

Blue plaque microbiology

(Martin Adams)



Marking sites associated with notable people or events is an estimable and widespread practice. London's Blue Plaque programme is said to be the oldest in the world – introduced in 1867 by the Royal Society of Arts and now run by English Heritage. Today there are more than 900 such plaques in London, revealing to the observant passerby such gems as the fact that George Frederick Handel and Jimi Hendrix would have been next door neighbours in Brook Street, but for the passage of 200 years.

Microbiologists are not overly represented by plaques, though Sir Alexander Fleming boasts two: one on his Chelsea home and the other on St Mary's Hospital, Paddington, where his laboratory is also preserved as a small museum. In fact the penicillin story as a whole is quite well covered. Ernst Chain has one on his Wimbledon home and the City of Oxford's blue plaque scheme has been admirable in honouring the crucial work done there. Two were unveiled in 2018, commemorating the first isolation and purification of penicillin at the Sir William Dunn School of the University of Oxford, and its first use at a former outpatients building of the Radcliffe Infirmary. The latter supplements an earlier plaque in the main entrance hall of the hospital. Norman Heatley, often an unsung hero of the penicillin story, also has a plaque on his Oxford house, unveiled in 2010. For Howard Florey though, the leader of the Oxford penicillin team, it doesn't stop there; he has plaques in his native Australia as well: one in South Australia (he was born in Adelaide) and another in Florey, a suburb of Canberra named in his honour.

Despite this plethora of plaques, it is probably still true to say that the role of Florey, Chain and Heatley in the development of penicillin is largely eclipsed in the public's perception by that of Fleming. His initial discovery at St Mary's in 1928, the result of chance contamination of a plate of staphylococci with spores of *Penicillium notatum*, is part of the popular history of science, as well as a fine example of Pasteur's dictum that 'chance favours the prepared mind'. The *Penicillium* spores that infected Fleming's plate most probably came from the mycology lab

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of C. J. La Touche, a floor below Fleming's, where they were isolating and identifying moulds from the homes of asthmatics at the time. This view has not gone unchallenged however. Across the road from Fleming's lab the landlord of the Fountains Abbey public house used to claim that his pub was the source of the spores, probably little realising the bad light this might shed on his stewardship of its beer and food. To settle this question at the bar of history, so to speak, I have visited the premises and can declare that it was most agreeable with no swirling fug of spores or mycelial carpet underfoot.

Fleming worked in the Inoculation Department at St Mary's run by Sir Almroth Wright. Wright was an advocate of harnessing the immune system to prevent and treat infectious disease through vaccination and immunotherapy. He was a towering and controversial personality in the medical world of his time. A prodigious intellect, he had studied medicine at Trinity College, Dublin while gaining a first in modern languages at the same time. He held strong views, fiercely expressed, once saying 'I make it a principle never to write anything that won't give offence to somebody'. He was vehemently misogynistic; opposing women's suffrage and professional advancement. He wrote a book on the subject: *The unexpurgated case against woman suffrage* and a letter to the Times in March 1912 which reading today makes for toe-curling embarrassment at the ideas expressed. Somewhat surprisingly considering his views, he was a friend of the playwright George Bernard Shaw and is characterised as Sir Colenso Ridgeon in Shaw's play 'A Doctor's Dilemma'. He also features prominently by name in Shaw's lengthy introduction to the play.

Modesty and diplomacy were not his strong suits and Wright accumulated enemies throughout his career. To some surprise, not being a military man, he became Professor of Pathology at the Army Medical School (RAMC) near Southampton in 1892, ahead of Sir David Bruce who was an army officer at the time and had recently described brucellosis. (Bruce has no blue plaque in London but his name does appear on the sculpted frieze that surrounds the London School of Hygiene and Tropical Medicine (LSHTM) in Keppel Street. Of course, he does also have a disease and bacterial genus named after him.)

While at the RAMC, Wright developed a typhoid vaccine, based on heat-killed bacteria, but had difficulty in getting military co-operation to help prove its efficacy. He eventually accumulated what he considered convincing data from trials in India and during the Boer War, but a vitriolic dispute erupted when the eminent statistician Sir Karl Pearson (supported by Sir David Bruce) questioned the statistical validity of the results. (Pearson, incidentally, has a blue plaque on his home in Hampstead.) One consequence of this dispute was Wright's departure for St Mary's in 1902. His work was continued by his successor, Sir William Leishman (who has no blue plaque but is, like Bruce, on the LSHTM frieze and has a disease and a protozoan genus named after him). Eventually the military authorities were persuaded and during World War 1 the RAMC's new premises on Millbank (next to Tate Britain and now the Chelsea College of Arts) and Wright's department at St Mary's were given over to the production of vaccines, resulting in the incidence of typhoid among troops declining from 27% during the Boer War to 0.6% in World War 1.

Wright retired in 1946 to write books on philosophy. He has no blue plaque on his home in Pembroke Square but might derive some consolation from the fact that there is a ward named in his honour at St Mary's.