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## 看見寄生蟲—— 萬巴德絲蟲研究中的科學實作

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英國醫師萬巴德在一八七〇和一八八〇年代於中國廈門對絲蟲病進行一系列研究，發現了蚊子是絲蟲的中間宿主。這個研究發現是萬巴德醫學生涯中最重要的科學成就，對日後熱帶醫學與寄生蟲學的發展有深遠的影響。本文探討萬巴德此一研究之科學實作，分析他蒐集研究材料、製作玻片樣本，以及從事顯微鏡觀察所運用的物質技術、社會技術與研究技能。此外，本文也檢視中國助手在萬巴德研究中所扮演角色，分析他如何訓練與使用助手進而獲得大量研究材料與資訊，成功擴大其研究規模並因而發現絲蟲週期性現象。顯微鏡對於當時的寄生蟲學研究有很大重要性，然而，成功的顯微鏡觀察依靠的不只是高倍率顯微鏡與觀察者敏銳的視覺而已，還需要一整套科學實作的支持，才有可能在顯微鏡下看到寄生蟲。

**關鍵詞：**寄生蟲學 熱帶醫學 技術 技能 助手

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## Seeing the Parasite: Scientific Practices in Patrick Manson's Filarial Research

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In the 1870s and 1880s, British physician Patrick Manson conducted a series of parasitological research experiments at the treaty port of Amoy in southern China. He discovered that the mosquito is the intermediate host of the human filarial worm. This scientific breakthrough forged a new research direction for parasitology and had a profound impact on the development of tropical medicine as a field of specialty. In this paper, I investigate the scientific practices which Manson employed in his filarial research, analyzing the research methods as well as the social and material technologies which he used. I also examine the role played by Chinese assistants in his research. I discuss the ways Manson trained and utilized his Chinese assistants, and argue that he relied on his assistants to procure ample amounts of research material and observational data which enabled him to enlarge the scale of his research and eventually led to his discovery of filarial periodicity. Using the study of Manson's filarial research as a basis for discussion, I argue that the successful analysis of parasites under the microscope depends not only on the researcher's ability to make astute visual observations but also on the implementation of a series of scientific practices.

**Keywords:** tropical medicine, parasitology, technology, skill, assistants