

History of Medicine: A Reflection in Collectibles

Bugaevsky KA*

Department of Medical and Biological Foundations of Sports and Physical Rehabilitation, The Petro Mohyla Black Sea State University, Nilolaev, Ukraine

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***Corresponding Author:** Bugaevsky KA, Department of Medical and Biological Foundations of Sports and Physical Rehabilitation, The Petro Mohyla Black Sea State University, Nilolaev, Ukraine.

Abstract

The article presents research materials on the study of reflection in philately, numismatics and phaleristics, information about anatomy and anatomists from different countries of the world. The textual and illustrative parts of the article are a logical continuation of the two earlier articles by the author on the issue under study. At the same time, all materials in this article are completely new, and were not used by the author in previous articles. New illustrative materials are postage stamps, envelopes, blocks and card maximums, postcards. For the first time, this article presents filumenic materials - match labels with portraits of famous anatomists of Russia. Also, in the numismatics section, new commemorative table medals are presented, presenting a number of anatomical scientists. In this article, the phaleristic section is rich and varied, including a variety of awards and commemorative badges dedicated to anatomy and famous anatomists. All materials presented in the article are supplied with accompanying text, with a description of the presented copies.

Keywords: Anatomy; Scientists-anatomists; Philately; Postage Stamps; Envelopes; Blocks; Numismatics;; Commemorative Medals; Match Labels

Introduction

Since ancient times, in any era, and in any country in the world, anyone who decided to devote his life to medicine was obliged to teach and know human anatomy, both normal and pathological. Without knowledge of these basic medical disciplines, it is difficult to imagine the process of diagnosing and treating a sick person, especially surgical treatment! This fundamental principle remains relevant and in demand, and to this day, in all medical schools around the world! Every country in the world has its own national anatomical school, whose representatives have made and are making their significant, scientific and practical contribution to the world anatomical and medical science. Their biographies and deeds are forever inscribed in the history of the development and formation of anatomy. Studying and preserving this history for posterity is truly a great and selfless work!

In this regard, the writing of both this article and the two previous ones is the author's contribution to the preservation of the history of anatomy and world medical science, in a non-standard, creative way - in reflecting collectibles, such as: philately, philocartography, philumenia, phaleristics and numismatics. Thanks to the inexhaustible possibilities of the Internet and a huge number of collection materials, in the process of many days, painstaking search, every time, bit by bit, it is possible to find more and more new materials on anatomists and the history of anatomy. In this article, completely new materials of the study are presented, demonstrating the results of a search for materials on the history of anatomy and the representation of anatomical scientists in a number of countries of the world.

Aim

To present new, non-standard data about such an important medical science as human anatomy, as well as brief information about a number of scientists who have left their mark on the development of world anatomy, using collectibles such as philately and numismatics as illustrative material.

Material and Methods

In carrying out this research work, we used the method of in-depth literary-critical analysis of available scientific sources of information on the issue under study, using reference books, encyclopedias, catalogs, specialized periodicals, and Internet resources.

Result and Discussion

The history of the development and formation of medicine began with people's attempts to find out the features of the structure and functioning of their own body. Ancient researchers were very successful in this, laying the foundations for the descriptive, clinical, pathological and topographic human anatomy! Starting from ancient Sumer, Egypt, Babylon and Assyria, China and India, the Arab East, Greece and Rome, the first anatomists and doctors studied the human body, performing autopsies on dead people, often risking their own lives! The ancient scientific treatises written by them, equipped with anatomical drawings of amazing beauty and accuracy of the image, embalming of the bodies of the dead, the first surgical operations, wonderful sculptures, paintings and bas-reliefs depicting human bodies, clearly testify to the high level of knowledge in anatomy, scientists, healers and people art in antiquity.

The history of world medicine and its research is an extremely interesting and exciting process. Studying some important past events in the world of medicine, or getting new, information about historical persons, you discover a new, previously unexplored world. An even more interesting point in these studies is that you find important aspects of the biography of ancient scientists in small means of material culture - in philately, numismatics and faleristics. This article presents completely new, copies of postage stamps, envelopes, coins, badges, and commemorative medals dedicated to anatomists, scientists and practitioners of the past centuries.

I would like to start my story with the presentation of a philatelic selection illustrating the knowledge of anatomy and medicine by ancient anatomists and doctors. This selection is shown in figure 1 [5,11,20].

Figure 1: The study of anatomy in antiquity, in the reflection of the means of philately.

In figure 2, a selection of philatelic materials from countries such as the USA, Pakistan, Greece, Malta, Germany, the Soviet Union, the Republic of Niger, the Vatican is presented, the plot of which is devoted to the anatomical accuracy of ancient sculptures and images of people, indicating a high level of knowledge of the anatomy of the human body at that time. This selection is shown in figure 2 [5,20].

Figure 2: Ancient Greek and Roman sculptures and ancient images of people.

Speaking about the origins of anatomy and the beginnings of medicine, one cannot fail to mention the names of two famous Greek scientists – Herophilus (335-280 BC) and Erasistratus (300-240 BC) [10,15]. Both of them are considered prominent representatives of the Alexandrian School of Medicine [10,15]. Herophilus, is the father of descriptive anatomy. He opened more than 600 bodies of the deceased, describing in detail the anatomical features of the human brain and cerebellum. Also, he argued that the brain is the organ of thought and the center of the human nervous system. The knowledge about the structure of the human body, which he accumulated over the years, Herophilus described in his book “Anatomica” [10,15]. Also, he studied and described in detail the duodenum and lymph nodes. He owns the anatomical description of the differences between veins and arteries. His authorship belongs to the compositions “On the eyes” and “On the pulse”. He is the author of such medical terms that are used in practical medicine to this day, such as: prostate, diastole and systole [10,15].

Erasistratus, is considered the internationally recognized founder of pathological anatomy [10,15]. His works supplemented and expanded the anatomical data of research belonging to Herophilus. He introduced into the anatomical and medical lexicon, the terms “brain” and “cerebellum”, which he studied in detail [9,14]. Also, Erasistratus is the author of the terms “parenchyma”, “bulimia”, “anastomosis”, “artery” [9,14]. Collectible materials (postage block and stamps Ukraine, commemorative medal) dedicated to Herophilus and Erasistratus are shown in figure 3 [5,20].

Figure 3: Collectible materials dedicated to Herophilus and Erasistratus.

Also, in figure 4, I would like to present a collection of new numismatic materials, not previously presented by the author, in the form of commemorative table medals (obverse and reverse) dedicated to Andrei Vesalius, Ambroise Paré, William Harvey and J. Hunter [5,20].

Figure 4: Commemorative table medals dedicated to Andrei Vesalius, Ambroise Paré, William Harvey and J. Hunter.

In a separate, large collection of collection materials (postcards, stamps, envelopes), Figure 5, illustrations are presented, the plot of which tells about the Dutch anatomical and art schools of the Renaissance era. Numerous paintings by Rembrandt are devoted to the process of anatomical study of the human body, pictures of the autopsy of dead people [5,20]. Also, in figure 5, a selection of completely new philatelic materials dedicated to the famous painting by Rembrandt - “Anatomy Lesson of Dr. Nicolaes Tulp”, presented [5,19,20].

Figure 5: Collectible collection dedicated to the Dutch anatomical school and “Anatomy lesson” by Dr. Nicolaes Tulp in the reflection of philately.

Also, in figure 6, a new artistic marked envelope of Romania (2011) is presented, the plot of which is dedicated to the anatomical studies of the famous Italian scientist - Leonardo da Vinci [5,12,20].

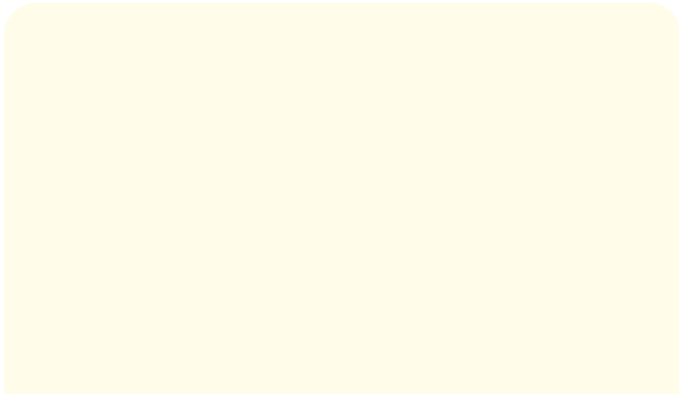


Figure 6: A selection of materials dedicated to the anatomical research of Leonardo da Vinci.

A separate large collection (in Figure 7) of philatelic and numismatic selection (postage stamps, envelopes, card maximums, postmarks and commemorative medals), presents the world-famous Italian scientist-anatomist, naturalist Marcello Malpighi [5,15,20].



Figure 7: A selection of collectibles dedicated to Marcelo Mallpighi.

New numismatic materials are presented in figure 8 are dedicated to the great Italian scientist, anatomist and physician - Giovanni Battista Morgagni (1682-1771). Giovanni B. Morgagni, is the father of pathological anatomy. This is a collection of Italian commemorative medals dedicated to this scientist-anatomist [5,9,13,15,20].

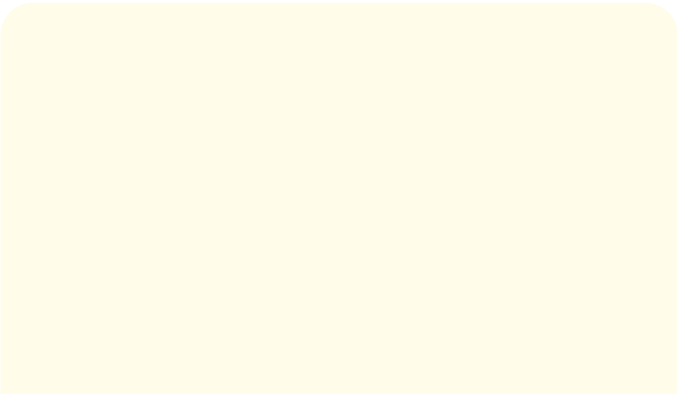


Figure 8: Collectible materials dedicated to Giovanni B. Morgagni.

On the next big collectible selection, it is presented Baron Antoine Portal (1742-1832), French anatomist, physician and medical historian, was the father of the French National Academy of Medicine, created by King Louis XVIII. He was the head of the Department of Anatomy in National Academy of Medicine in 1973 [5,7,15,20]. Knowing his active work in the field of surgery and anatomy, Voltaire said the following statement about him: «This is a doctor who knows how to discover the secrets of life, delving into death» [5,7,15,20]. The materials dedicated to this famous French scientist are presented in figure 9 [5,7,13,20].

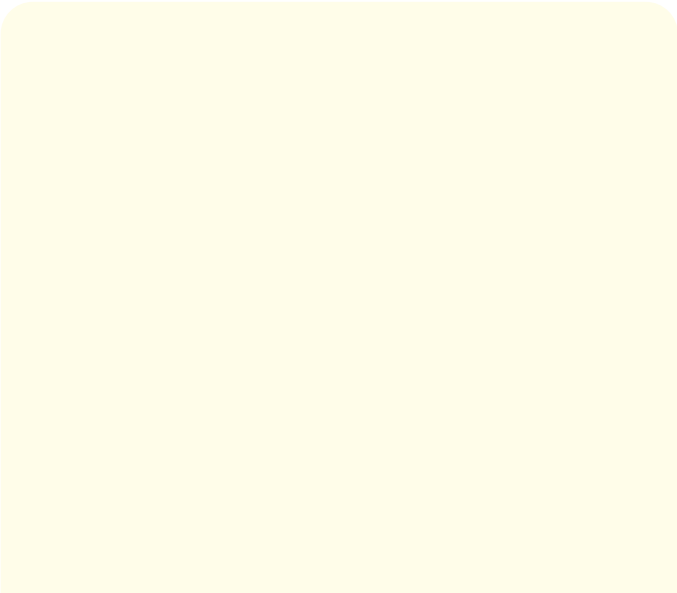


Figure 9: Philatelic materials dedicated to the famous French anatomist and physician, Baron Antoine Portal.

Marie François Xavier Bichat (1771-1802) - French anatomist, physiologist and physician. He is one of the founders of modern thanatology (the science of death and the process of dying), pathological anatomy and histology [7,15]. Xavier Bichat described the morphological characteristics and physiological properties of several human tissues [7,15]. He is the author of the famous book *Recherches physiologiques sur la vie et la mort* – Physiological Studies of Life and Death (1800) [7,15]. According to his classification of tissues, the body consists of tissues that are combined into systems (for example, bones, muscles). An organ is a collection of tissues belonging to different systems. The set of organs with a general-purpose forms an apparatus (for example, respiratory, digestive), etc. [7,15]. Bichat, died of tuberculosis at the age of 31, in the prime of life and creativity. Collectible materials dedicated to Xavier Bichat are shown in figure 10 [5,7,13,20].

Figure 10: Collectible materials dedicated to the famous French anatomist and doctor Xavier Bichat.

In the history of Russian anatomy, biomedical sciences, and physical education, the name of Professor Petr Frantsevich Lesgaft occupies a special place [15,17]. In 2022, the scientific community will celebrate the 185th anniversary of his birth, and in 2021 - the 125th anniversary of the founding of the university that bears his name [15,17]. A selection of collection materials (a postal enve-

lope, commemorative and award medals, a badge, match labels dedicated to P.F. Lesgaft is shown in figure 11 [5,20].

Figure 11: Collectible materials dedicated to the Russian anatomist P.F. Lesgaft.

The next collection tells about the contribution to world anatomy and surgery, a scientist with a world name – Nikolai Ivanovich Pirogov [2,15]. In figure 12, postage envelopes and commemorative badges dedicated to N.I. Pirogov, as an anatomist [5,20].

Figure 12: Collectible materials dedicated to Nikolai Pirogov.

In the following figure 13, a selection of various collection materials (philately and numismatics) dedicated to the anatomical scientists of Romania – Prof. Dr. Thoma Ionescu (1860-1926), Dr V. Gomoiu (1638-1686) and Prof. Dr. Grigore Antipa (1867-1944), and also, congresses on anatomy in Romania [4,5,15,20,21,23].

Figure 13: Famous Romanian scientist-anatomists in the reflection of collectibles.

In figure 14, presents a small selection of Italian commemorative medals dedicated to Carlo Giacomini (1840-1896) and Angelus Caesar Bruni, and also, congresses on anatomy in Italy [5,20].

Figure 14: Famous Romanian scientist-anatomists in the reflection of collectibles.

The following selection of collection materials (postage stamp, envelopes, commemorative medals), shown in figure 15, dedicated to the Danish anatomical scholar and Catholic bishop Niels Stensen (1638-1686) [5,20]. In 1663 he received his medical degree. He was the head of Department of Anatomy in 1671. He stayed in this position until 1675 [1,15]. He studied the structure and function of muscles. The ducts of the parotid saliva - “stenons” are named after him [1,15].

Figure 15: Collectible materials dedicated to Niels Stensen.

The Dutch scientist anatomist Petrus Kamper (1722-1789) is devoted to a small collection selection, shown in figure 16 [5,16,20]. He is best known for his many years of research in comparative anatomy and craniometry concerning the measurement of the facial angle, which determines the relationship between the facial and cranial parts of the head. Also, he singled out anthropology as a separate science in the field of natural science [15,16]. Since 1755, Petrus Kamper has been head of the Department of Anatomy in Amsterdam, the Netherlands. He stayed in this position until 1773. Autopsy performed on 50 corpses on his own. The result of his anatomical research was the work “Demonstrationum anatomico-patologicarum” (1760-1762) [15,16]. He actively supported the ideas of William Harvey about two circles of blood circulation [15,16].

In figure 17 presents a small selection of collection materials (postage stamps and envelopes, badges) from different countries, dedicated to the study of anatomy and anatomical congresses of different years [8,14,22]. An interesting selection of Japanese postage envelopes and stamps is presented, dedicated to the development of anatomy in Japan, under the leadership of Sugita Genpaku

Figure 16: Collectible materials dedicated to Petrus Camper.

(1722-1817) [8,14,22]. Since 1771-1817, Genpaku began performing autopsies to study human anatomy. The beginnings of classical European medicine, different from Chinese, were introduced by the Dutch. In 1751, an anatomical school was opened in Tokyo, where they taught anatomy classes, and in the same year, the famous Japanese medical scientist, Sugita Genpaku, Maeno Ryotaku, Nakagawa Jun'an and others, based on the results of the autopsies, published their scientific work "Kaitai Shinsho", or "New Treatise on Anatomy" - Japanese translation of the Dutch work on anatomy "Ontleedkundige Tafelen", physician Gerard Dikten (1696-1770), which, in turn, is a translation of the German work "Anatomical tables" (Anatomische Tabellen) by the physician Johann-Adam Kulm (1689-1745) [8,14,22]. He completed it in 1815. Plots on the development of the anatomical school in Japan are also shown in Figure 17 [5,14,20].

Figure 17: A selection of collection materials dedicated to the study of anatomy in different countries.

Further, in figure 18, a selection of icons dedicated to the anatomy of various parts of the human body is presented [3,5,20].

Figure 18: Anatomy badges of various parts.

This concludes a brief overview concerning the reflection in philately and numismatics, the history of world anatomy and famous scientists anatomists of different centuries of human history.

Conclusion

- The article presents new materials of the study, devoted to the reflection in the collection media, the memory of several world-famous scientists-anatomists, their scientific contribution to the world anatomical and medical science, as well as the formation and formation of the foundations of modern anatomy.
- The presented text and illustrative materials, taking into account the limited volume of the article, quite fully correspond to the goals and objectives of writing this article, submitting the information presented in a format convenient for the reader.
- The materials of the article can be of great interest to scientists, teachers and students of medical schools, practitioners

and other categories of medical workers of various orientations who are interested in anatomy and medicine.

- The presented illustrative materials can be used as an auxiliary informative tool in the study of such disciplines as "Anatomy", "Operative surgery and topographic anatomy" and "History of medicine" in specialized universities and departments.
- Modern collectibles, in all their diversity, quite fully, brightly and creatively, reflect information about any medical discipline and its heroes.
- In the short term, in his new article, the author plans to continue his research in the field of reflection of various sections of the anatomy of human internal organs, presented in the reflection of such collectibles as philately, numismatics and faleristics.

Conflict of Interest

I have no conflict of interest.

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