



# Foundations of Medicine

## The History of Medicine

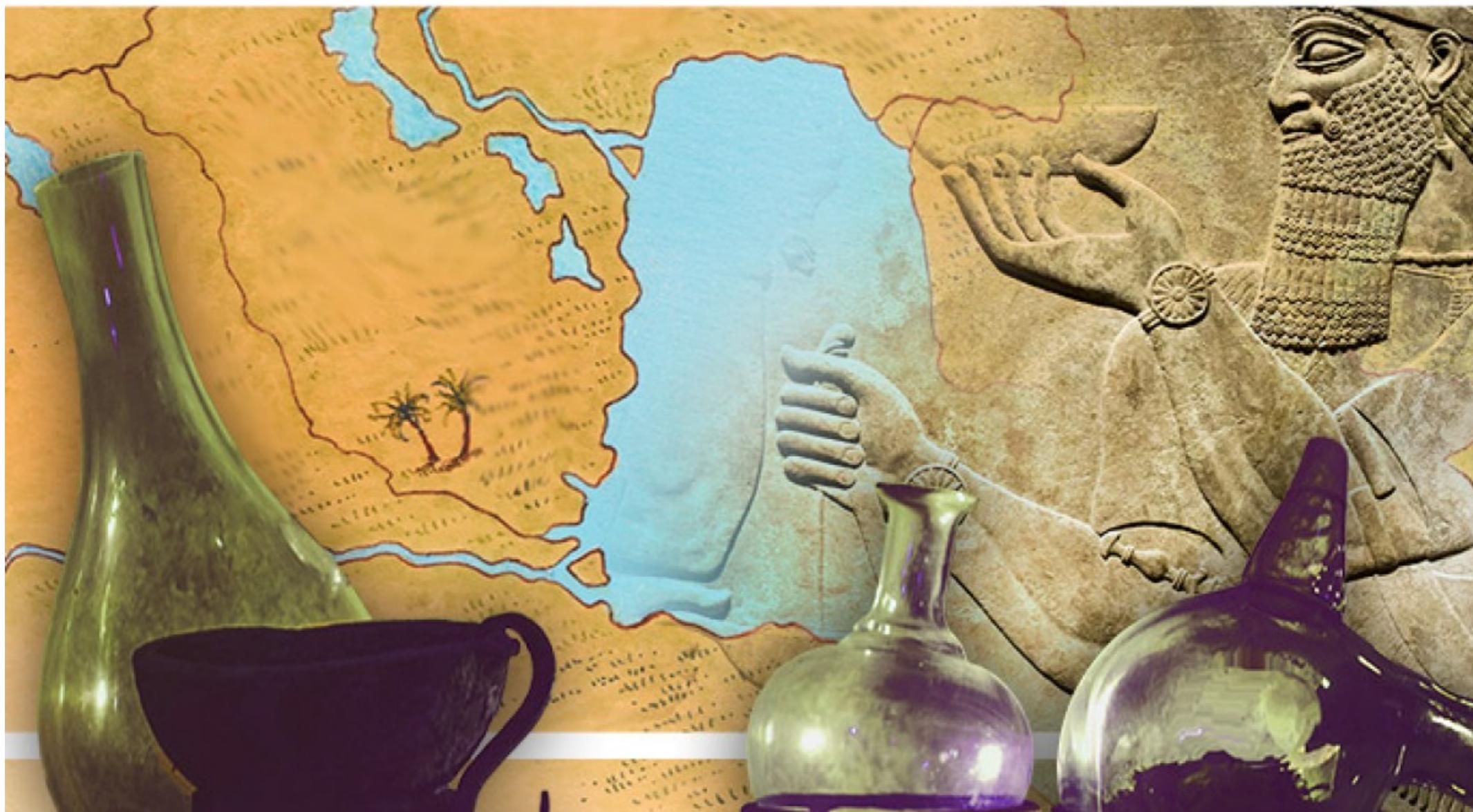
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Conventional medicine, also known as Western or allopathic medicine, has a rich and complex history that spans thousands of years.

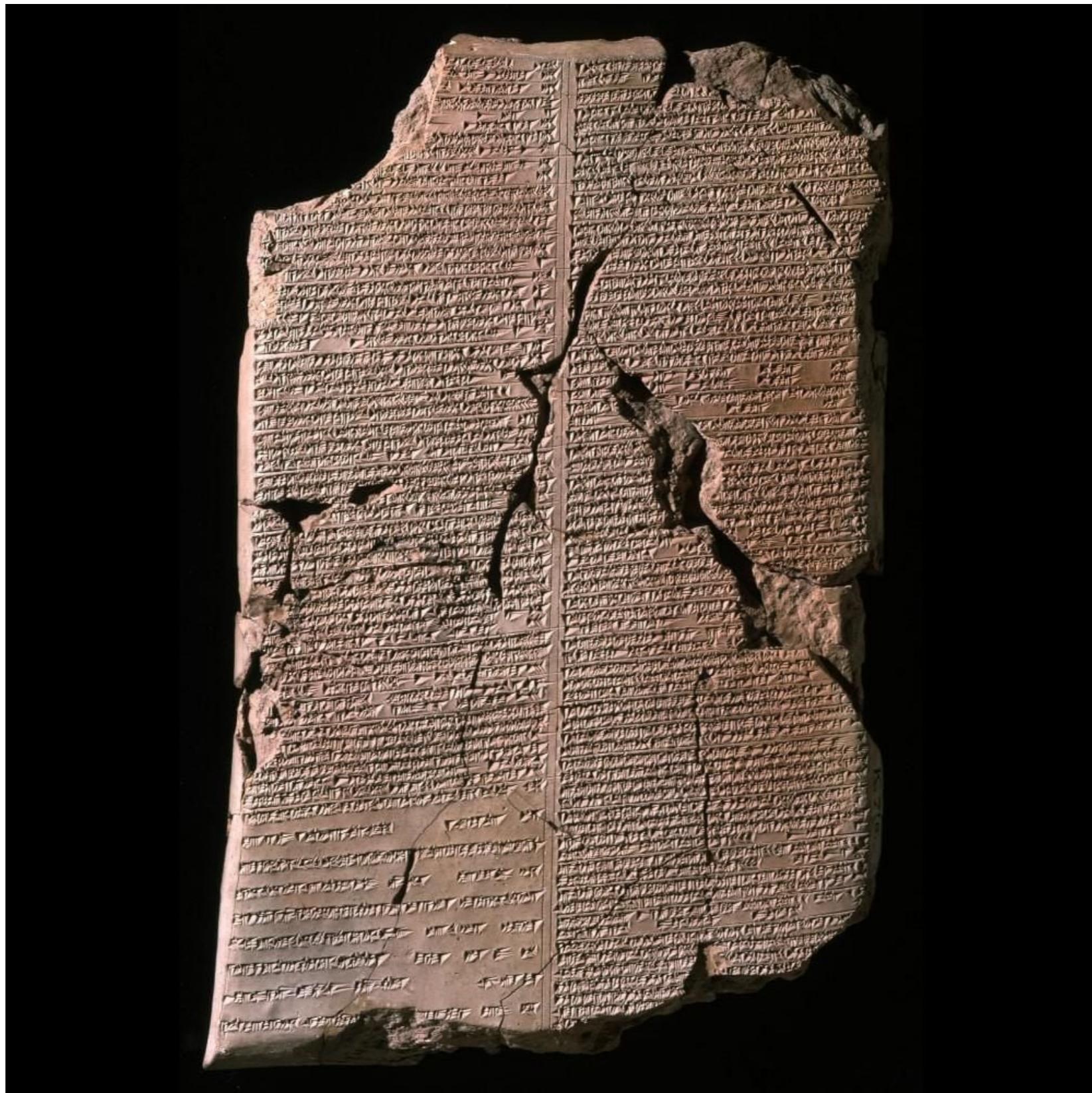
Rooted in ancient traditions, it has evolved through a series of groundbreaking discoveries and innovations, becoming the dominant healthcare system in much of the world today.

# Ancient Foundations

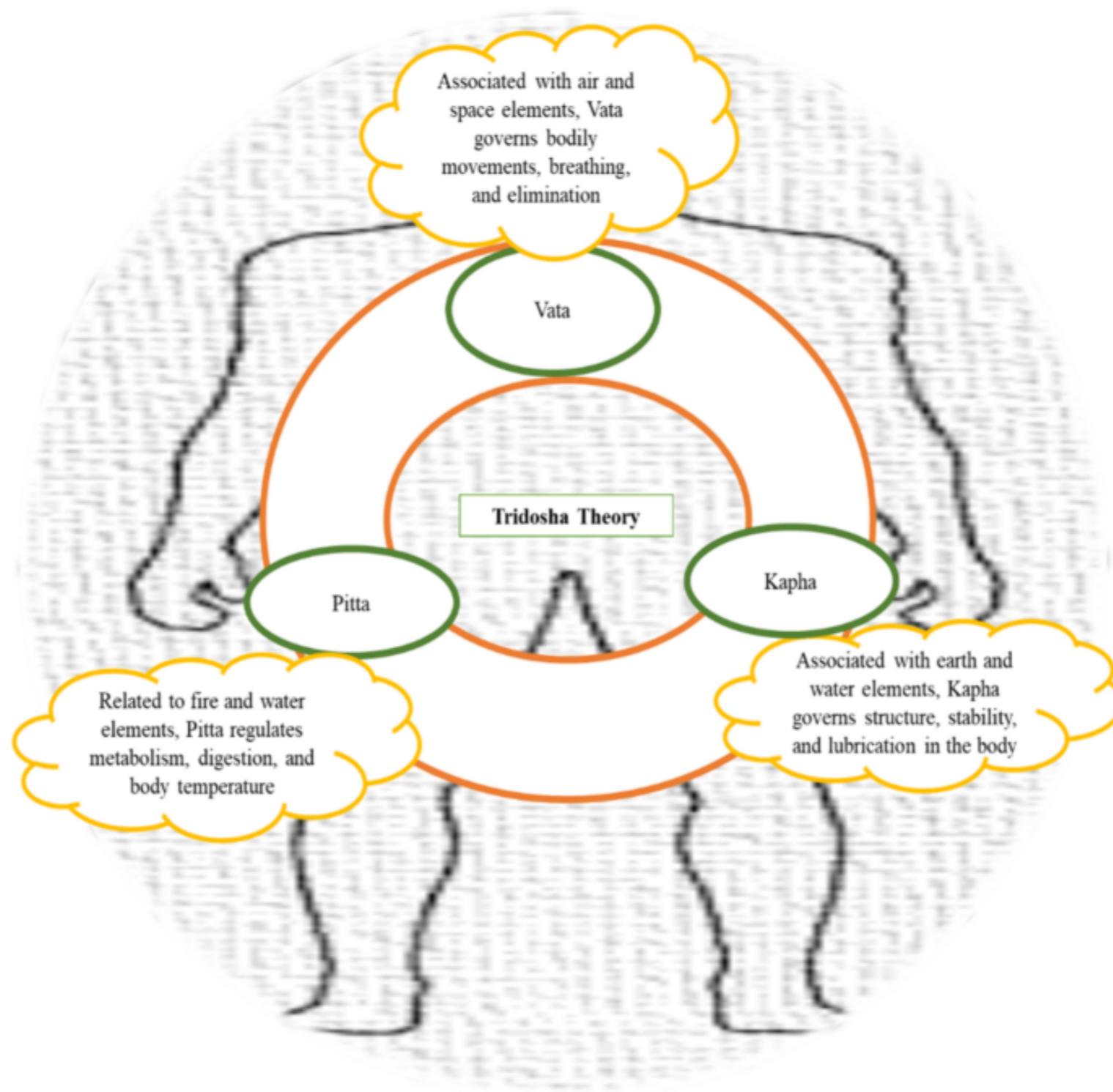
Ancient Mesopotamians attributed diseases to supernatural causes but also utilized diagnostic techniques and medicinal plants.







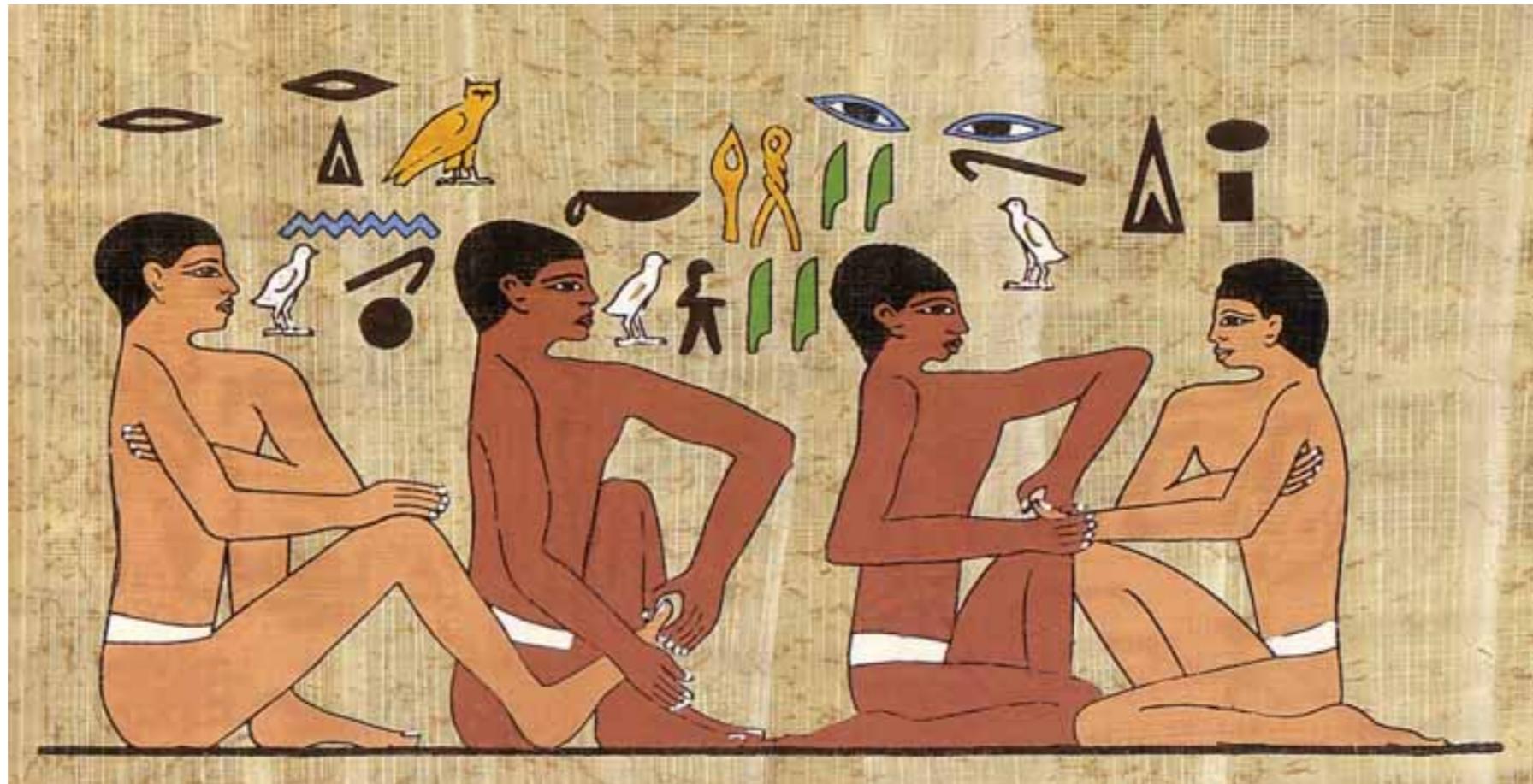
**Ayurveda:** Originating in India over 5,000 years ago, Ayurveda promoted a holistic approach, focusing on balancing the **three doshas (vata, pitta, kapha)** through diet, herbs, yoga, and meditation.



# Ayurveda



In **Egypt**, physicians practiced complex surgical procedures and used herbal remedies, as evidenced by the *Ebers Papyrus* (1500 BC).



yin and yang



## Traditional Chinese Medicine (TCM):

Emerging over 2,000 years ago, TCM emphasized harmony between **yin** and **yang**. Practices such as acupuncture, herbal remedies, and qi gong aimed to restore **energy flow (qi)** for optimal health.



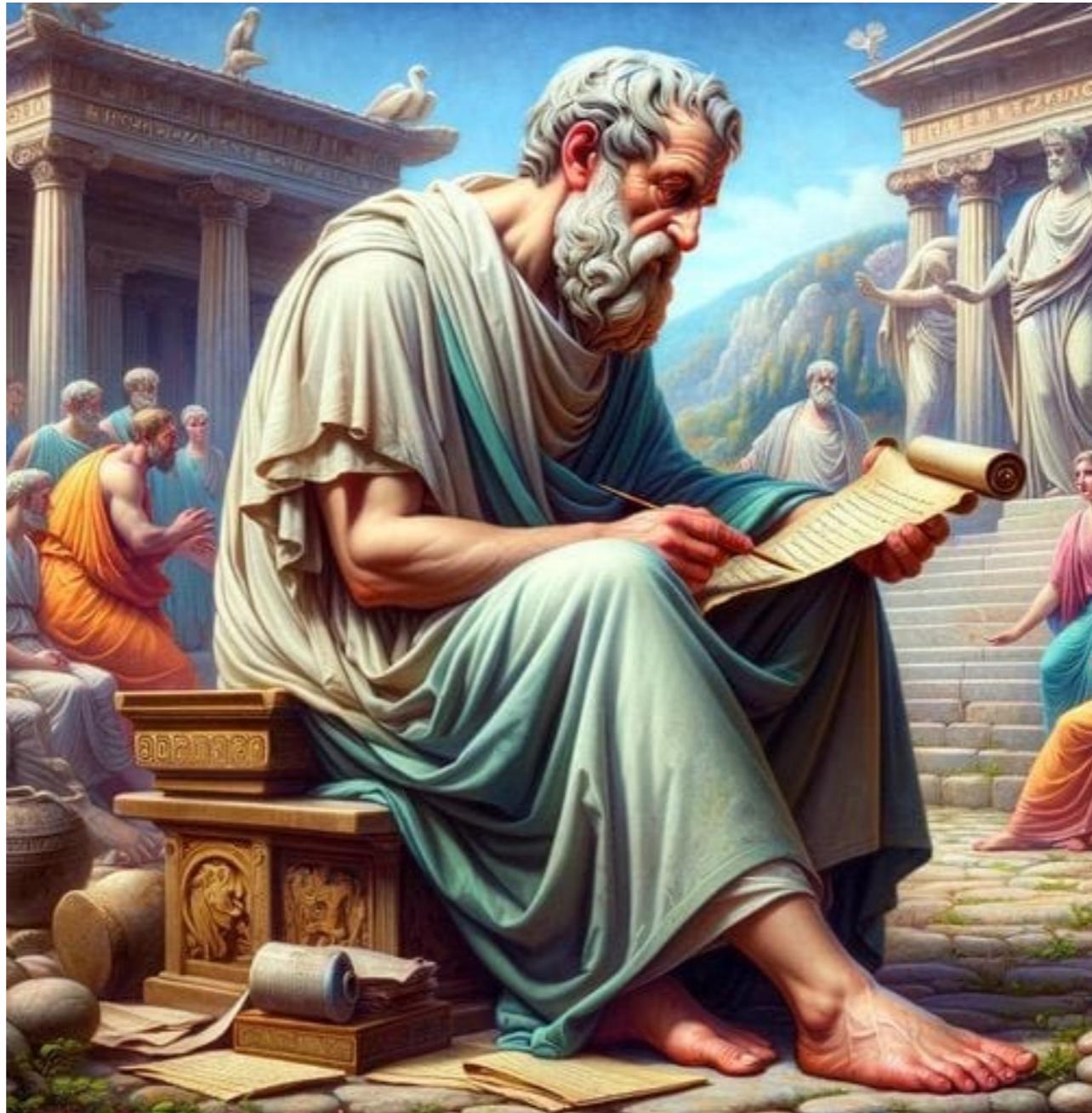


Rod of Asclepius

Greek medicine laid the foundation for systematic medical practice.



Hippocrates (460–370 BCE), often called the “Father of Medicine,” introduced the concept of natural causes of diseases and emphasized observation, diagnosis, and treatment.



In ancient Rome, Galen (129–216 CE) expanded on Greek medical theories, emphasizing anatomy and physiology.



# Islamic Medicine

During the medieval period, medical knowledge stagnated in Europe but flourished in the Islamic world.

Scholars translated Greek and Roman texts into Arabic, preserving and expanding upon ancient knowledge.

Islamic medicine, led by figures such as Al-Razi and Ibn Sina, profoundly influenced the later development of conventional medicine.

Meanwhile, in Europe, monasteries became centers of medical knowledge.

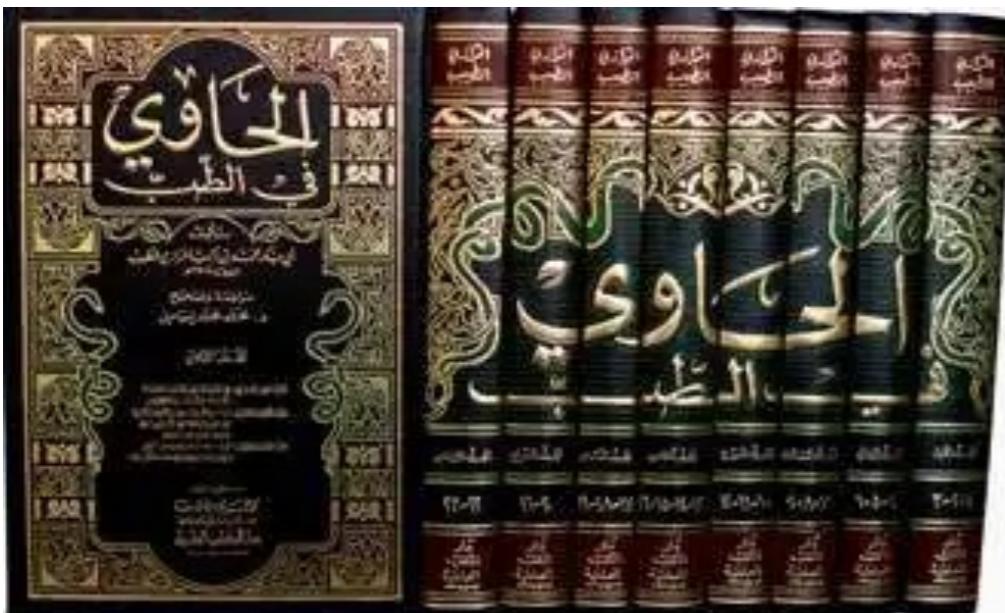
Treatments were often based on humoral theory, which linked health to a balance of bodily fluids.

This era also saw the establishment of universities, where medicine became a formal field of study.

# Islamic medicine

- A cornerstone of medieval science and healthcare, thrived during the Islamic Golden Age (8th–14th centuries).
- Rooted in the integration of ancient knowledge and original innovation, it became a bridge between classical traditions and modern medical practices.
- Influenced by Greek, Persian, Indian, and Roman works, Islamic scholars developed a holistic system of medicine that emphasized prevention, ethics, and comprehensive care

Al-Razi (Rhazes): known for his contributions to clinical medicine and the distinction between smallpox and measles. His work, *Kitab al-Hawi* (The Comprehensive Book on Medicine), was a monumental medical encyclopedia.



Ibn Sina (Avicenna): A physician, philosopher, and scientist whose *Al-Qanun fi al-Tibb* (*The Qanun of Medicine*) served as a standard medical text in Europe and the Islamic world for centuries. It outlined principles of anatomy, pharmacology, and disease diagnosis.



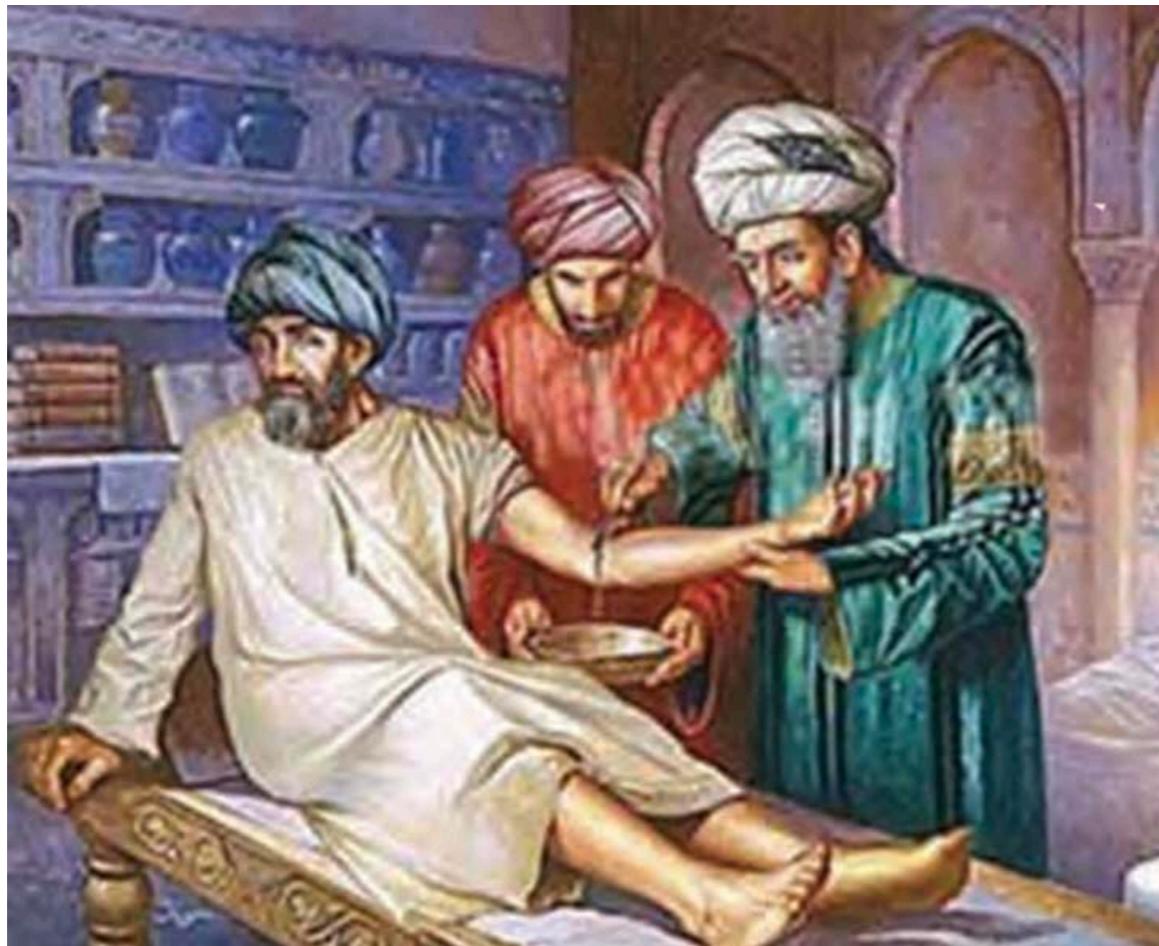
# Key Contributions of Islamic medicine

1. **Hospitals (Bimaristans):** Islamic hospitals, known as “bimaristans,” were among the first organized healthcare institutions. These facilities treated patients regardless of wealth or status, emphasizing compassion and professionalism.



2. **Pharmacy:** Pharmacology was a thriving discipline, with scholars developing techniques to extract and compound medicines from herbs, minerals, and animal products.
3. **Surgery:** Islamic physicians advanced surgical techniques, including the use of anesthesia, sutures, and specialized instruments. Al-Zahrawi (Abulcasis) authored *Al-Tasrif*, an influential surgical manual.
4. **Public Health:** Hygiene, sanitation, and preventive measures were central to Islamic medical practices, inspired by teachings in the Qur'an and teachings of the Prophet.

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## كتاب التصريف لأبو القاسم الزهراوي

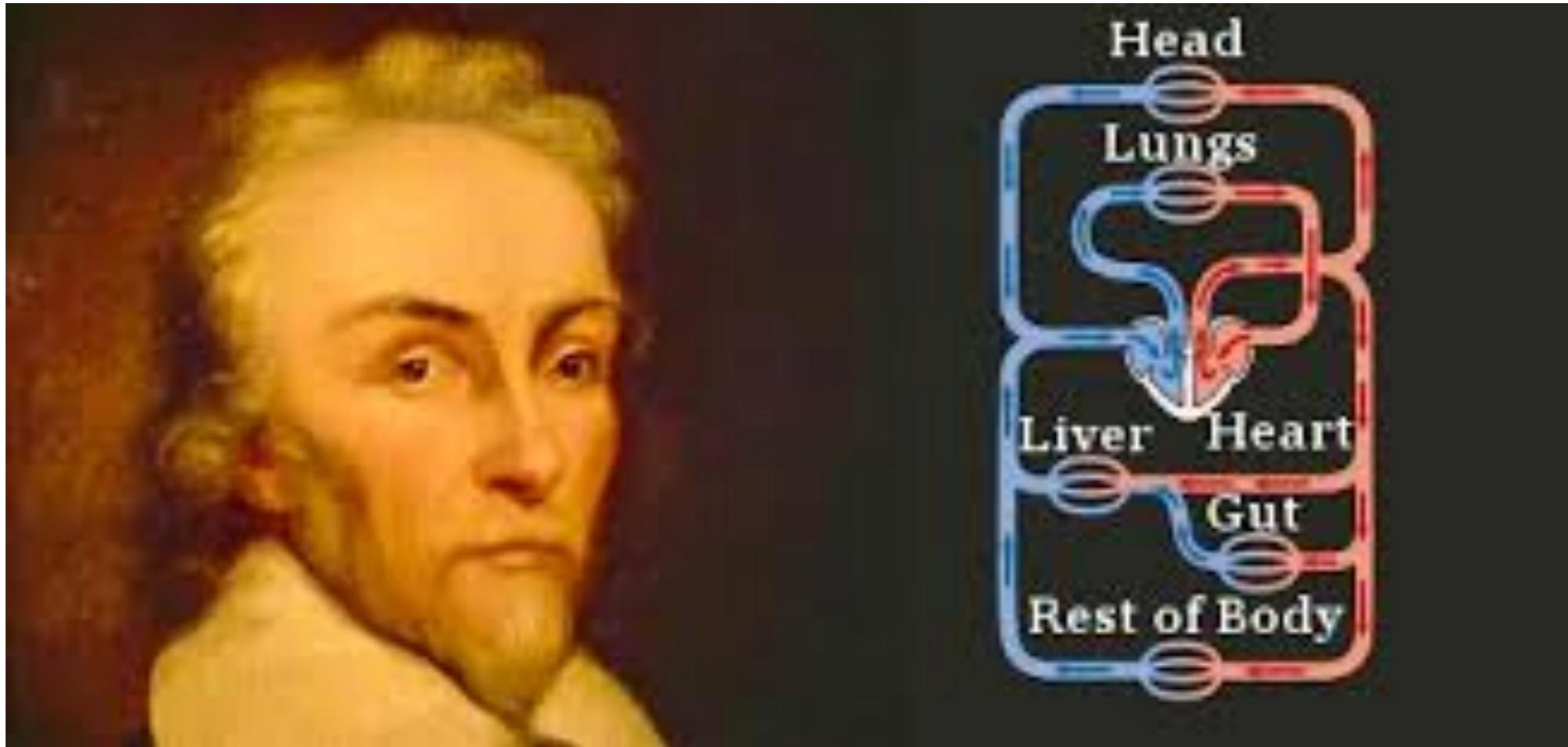


# The Renaissance and Scientific Revolution

Pioneers like **Andreas Vesalius** (1514–1564) challenged Galen's anatomical errors, using human dissection to produce accurate anatomical drawings.



William Harvey (1578–1657) discovered the circulation of blood.



Antonie van Leeuwenhoek (1632–1723) revealed the microscopic world, laying the groundwork for microbiology.



Antony van Leeuwenhoek  
1632-1723