and of leprosy control, in the making of political forms for the administration of Ogoja in the context of the post–1945 formation of development ideologies, policies and agencies. As with much in the administration of colonial West Africa, these policies were characterised by a surprising lack of control. The porosity of leprosaria, as physical, conceptual and organisational spaces mitigated the force of compulsion, the success of case-finding and the development of research, acting to problematise the relation of leprosy control to its outcomes.

#### Contagion, Containment, and Exclusion: The Spatial Governance of Leprosy and Chinese Immigration in British Columbia. Renisa Mawani

This paper explores the spatial and racial dimensions of leprosy management in late nineteenth and early twentieth century British Columbia (BC). In 1891, Victoria's Medical Health Officer detected the first cases of leprosy when five Chinese men believed to be afflicted with the disease were found in the City's Chinese quarters. In response to pervasive and growing local fears about "Chinese leprosy," the City responded

quickly by creating a containment facility on D'Arcy Island, a small island located seventeen miles north-east of Victoria. Operative between 1891 and 1924, the island became a quarantine and detention facility that housed a total of 49 men, 43 of whom were Chinese. Although the lazaretto was intended to be a therapeutic and corrective space, island residents were offered virtually no treatment and were sent to the island to be spatially contained and in some cases, exiled from the nation through deportation orders. Through a detailed examination of government correspondence, newspaper coverage, legislation, and other archival sources, I explore the management of leprosy on D'Arcy Island and consider the ways in which anxieties about hygiene, sanitation, and public health were tied up with ongoing concerns about Chinese immigration and the protection of national borders. Although government officials—at the local, provincial, and federal levels-responded to escalating anxieties about leprosy through a number of repressive and coercive strategies (ranging from quarantine detention, to immigration restrictions, and in some cases deportation orders), I argue that the management of "Chinese leprosy" was always geographically configured. Quarantine, segregation, and deportation were all legally mandated spatial techniques that set the physical and discursive parameters of national in/exclusion. But while the care and control of leprosy was endeavored through particular geographies of exile, I suggest that D'Arcy Island must be contextualized within the broader climate of Chinese exclusion that shaped BC at that historical moment. Thus, the spatial management of leprosy was only one dimension of a wider political agenda aimed at constructing a provincial and national identity, by physically separating Chinese from European, diseased from healthy, and foreigner from citizen.

### The Spatial Politics of an African Leprosarium. Harriet Deacon

Historically, the treatment of people identified as having leprosy has been heavily reliant on practices of exclusion from society on the basis of gender, race and class segregation within institutions. In colonial South Africa, people with leprosy were stereotyped

as sexually deviant and black and until the 1890's only the destitute entered leprosaria. This paper provides a geographicallyinformed analysis of the Robben Island leprosarium, established in 1846 and closed in 1931. It was an early example of a state-run leprosarium under medical supervision that housed under a hundred destitute, mainly black, voluntary patients, until compulsory segregation in the 1890's brought in five or six times that number, and more white patients. The paper argues that gender segregation had a greater impact on the Robben Island institution than any other form of patient segregation. All female leprosy patients were removed from Robben Island in 1871. This was not only because doctors and officials needed to show that they were preventing hereditary transmission of the disease, but because they could not use force to prevent contact between the sexes on the island without appearing illiberal. In the 1880's, when the female leprosy patients were returned to the island, heredity was still accepted as a possible mode of transmission in spite of the discovery of the *lepra* bacillus. Fear of the transmission of the disease to whites (by heredity as much as by contagion), and especially through sexual contact, was more important in justifying stricter segregation laws in the 1880's and 1890's than theories of contagion alone. Theories of contagion changed over time, too. In the early 1890's, the key path of infection was thought to be the physical bodies of leprosy patients: once the leprosy wards were empty, they could be reused. By the 1930's, however, the environment of the leprosy patient was also considered tainted. Empty wards had to be totally destroyed by fire and demolition.

### Leprosy as a public health issue: the Comissão de Profilaxia da Lepra (1915–1919) [Brazil]. Laurinda Rosa Maciel

This paper investigates activities and discussions developed by the members of the "Comissão de Profilaxia da Lepra," between 1915 and 1919, that led to proposals concerning leprosy prevention and control. Subcommittees were established by the Commission with existing social and political concerns in mind. Leprosy and occupations, leprosy and housing, leprosy and iso-

lation, leprosy and marriage, leprosy and immigration and leprosy transmissibility were identified as topics for investigation. These sub-committees were composed of scientists from different institutions who, in this climate, were able to exchange ideas and theories. The main conclusion derived from the work of the Commission was that it would be impossible to continue to take care of leprosy without the engagement of an official institution, related to the Ministério da Justiça e Negócios Interiores. After the final discussions, the Commission presented several suggestions to the Government concerning leprosy care. One of the most relevant was the need to create an office for managing public health and leprosy control in Brazil, considering that the disease was probably a public health issue. In 1920, the Inspetoria de Profilaxia da Lepra e Doenças Venéreas was created, establishing a link between public health, leprosy, and venereal diseases. This study reveals diversified aspects concerning the creation of the first office for disease control, emphasizing the problem of leprosy in Brazil. This text is part of a larger research project dedicated to the history of leprosy in Brazil between 1920 and 1962.

# Prophylaxis and Violence: Leprosy and Public Health Policies in Brazil (1930–1960). Yara Nogueira Monteiro

At the beginning of the twentieth century, the eradication of epidemics and the control over endemic diseases were regarded as important issues for economic development in Brazil. At that time, however, leprosy represented a serious problem to be solved. For example, in 1930, the State of São Paulo, the most developed and richest of the country, adopted policies to fight leprosy, thereby influencing the entire nation. The prophylaxis policy of São Paulo was grounded on: (i) "The Norwegian Model," which recommended the isolation of the leprous; (ii) eugenics ideals, which proposed the exclusion of the "undesirables"; and (iii) "The Campaign Model," which was inspired by military organization. Based on those concepts, prophylaxis started to be considered as a battle, and the disease, as the enemy to be exterminated. Each and every sanitary measure represented a struggle, the consequences of which resulted in

the sacrifice of individual rights to the wider demands of the community. Subsequently, the compulsory isolation of all the leprous was enacted, without any consideration of the manifestation or stage of the disease, or gender or age, and the Department of Prophylaxis of Leprosy was empowered with a strict, hierarchical and centralized organization. The prophylaxis measures continued in São Paulo until 1967 against international recommendations and even against the Brazilian legislation, which had already abolished isolation in 1962.

This study is based on the legislation on leprosy, specialized literature, minutes of medical conferences, protocols from the prophylaxis service and medical records. The aim of this paper is to analyse how the State, in the name of preserving public health, was able to intervene in every aspect of the life of the sick, to the extent of interfering with their families, affecting healthy parents, partners and children. Our objective is, as well, to discuss how the authoritarian and arbitrary prophylactic model of fighting leprosy, adopted in São Paulo, was socially and politically welcomed in the country.

### Adolpho Lutz and the Controversies Regarding Leprosy Transmission in Brazil. Jaime Larry Benchimol and Magali Romero Sá

This paper is part of a research project, Adolpho Lutz and the history of tropical medicine in Brazil, aimed at producing a critical and annotated edition of the scientific work and unpublished correspondence of the Brazilian scientist. It also intends to produce a biographic essay and a review of the history of tropical medicine during Lutz's professional years.

A world pioneer in the scientific study of the microbial agent of leprosy and of its clinical and epidemiological aspects, Lutz emphatically defended the theory that the disease was transmitted by mosquitoes.

During his early study years in Switzerland and Germany, Adolfo Lutz (1855 to 1940) had already published papers in zoology and clinical and therapeutic practices. The fundamental study he later developed on *Ancylostoma duodenale*, published in Leipzig in 1885, contributed to the Brazilian helminthological research agenda in

syntony with the theoretical and methodological practices of German, British and French microbiologists and parasitologists of the time.

In 1885 to 1886, Lutz travelled to Hamburg to study with Paul Gerson Unna, one of the foremost German dermatologists. During that time, he investigated the morphology of germs related to several skin diseases, having even proposed a new classification for the agent of leprosy, removing it from the genus Bacillus and re-classifying it as *Coccothrix leprae*. Lutz's study was facilitated by a new staining method, developed by him and improved by Unna. In 1889, the German dermatologist recommended his most prominent student as physician-in-chief of the Leprosarium at Molokai Island, Hawaii. Lutz worked there for nine months, after which he continued his research on leprosy in his own private clinic for more than a year. From Hawaii, he moved to California in 1892, spending some months there, before his return to Brazil.

In 1893, Lutz assumed the direction of the Bacteriological Institute in São Paulo. By that time, medical entomology—especially the study of mosquitoes—became one of his main interests. He developed research in both urban and forest yellow fever (which he foresaw), as well as in forest malaria and the transmission of leprosy by mosquitoes. Since his time in Hawaii, Lutz had been fostering the notion that leprosy was transmitted by mosquitoes. He continued research on the subject when he moved to Instituto Oswaldo Cruz in 1908, having passionately defended this idea in scientific meetings and medical commissions until his death in 1940.