

(by Dr. Calliopi Christofides, biologist)

During the 5th century BC, around the time when Myrtis was alive, there were a number of Greek philosophers interested in examining all living creatures, from the humblest plant to man himself. The term biology, from the Greek words *bios* (life) and *logos* (word or discourse), was given to this study of all aspects of natural life. The ancient Greeks were interested in how living things were created, how they developed, how they functioned, and where they were located. The urge to answer these types of questions led the Greeks to begin discovering the basics of life.

Alcmaeon of Croton (born around 510 BC) was one of the first to contribute significantly to biology. He is an early pioneer of anatomical dissection as well as the first to look into the internal causes of illnesses. In his interest to find the whereabouts of human intelligence, he observed that since a blow to the head can affect the mind, this must be where reason lies. In dissecting corpses to pursue this idea, he made the first scientific discoveries in the field of anatomy. He made the earliest observations of the passages linking the brain with the eyes (the optic nerves) and the back of the mouth with the ears (Eustachian tubes).



*Taken from: Insignium Aliquot Virorum Icones  
(Jean De Tournes, 1559)*

Later on, at around 431 BC when Myrtis was 9 years old, the Greek physician and philosopher Empedocles (ca. 490 - 430 BC) originated the cosmogonic theory of the four classical elements (fire, earth, air and water). He then used these elements to describe the human body associating it with the four fluids or 'humors': yellow bile (fire), black bile (earth), blood (air), and phlegm (water). He observed that plants and animals, including man, are created from these elements, which he called «rhizomata» (roots). Mixtures of these four elements describe each organ or part of our body. He wrote that all animals come from randomly generated body parts, and that there is "natural selection" of successful combinations, thus proposing a type of evolutionary biology based on the mixture of the four roots. This belief dominated medical thinking for centuries. These physical speculations were part of a history of the universe which also dealt with the origin and development of life. Overall, his biomedical comments were a precursor of modern biology.



*The birth of biology: 5th century B.C.*

~~From the birth of biology: 5th century B.C. to the birth of biology: 5th century B.C.~~



*100 Euro banknote (1967)*



*Philosophy and the Birth of Biology, by Pieter Lastman (1583-1633)*

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