

1e Bijeenkomst Genootschap Historia Paediatrica te Delft op 20 november 2008

Bacinol: Dutch Penicillin 1940-1950.

“De ontwikkeling van penicilline gedurende de periode 1940 – 1950 in Delft”

Dr. Marlene Burns

In November 1945 the recovery of Maria Geene in Delft's Bethel Hospital signalled the success of the secret wartime research with Bacinol, Dutch penicillin, at *NV Nederlandsche Gist- en Spiritusfabriek* (NG&SF; Netherlands Yeast and Spirit Factory) in Delft, the Netherlands. Fifty years later, Gist-Brocades, of which NG&SF was the forerunner, had become one of the world's largest producers of bulk penicillin.

However, during the war years occupation meant that those at NG&SF were cut off, not only from the outside world but also from information on the research and development of penicillin being conducted by Howard Florey and Ernst Chain in Oxford and in production plants throughout the United States. From late-1943 until January 1946 there was an Allied embargo on publications relating to the production of penicillin in Britain and the USA. How, then, was the development of penicillin at NG&SF during the war years possible? Who were the researchers? How, too, could NG&SF under severe post-war financial restrictions invest in the mass production of the new 'wonder drug', penicillin?

It is the remit of this presentation to bring the above questions to the fore. In order to do so special consideration will be given to the unique position of three people: Albert Jan Kluyver, Professor of Microbiology at the *Technische Hogeschool*, Delft (now TU Delft); Professor Johanna Westerdijk, Director of the *Centraalbureau voor Schimmelcultures* (CBS; National Collection of Fungal Cultures), Baarn; and, Ir. François Gerard Waller (FG), Deputy Director of NG&SF, Delft.

While the driving force of the development of penicillin by the Delft Team was undoubtedly FG Waller, the unique position of Kluyver as member of the CBS governing body and advisor to NG&SF, makes him a candidate for the necessary academic input required for the development of Dutch penicillin both during and after the years of occupation. As will be shown, all of those involved in the production of penicillin at Delft had links with Kluyver.

In order to illustrate these links extensive use will be made of the NG&SF Archive material now stored in Delft's Local Authority Archive and the Kluyver Archive, presently housed in Delft University of Technology.
