

Outlook at the Scientific life of Iranian and World Great Scientists (section 1)

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Studying the biographies of great scientists can lead to more effectively understanding their intellectual path. As we learn how other people made novel discoveries, we learn new ways of thinking that might allow us to make our own new discoveries. In addition, through learning about the history of science, we read about great scientists who thought outside the box. We also see how science is influenced by the culture. In this way, we discover the history of science. In this study, the biographies of Razi and Avicenna, two great Iranian scientists and Newton and Pasteur, two great Western scientists have been studied. In this paper, in addition to mentioning the discoveries and inventions of these great scientists, their moral highlights have been addressed. Some of the opinions and thoughts of these scientists are summarized: Razi was the first physician to free himself from the unquestioning beliefs. He chose experimental and practical methods, and he rejected what seemed wrong in practice. He imported experimental methods in natural sciences (especially medicine and chemistry) 1500 years ago. Razi was one of the pioneers of Alchemy knowledge as he wrote a book entitled *Al-Asrar* or *Secrets of the Alchemy Industry*. Razi's opinion about animals, plants, and living things is as follows: It is not permissible to harm a living thing unless we have removed the most severe suffering from it.

One of the important issues at corona virus(COVID-19) time knows about quarantine ruled by Avicenna. Avicenna announced the first rules of quarantine and hygiene regarding the plague, including: wash your hands with water and vinegar, stay at home, do not go to the mosque, keep your distance, shops are closed only grocery stores and basic necessities should be open. One of his most important tips was to be completely hygienic but not afraid of the plague. Fear causes the plague to come to you. One of Avicenna's views was that prejudice in science and philosophy, like any other prejudice, is a sign of crudeness and futility and always ends up to the detriment of truth.

Newton said: he made most of his discoveries during the 18-month quarantine period due to the outbreak of the plague, which he called the Golden Age until many years later. Another great quote from Newtown: You can never do great things with small people.

Pasteur achieved remarkable achievements such as disinfectant for the room and surgical instruments, anthrax vaccine and rabies vaccine, which undoubtedly changed human life, and after him, the principles of its foundation were shared with other scientists. It was very effective in treating typhus, cholera, diphtheria and yellow fever. One of Pasteur's great quotes: The role of infinitesimal beings in nature is infinitely large.

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