

Letter: Leprosy and Paleopathology – exchange of experience Correspondência: Lepra e Paleopatologia – intercâmbio de experiências Patrícia DEPS<sup>1</sup>

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### Background

I was a medical student in 1990 when I visited the Alzira Bley Educational Establishment while training in pediatrics. At that time, I was able to visit the nearby Colony Hospital Doctor Pedro Fontes, where leprosy patients were segregated from around 1937 to 1979. Since then I have returned to the Colony Hospital many times looking for answers about that enigmatic, infectious disease called leprosy. The patients considered themselves exleprosy patients because they were treated according to the WHO recommendations and were theoretically "bacilli free". However, many of the patients told me their stories and this uncovered a wealth of information about how their leprosy was diagnosed and treated, as well as giving me an understanding of their lives and their expectations for the future.

It was these visits to the Colony Hospital that first sparked my interest in leprosy and my interest continued to grow following my graduation. So much so that I have now spent more than two decades studying this fascinating and amazing topic.

I graduated in medicine in 1993 at the Universidade Federal do Espírito Santo (UFES), in Vitória (Brazil), then moved to São Paulo for training in

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Dermatology at São Paulo Hospital/ University Federal de São Paulo. In São Paulo I met the Brazilian Professor Diltor Vladimir Araújo Opromolla, one of the world's leading leprosy experts. Professor Opromolla subsequently supervised my PhD project and he shared with me a little of his huge knowledge of leprosy.

In 2001 I became a member of the Sociedade Brasileira de Hansenologia (Brazilian Society of Leprosy), which allowed me to meet colleagues who share my interest in leprosy.

I returned to the UFES in 2002, now as a Professor of the Department of Social Medicine, where I was invited to be a supervisor in the Post-Graduation Program of Infectious Diseases.

In that post I have supervised many Masters and PhD students over the last 13 years. During this time, I have continued to learn more about leprosy, medical psychology, human rights, medical humanities, archeology and paleopathology.

# Discovering a new Science - Paleopathology

Human Paleopathology is a relatively new Science and studies the history of diseases through the examination and interpretation of biological remains and other sources. Paleopathology is a multidisciplinary science, and teams usually include historians, physicians, nurses, dentists, archeologists, biologists, geologists, and other specialist areas of knowledge working together. Diagnosis in paleopathology is often made by observing alterations in the skeletons, bones and teeth. For a variety of historical, clinical, epidemiological and cultural reasons, the history of diseases like leprosy, syphilis and tuberculosis has caught the attention of the paleopathologists.

In 2014 I was invited by Professor Keith Manchester from the University of Bradford in the United Kingdom to take up the post of Honorary Visiting Researcher in The Biological Anthropology Research Center. The main objective of that post was to learn more about paleopathology and to help make a link between clinical leprosy and bone lesions. I was able to help improve the understanding of bone findings in medieval skeletons according to Ridley-Joppling clinical and immunological classification. It might seem quite a complex goal for a simple visit, but reaching that goal could unveil an



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extremely important hidden point about the mysterious decline of leprosy in the end of the medieval period in Europe.

The skeletons I studied at the University of Bradford were excavated in Chichester (UK) in 1986-87 and in 1993. It is believed that the individuals were probably buried in the 12th century. Information about that excavation was published in detail in the book entitled 'Lepers Outside the Gate: Exacavations at the Cemetery of the Hospital of St. James and St. Mary Magdalene, Chichester'.<sup>2</sup>

The history of diseases can be answered analyzing human remains and artefacts dated to a specific time. Those medieval skeletons certainly raised many questions. Many of them were diagnosed with leprosy 700-800 years ago and I found the study of those individuals to be a great and incredible experience.

While interested in them from a medical point of view, I also found myself wondering about more human questions. How did these individuals live? What did they eat? Who looked after them? How were they treated? How to answer those questions about them? How accurate is the information obtained from the bones after so many years?

As my concerns about the lives of those medieval patients grew, I was happy to accept an invitation to join the Meeting of the Medieval Group - Prof. Axel Muller from the Institute for Medieval Studies and Prof. Iona McCleery from the School of History, University of Leeds. The first meeting I attended was a presentation called "Fifteen shades of brown: Making Saltpetre, experimental archeology, and being historically authentic". This was a fantastic experience and the archeologists simulated gunpowder production in medieval Denmark.

I also had fruitful discussions with Prof. Keith Manchester, in the BARC, University of Bradford, about bone and radiological alterations of leprosy, examining the collection of medieval skeletons. Manchester is a very intelligent researcher, a retired physician, and his concerns about bone lesions in leprosy demonstrate a very advanced understanding of the subject.

<sup>&</sup>lt;sup>2</sup> MAGILTON, J.; LEE, F.; BOYLSTON, A. Lepers Outside the Gate: Exacavations at the Cemetery of the Hospital of St. James and St. Mary Magdalene, Chichester 1986-87 and 1993. York: Council for British Archeology, 2008, 294p.



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# Sharing and Spreading Experiences

Returning to Brazil and to my post in Vitoria, I coordinated the First Meeting of Paleopathology at UFES. Professor Manchester had suggested Professor Charlotte Roberts from Durham University as a main speaker. She is an expert in paleopathology with a long list of manuscripts and books published.

The First Meeting of Paleopathology of the UFES took place from 19-22 August 2015. Professor Roberts was the international speaker. Important names in Brazilian paleopathology also came for the event, including Professor Sheila Maria Ferraz Mendonça de Souza and Shênia Novo from the Escola de Saúde Pública (FIOCRUZ), Henrique Valadares, Valdirene Ambiel and Veronica Wesolowisk from Universidade de São Paulo, Professor Ricardo da Costa e Igor Erler from UFES, Professor Hélio Angotti Neto from UNESC Centro Universitário do Espírito Santo. The First Meeting of Paleopathology at UFES was a fantastic event with an attentive audience.

Local enthusiasts in paleopathology joined with a few archeologists and historians and decided to create the Group of Studies of Archeology (Grupo de Estudos de Arqueologia - GEA) officially registered at the Department of Social Medicine at UFES. I was happy to accept the invitation to be the first coordinator of this group. The GEA will hold scientific meetings monthly and is currently organizing the First Congress of Archeology at the UFES planned for October 2016.

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Charlotte Robert's visit to Vitória, Brazil, during the First Meeting of Paleopathology at UFES.

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## **Bibliography**

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