

CURRICULUM VITAE

Mark Spigelman.

Date of Birth: 4/11/41

DEGREES:

1965 MB BS. Sydney University
1971 FRCS. Royal College of Surgeons London
1994 B Sc Institute of Archaeology UCL London

INTERESTS:

Human remains specialist/ anthropologist, researching the history and development of microbial diseases utilizing microbiological techniques on Ancient human remains. Previously a consulting surgeon for 25 years in Sydney Australia.

EXPERIENCE:

Present Visiting Surgeon: Royal Prince Alfred, Sydney Homeopathic, Marrickville District Hospital and The Waverley War Memorial Hospitals.

1998-02 Human remains specialist Luxor and Helwan excavation Egypt with the Macquarie University Sydney Australia.

1997-98 Human remains specialist: Tel Rehov Hebrew University Institute of Archaeology Jerusalem Israel.

1997 Anthropologist with the Caesarea Combined Expedition. Caesarea Israel with the University of Maryland.

1996 Human remains specialist Saqqara excavation Egypt with the Macquarie University Sydney Australia.

1995 Anthropologist Karkur excavation Beer Sheva University Israel.

1993-96 Human remains specialist at Tel Beit Shean Hebrew University Institute of Archaeology Jerusalem Israel.

1986-90 Member of the Medical Board of NSW.

1984-90 Director NSW Hospital Planning Authority.

1982-92 Roster of experts on the Commonwealth Health Secretariat.

1974-91 Clinical lecturer and final year examiner at Sydney University Medical: School in Surgery.

CURRENT APPOINTMENTS: APPOINTMENTS:

1994 - Hon Research Fellow UCL Institute of Archaeology London.
1995 - Research Fellow UCL Medical School Dept of Bacteriology.

- 1995 - Visiting Fellow Kuvin Center for the study of Infectious & Tropical Diseases and Ancient DNA Hadassah Medical School Hebrew University Jerusalem Israel.
- 1997 - Visiting Professor UCL Medical School Dept of Bacteriology: In microbial Ancient DNA.
- 1998 - Member of the Advisory Panel Manchester Mummy Tissue Bank.
- 1998- Member of the Hebrew University Orion Center for the study of the Dead Sea Scrolls- Science Group.
- 1999- Founder member of the Hebrew University of Jerusalem Science and Antiquity Group.
- 2000 - Visiting Professor Hebrew University Medical School Kuvin Centre
- 2000 - Chairman of the 6th International aDNA Conference Jerusalem July.

PUBLICATIONS (SINCE 1993):

Papers:

- 1993 Spigelman, M and Lemma, E. The use of the polymerase chain reaction to detect *Mycobacterium tuberculosis* in ancient skeletons. International Journal of Osteoarchaeology; 3; 137-143.
- 1994 Rafi, A., Spigelman M., Stanford, J., Donoghue, H., Lemma E. and Zias J. DNA extraction and amplification using PCR of *M leprae* from a bone from 600 A.D. International Journal of Osteoarchaeology; 4 183. 1-4.
- 1996 Spigelman M. The archaeologist and ancient bio-molecules: Field sampling strategies to enhance recovery. Papers from the Institute of Archaeology. 7: 69-74.
- 1997 Fricker, C., Spigelman, M. and Fricker, E. The detection of *Escherichia coli* DNA in the ancient remains of Lindow Man using the polymerase chain reaction. Letters in Applied Microbiology. 24: 351-4.
- 1997 Spigelman M. 1997. Circumcision in ancient Egypt Ritual or Medical necessity. Bulletin of the Australian Center for Egyptology. 8: 90-100.
- 1998 Spigelman M and Bentley P. Bilateral congenital hip Dislocation: Skeletal changes in a Skeleton from the 18th Dynasty Saqqara Egypt. Paleopathology Newsletter. 102: 6-12.
- 1998 Donoghue HD, Spigelman M, Zias J, Gernaey-Child AM, Minnikin DE. Mycobacterium tuberculosis complex DNA in calcified pleura from remains 1400 years old. *Lett Appl Microbiol*. 1998 Nov; 27(5):265-9. PMID: 9830142; UI: 99047834
- 1999 Spigelman M and Bentley P. Cancer in ancient Egypt. Journal of Paleopathology. 9:(2) 107-14.

Papers (cont):

- 2000 Ubelaker D H., Jones E B., Donoghue H D. and Spigelman M. 2000 Skeletal and Molecular Evidence for Tuberculosis in a Forensic Case. Anthropologie. XXXVIII/2: 193-200.
- 2000 Ian Barnes, John Holton, Dino Vaira, Mark Spigelman and Mark Thomas. Dec 2000. An assessment of the long-term preservation of the DNA of a bacterial pathogens in ethanol-preserved archival material. Journal of Pathology 192: 554-9.
- 2001 Donoghue H, Holton J and Spigelman M. 2001. PCR primers that can detect low levels of *Mycobacterium leprae* DNA. Journal of Microbiology. 50,177-82.
- 2001 Spigelman M and Donoghue H. 2001. Unusual Pathological Condition in the lower extremities of a skeleton from ancient Israel. American Journal of Physical Anthropology. 114(1):92-3.
- 2001 Mark Spigelman Ian Barnes, John Holton, Dino Vaira, and Mark Thomas. Long-term DNA survival in ethanol-preserved archival material Annals of the Royal College of Surgeons of England July 2001
- 2001 Rothschild B., Martin L., Lev G., Bercovier H., Greenblatt C. and Donoghue H.D, Khila G., Spigelman M. and Brittain D. *Mycobacterium-tuberculosis*-complex DNA from an extinct bison dated 17,000 years before the present. 2001. Clinical Infectious Diseases. 2001 Aug 1;33 (3):305-311.
- IN PRESS Spigelman M and Donoghue H. 2001. The study of ancient DNA answers a Paleopathological Question. (In press BAR to be published in Feb 2002).
- IN PRESS Spigelman M., Donoghue H, Gladkowska-Rzeczycka J. and Marscik A. 2001. *Mycobacterium leprae* in archaeological specimens. (In press BAR to be published in Feb 200).
- IN PRESS Towards a "medical archaeology" Charles Greenblatt & Mark SpigelmanASHA (In press -J of American Society of Historical Archaeology)

Letters:

- 1993 D Brothwell and M Spigelman. Drugs in ancient populations. The Lancet; 1st May, 341:1157.
- 1994 Spigelman M. 21st May 1994 Studying ancient DNA. British Medical Journal; 308: 1370.
- 1994 Rafi, A., Spigelman, M., Stanford, J., Donoghue, H., Lemma E. and Zias J. 28th May 1994. *Mycobacterium leprae* from ancient bones detected by PCR. The Lancet; 343:1360-1.

Letters (cont):

- 1994 Spigelman M. Ancient DNA, Annals of the Royal College of Surgeons of England; 1994 76:351.

Books and Chapters:

- 1995 Spigelman M., Fricker C and Fricker E. In C Turner and R.G.Scaife (eds) Bog Bodies New Discoveries and New Perspectives. Extracting DNA from Lindow Man's gut content. Modern technology looking for answers from ancient tissues. British University Press. 59-61.
- 1999 M Spigelman & C Greenblatt; A guide to digging for pathogens. In Digging for Pathogens. Ancient Emerging Disease-Their evolutionary, Anthropological and Archaeological Context. C Greenblatt (ed) Balaban Israel. 19;99 345-63.
- 1999 Donoghue H, D., Uberlaker, DH. and Spigelman M. The use of Paleomicrobial techniques in a Current forensic case. In Tuberculosis Past and Present Palfi G, Dutour O Deak J and Hutás (eds). Golden Book publishers Hungary. 361-8.
- 1999 M Spigelman and H. D. Donoghue. Mycobacterium tuberculosis DNA in Archaeological Specimens. In Tuberculosis Past and Present Palfi G, Dutour O Deak J and Hutás (eds). Golden Book publishers Hungary. 361-8.
- 1999 Pap, I., Jozsa L., Bajzik, G., Repa, I, Lakhani, S.R., Donoghue, H.D and Spigelman, M. 18-19th century tuberculosis in naturally mummified individuals (Vac Hungary)In Tuberculosis Past and Present Palfi G, Dutour O Deak J and Hutás (eds). Golden Book publishers Hungary. 419-28.

In prep/ Press:

- n.d. Karkur in the Negev Israel Skeletal Survey with J Zias and the Ben Gurion University. Dr Pau Figueras(in prep).
- n.d. Also chapter - H.D. Donoghue, M. Spigelman, J. Zias , A.M. Gernaey-Child and D.E. Minnikin. 1998. Demonstration of Mycobacterium tuberculosis complex DNA in calcified pleura from remains 1400 years old.
- n.d. The Tomb of the Shroud From Akeldama in Jerusalem.(in prep)

SITE REPORTS:

Published:

Teti Cemetery at Saqqara Tomb of Nikauisisi. Prof Kanawati Macquarie University and M. Abder-Raziq.

In Prep:

- 1991-6 Beit Shean Israel Skeletal survey, with Institute of archaeology Jerusalem Prof Ami Mazar(in prep).

In Prep (cont):

- 1994-5 Karkur in the Negev Israel Skeletal Survey with J Zias and the Ben Gurion University. Dr Pau Figueras(in prep).
- 1996 Saqqara Egypt Skeletal Survey Tomb of Inw-minw with the Macquarie University Sydney Australia the Australian Center for Egyptology. Prof Naguib Kanawaty. Skeletal survey(in prep).
- 1996 Saqqara Egypt Skeletal Survey Tomb of *Amenemheb Amenemone*. with the Macquarie University Sydney Australia the Australian Center for Egyptology. Dr Boyo Ockinga. Skeletal survey(in prep).
- 1997 Tel Rehov Israel site report on Skeletal remains(in prep).
- 1998 report on a shaft bony remains from Luxor Egypt.

VIDEOS TV PROGRAMS:

- 1) BBC TV: Horizon: Bones of Contention 23/1/95.
- 2) Tomorrows World BBC1. The Hunterian Museum and Bacterial DNA 23/2/95.
- 3) 1998- Video for the Nicholson museum- Forensic examination of three mummies.
- 4) 2000- Ancient Autopsies for the Discovery channel.
- 5) Quatum ABC Mummies 29 March 2001.
- 6) 2002- ITV UK The Tomb of the Shroud From Akeldama in Jerusalem.