

# LUMINARIES IN MEDICINE

*Hussein A. Algahtani, MD, FRCPC*



**Ibn al-Nafis**  
(1213-1288 A.D.)

The golden age of Islam has produced scientists and scholars of a caliber that human history had never seen before. They challenged the established Greco-Roman theories and laid down the foundation of modern science that we enjoy today.

One of the prominent scholars was Ibn al-Nafis. His full name was Ala-al-din abu Al-Hassan Ali ibn Abi-Hazm al-Qarshi al-Dimashqi. He was a Sunni Muslim pioneer clinician born in 1213 and graduated from the Bimaristan Al-Noori Medical College Hospital in Damascus, Syria. This institute was considered one of the best medical institutions of its time<sup>[1]</sup>.

In addition to medicine, he also studied literature, jurisprudence, and theology. He moved to Egypt at the age of 23 and worked at different hospitals including Al-Nassri Hospital, Al-Mansouri Hospital, and subsequently, he was nominated as the Sultan's personal physician.

At the age of 29, he published the *Commentary on Anatomy in Avicenna's Canon*, considered his most important piece work. In this state of the art-book, he explained and hypothesized his ideas on the heart and pulmonary circulation, centuries before the English physician William Harvey depiction in 1628<sup>[2]</sup>. Through his theories, he challenged the Galen School theories which hypothesized that the blood could pass through the cardiac chambers (interventricular septum). He was the first scientist who discovered that all the blood that reached the left ventricle passed through the lung. He also believed that a channel exist between the pulmonary artery and the vein<sup>[3,4]</sup>. This predication has preceded the first description of the pulmonary capillaries by Marcello Malpighi (by more than 400 years)<sup>[5]</sup>.

Other works by Ibn al-Nafis included commentaries on the medical writings of Hippocrates, treatises on eye disease and diet. In addition, he published several articles on theology, philosophy, law, sociology, and astronomy.

His materials on extensive book on the art of medicine where he featured sections on surgical techniques and the obligations of surgeons to their patients, was well illustrated. This huge work (Kitab al Shamil) was considered the most comprehensive medical encyclopedia written at that era. Presently, several scholars and researchers still consult this book for references. He also wrote an Arabic science-fiction novel that was translated as "*Theologus Autodidactus*".

Ibn al-Nafis' books and ideology had a profound impact on scientific research all over the world for centuries to come. He will be ranked among the greatest scientific writers of all times. After donating all his publications and library to the Mansuriya Hospital, Ibn al-Nafis died in 1288. His greatest innovation in science and medicine has been a great contribution for today's society.

## References

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## Address for Correspondence:

**DR. HUSSEIN A. ALGAHTANI**  
King Abdulaziz Medical City  
P.O. Box 12723, Jeddah 21483, Saudi Arabia  
e-M: halgahtani@hotmail.com