

1844-1994



*Our*

*Medical*

*Heritage*



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# *Our Medical Heritage*

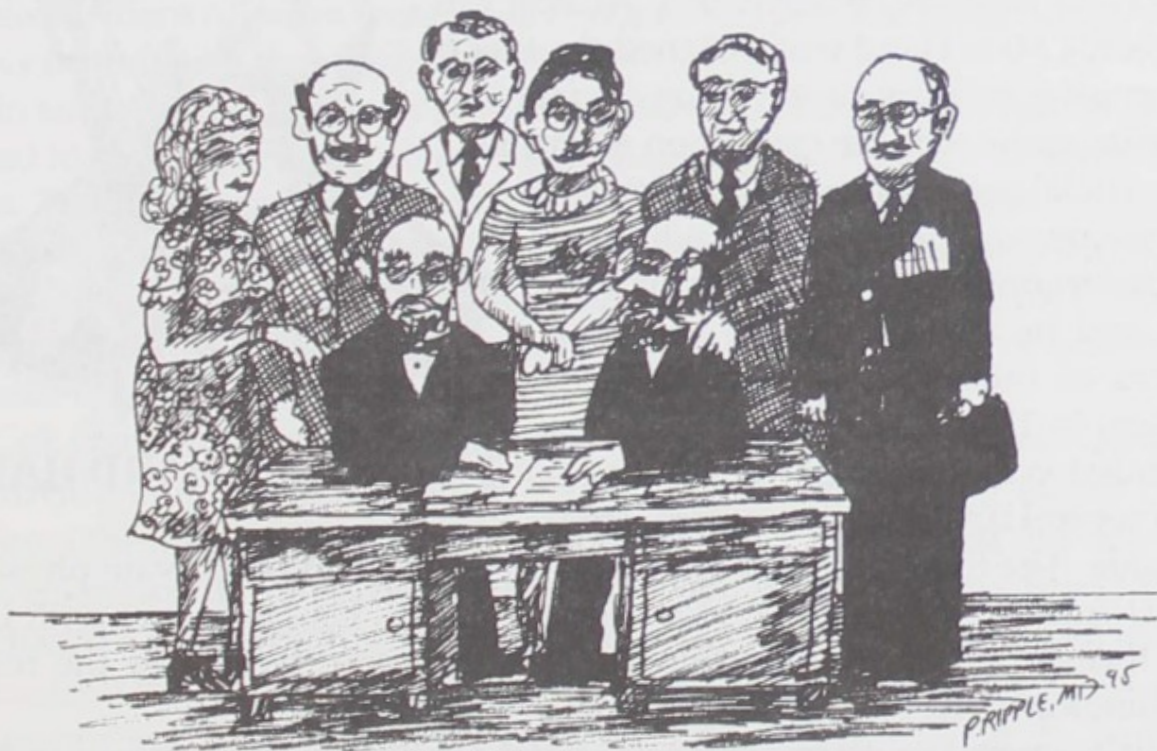


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Lancaster City & County Medical Society

## Section 3

# Prominent Physicians





*Chapter 29*  
*H. M. Alexander, M.D.*  
*Lancaster County Vaccine Farm*

In 1894 the Lancaster County Vaccine Farm, located on the outskirts of Marietta, was the largest in the world and produced more smallpox vaccine lymph than all of the other vaccine establishments in the United States. So high was the reputation for purity which this lymph had gained that the demand for it even rivaled the Government Vaccine Propagating Department of England, the country in which Dr. Jenner had discovered smallpox vaccine. Dr. Alexander was able to propagate 100,000 vaccine doses a day.

In 1882 Dr. H. M. Alexander, a member of the Lancaster City & County Medical Society and a practicing physician in Marietta, recognized the need for having a readily available smallpox vaccine. At that time, smallpox vaccine was not commercially obtainable in the United States. Dr. Alexander decided to make, for his own use, vaccine prepared after the vaccine of Jenner. He proceeded by leasing from a local farmer one heifer to which he applied smallpox virus procured from a victim of the disease. The vaccine obtained from this heifer was used to vaccinate patients in Dr. Alexander's practice. An account of this successful experience, when presented in the form of a scientific paper to the Philadelphia Academy of Medicine, led to many requests for vaccine. Dr. Alexander carried out this work in a renovated chicken house adjacent to his office at 299 West Market Street, Marietta, Pa. He followed closely the work done by Dr. Edward Jenner and maintained extensive correspondence with foreign scientists. Thus, from vaccine production on one heifer at a time, it was necessary to increase production to two heifers and then six heifers and on and on. Within the year it was necessary to expand the facilities and he purchased a farm located at Wasp and Biddle streets in Marietta. The establishment was known as the Lancaster County Vaccine Farm, and within a few years 500 vaccinated heifers were kept there to supply the demand for vaccine. This property is now Wyeth-Ayerst Laboratories. Vaccine was sent by him to every nation on the globe, including distant China. In addition to his farms in Marietta, he had a branch establishment in Omaha, Nebraska and an office in Chicago. In 1894 he purchased a farm in Northumberland County, Pa. with the idea of establishing a branch there.

Dr. Alexander was born in Lewisburg in 1851. He attended school in Kelly Township. One day while preparing for a reading exercise in his old Sander's *Third Reader*, he studied the purpose of the simple words, "Continue to the end." These words impressed him and became the motto for his life. He graduated from Bucknell in 1873 and from their Medical Department in 1876. He was employed for a short time by a hospital, and then opened an office in Marietta. Dr. Alexander was a popular physician and became very



successful. In 1889, he abandoned his practice to devote all of his time to the propagating of the virus for the vaccine which he had started in 1882.

Dr. Alexander was one of the planners and promoters of the American Exhibitors' Association organized at the World's Fair in Chicago in 1893. At that Exposition, he received the only premium awarded on a virus vaccine, and his virus vaccine was pronounced to be the purest vaccine manufactured by any concern in the world.



Dr. Alexander was invited by the Pa. State Board of Health to deliver an address before the State Sanitary Convention in Pittsburgh on May 31, 1889, the day the Johnstown flood occurred. He learned of the disaster early Saturday, June 1. Joining with others at the Convention, he loaded railroad cars with relief supplies all day Saturday and went to Johnstown on the first train that night. Leaving the train at Sanghollow, a Mr. Turner and he were the only ones who would venture to cross the six miles into Johnstown over the dangerous landslides and washouts to reach the disaster. They carried some medical supplies and blankets and reached the stone bridge early Sunday morning. They worked with the relief department for five days in that stricken city. On one occasion Dr. Alexander fell into the Conemaugh River when a temporary bridge collapsed. One night he spent sleeping propped against an oak tree, having sat down in the rain for a brief rest and failed to rise until the next morning.

While he was helping the victims, a man of limited means approached him and told him that his farm had been covered with 15-20 inches of sand as



a result of the flood. This catastrophe ruined the farmer's land and made him insolvent. Dr. Alexander conceived a gigantic undertaking by which the land could be restored to its former usefulness and the farmer could make a gain from the sale of the sand. Dr. Alexander suggested the plan to two different persons to implement the scheme, and twice it was rejected. Finally, Dr. Alexander got the Pennsylvania Railroad to build a siding to the farm, and by tramways the sand was transferred to the railroad cars. In the course of a year, the land was cleared and restored to its former use. The money from the sale of the sand amortized the mortgage.

Before the turn of the century, Samuel H. Gilliland, V.M.D. became an employee of Dr. Alexander and assumed the directorship of the Laboratory in 1906. Dr. Gilliland eventually married one of Dr. Alexander's daughters. Dr. Alexander died in 1906 and his children inherited the business. Family difficulties ensued and adverse changes occurred in the operation of the vaccine farm. Dr. Gilliland resigned in 1916 to form the Gilliland Laboratories in Ambler, Pa. In preparation for the entrance of the United States into W.W.I, the Gilliland Laboratories grew rapidly. The heirs of Dr. Alexander, having no responsible head for their establishment, were forced to close and the Marietta property went into receivership. At public auction in 1917, Dr. Gilliland and associates bought the assets from the Alexander estate and merged the Marietta facilities into their own corporation. In 1922, the company moved to Marietta and continued operating under the name Gilliland Laboratories, Inc. until 1943.

American Home Products, Inc. bought the Laboratories that year, and shortly thereafter consolidated all of their prescription drug divisions into a separate entity, known as Wyeth Laboratories, Inc. In 1987, following a merger with Ayerst Laboratories, the company assumed the name, Wyeth-Ayerst Laboratories.

These laboratories were the first commercial producers of smallpox vaccine and at the present time maintain a license to resume production, if needed. Under the auspices of the World Health Organization, smallpox was officially declared eradicated from the globe on December 9, 1979.

The following excerpt is from *History of Lancaster County, Pennsylvania, with Biographical Sketches of Many of Its Pioneers and Prominent Men: Part 1* by Franklin Ellis and Samuel Evans. Published in 1883, the following was printed on page 289:

**DR. H. M. ALEXANDER**, of Marietta, is a son of John Alexander, a farmer, formerly of Lewisburg, Union Co., Pa. He is a graduate of the University of Lewisburg. Afterwards he began reading medicine under Dr. Thomas H. Wilson, and graduated in medicine, in 1876, at the University of Pennsylvania. This same year he located at Marietta, where he has practiced ever since. In 1882 he began the propagation of "vaccine virus" from "grain-fed cattle," and succeeded in establishing quite a reputation in this respect. He is a member of the State and County Medical Societies.

The following postscript is from Alan Peterson, M.D. (2019):

We have also discovered in the Winters Heritage House Museum in Elizabethtown that Dr. H. M. Alexander had a vaccine from West Donegal Township where Zeager road crosses the Grubb in 1853. Part was purchased by Dr. H. M. Hamilton from a Clayton Landis in 1899 and part by a Pennsylvania Vaccine Co. from a Henry Kauffman in 1902.

An 1899 West Donegal map shows Hamilton as the owner of the property more recently known as Conewago Manor, a beautiful property that is a venue today for weddings and other events. Yes, in its earliest days it was known as Mount Vernon Estate, then Conewago Manor, now, recently (2015) as Moonstone Manor. You can visit their website at: <http://moonstonemanor.com/tours/inside/mount-vernon-retreat/>. They briefly mention the vaccine farm in their review of the Manor history and have some photos. Another site with photos is at: <http://millpictures.com/mills.php?millid=1141>. At one time there was a mill and iron works within the estate.

The history of Marietta's Biological Laboratories is as follows:

- 1882 – 1916 Lancaster County Vaccine Farms of Dr. H. M. Alexander and Company.
- 1917 – 1943 Gilliland Laboratories
- 1943 – 2005 Wyeth Laboratories
- 2005 – 2019 (now) and continuing as GlaxoSmithKline