

### Abstracts of Persian Articles

#### A Survey of Islamic Physicians' Views on Sports

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In Islamic medicine six factors are thought to affect the health of every person and physicians try to maintain and restore health by establishing an equilibrium between them. Sport has always been considered as one the most important among these factors, both for its role in mainting health and treating the diseases. The aim of this paper is to discuss the views of certain Islamic physicians on subjects pertaining to sport. These include the definition of sport, its place in Islamic medicine, its necessity and the convenient time to practice it, as well as the sports prescribed for different groups of people.

**Keywords:** Islamic physicians, “the six necessary causes”, sports

#### Ghāfiqī's *Jāmi'* and the Science of Botany

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Ghāfiqī (6<sup>th</sup>/12<sup>th</sup> century) is an Andalusian botanist whose *al-Jāmi' fi al-Adwiya al-Mufrada* is one of the principal pillars of the science of botany in Andalusia and one of the most important sources for knowing and reconstructing the past history of this science. This book ows much to earlier botanical works, especially *al-Nabāt* of Dīnawarī and *al-Qānūn* of Ibn Sīnā. In this paper, first the most famous manuscripts of this book introduce are introduced. Then on the basis of the Malik manuscript the things cited by Ghāfiqī from earlier and contemporary works are discussed, and thus the eminent role of this book in preserving the past heritage is underlined. Then the book is analysed on the basis of modern botanical science. Ghāfiqī's method in botany consists of empirical observation, exact recording of these data and comparing them with each other. By this method, classes, babitats, plant geography and morphology of plants are characterized. Mentioning the names of the plants in Andalusian, Barbar, Greek, Syriac and even Persian is another salient point of this book.

**Keywords:** Botany, Ecology, *Jāmi*’, morphology, taxonomy

### **Conics in Mathematical Textbooks of Contemporary Educational System of Iran**

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Conics or the science of conic sections is one of the highest theoretical topics of geometry in Classical Antiquity and the Middle Ages. It was also studied for its practical applications. In this paper, we first present a short history of conics in Antiquity and the Islamic civilization, then we show how this discipline was introduced in Persian textbooks in the Qajar period and a little after, and how, through this transmission, its vocabulary underwent a change.

**Keywords:** Contemporary Iran, Dār al-Funūn, Kīř, Conics, Muhandis al-Mulk

### **Re-appraisal of the Legacy of Abū al-Wafā Būzjānī in Art and Architecture**

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Abū al-Wafā Būzjānī is one of the top mathematicians in Islamic period. His book on geometrical constructions has been the subject of many discussions and researchers in the fields of history of science, architecture and related crafts. Nevertheless, despite these researchers, its exact contribution to art and architecture has not been identified. The main purpose of this article is to clarify Abū al-Wafā’s heritage in the mathematics of architecture by relying on the historical analysis method (structural similarities). In this paper, after an overview of the formation of practical arithmetic and geometry during century 4 AH/10 AD, Abū al-wafā’s geometric methods and their practicality are compared with artisans and architects’ methods. The findings of the present research reveals that although Abū al-Wafā collected the basic rules of the use of geometry, and especially that of plane geometry, and presented different solutions for problems, his methods did little contribute to

geometric designs of artisans and architects. Due to their simpler and more practical methods, the artisans and architects did not use a considerable portion of Būzjānī's book. It seems that the main heritage of Abū al-Wafā in architecture is his discussion of the arithmetic of buildings. He formulated the preliminaries of practical arithmetic for secretaries, accountants, and financial overseers of buildings.

**Keywords:** Architecture, Arithmetic, Artisans, Abū al-Wafā Būzjānī, Geometry

### **Iranian Medicine's Encounter with the Cholera and Plague Epidemics in Qajar Iran in the 19<sup>th</sup> Century**

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Cholera and plague were widespread deadly epidemics and diseases which broke out in the some regions of Iran for several times during the 19th and 20th centuries. Since the early 20<sup>th</sup> century, the spreading of these diseases ceased due to the introduction of modern sanitary rules and principles, development of public health and the use of some preventive measures. This article discusses the Iranian medicine's reaction to the cholera and plague outbreaks in the 19th century. The main concern is how the discourse of the Iranian medicine dealt with the problem of cholera and plague when these diseases emerged. The subject is how this kind of knowledge diagnosed these diseases, what nature it assumed for them and what treatments prescribed. This study focuses on the first decades of the emerging of those epidemics before the encounter of Iranian medicine with modern western medicine.

**Keywords:** Cholera, History of medicine, Iranian medicine, Plague