## VII. Medicine in the Lewis and Clark Age

In Meriwether Lewis, Thomas Jefferson found many of the traits required to prepare for and lead an Expedition from nearly one end of North America to the other, over about 8000 very rough miles. In scientific respects Lewis was lacking initially, but he was eager, a good observer and educable, and who better to provide all means but Mr. Jefferson himself, scientist, inventor, member of the American Philosophical Society of Philadelphia, Librarian-in-Chief at Monticello, and much more.

At the start of the Lewis and Clark Expedition, Lewis lacked sufficient scientific knowledge in botany, biology, astronomy, cartography and so forth. He lacked knowhow of the scientific enterprise, the rigorous recording and interpretation of data. By 1804, however, the American Philosophical Society of America already saw fit to make him a member among those who had been his teachers.

By "homeschooling," Lewis acquired the requisite skills to be "physician" to his Corps of Discovery. Jefferson seems to have had as much, if not more, confidence in the Expedition's captains to act as "physicians" as he had in the so-called, recognized physicians of the day. Paul Cutright in "Lewis & Clark: Pioneering Naturalists" suggests that this view was held on the basis of Lewis's knowledge of herb therapy from his mother and Jefferson's own negative experiences with purging and blood-letting doctors. Who then knew to ascribe illnesses to bacteria and viruses?

When Lewis was in Philadelphia in May/June 1803 to complete his training and to make key purchases of instruments and goods, including thirty different kinds of drugs, he visited with the eminent Dr. Benjamin Rush to gain his advice, as requested by Jefferson. Rush, who was aware of Jefferson's skepticism, was particularly in favor of prescribing all-purpose purging pills of his own design, containing a mixture of calomel (mercury chloride) and jalap, a dried root from Mexico. Each is a purgative.

Lewis acquired, and shipped by wagon to Pittsburgh, supplies that included syringes, lancets, and forceps, and, notably, Dr. Benjamin Rush's purging "thunderbolts" among a lot of other now known-to-be toxins. Syphilis, for example, was a very common malady of the Corps, and its treatment with calomel does have serious side effects, known best by the example of the literary Mad Hatter of "Alice in Wonderland."

Both Lewis and Clark administered these drugs to the Corps, and to Native Americans at times. They also are known to have done more serious doctoring, namely amputation of frostbitten toes. They were not known to have had a surgical saw, so this must have been a crude operation by any current standard.

Nevertheless, as the title of E.G. Chuinard's source book "Only One Man Died: The Medical Aspects of the Lewis and Clark Expedition" indicates, these frontier doctors did quite well with what they had and what they knew. The "one man" was Sergeant Charles Floyd, who has been theorized to have died as the result of an attack of appendicitis. If so, no physician of the time could have treated him effectively. "It was

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not long after the Lewis and Clark Expedition that appendicitis was recognized, but a long time before it was to be treated successfully."

In the practice of medicine, as in much else, Lewis and Clark are to be judged by the largely successful result after a long time away from their civilization. What a story for Thomas Jefferson's "Third Library," the 21<sup>st</sup> century one we now might call the public Library!

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