

# History of Neurology and Neurosurgery as Reflected in Collectibles

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## ABSTRACT

The article contains brief information on such sections of medical science as neurology and neurosurgery, their history, formation, scientists and practitioners who have made a significant contribution to the formation of these areas of medicine. The article is richly illustrated with screenshots of philatelic, numismatic and faleristic materials dedicated to neurology and neurosurgery, and its heroes. The accompanying comments are given to the illustrative materials. The materials presented in the article may be of interest to many categories of readers.

**KEYWORDS:** Neurology; Neurosurgery; Famous scientists and doctors; Philately; Stamps; Envelopes; Blocks; numismatics; coins; Commemorative medals; Faleristics; Commemorative badges

## INTRODUCTION

Among many medical disciplines, neurology and neurosurgery take their special, honorable place. These sections of medical science require a lot of detailed anatomical and physiological knowledge and perfect practical skills to provide highly qualified care to patients of this category. The human nervous system and its relationship with other vital parts of the human body are very complex and specifically organized. Therefore, any external interference in the work and functioning of the central and peripheral nervous system requires caution, skill and understanding of the manipulations carried out. The study of the history of the development and formation of neurology and neurosurgery is a very interesting and relevant topic in the field of competence of the history of medicine. New information about the historical personalities of scientist theorists and practitioners in this medical field will always be of interest to both historians of medicine and specialists in this field of medicine. Of particular interest are the data on this important issue presented in collectibles such as philately, numismatics and faleristics. In this article, an attempt will be made, in a concise

informative and illustrative form, to conduct a story about world neurology and neurosurgery through these collectibles.

### Purpose/Aim of the Work

To study in the available media, and present in the materials of the article, the results of the study devoted to the study and analysis of the representation of such important medical scientific and practical areas as neurology and neurosurgery, as well as its heroes - theoretical scientists and practitioners. To achieve this research the goal, the following practical tasks were set: Determine the search circle of the research being carried out - any copies of philately (postage stamps, envelopes, blocks, card maximums, postcards and special cancellation stamps); numismatics (commemorative, table medals and coins); bonistics - banknotes, faleristics (commemorative awards and badges), the plot of which is dedicated to neurology, neurosurgery and their heroes.

Search for all the necessary text and illustrative (screenshots-coins) information about the plots and data about famous

### Quick Response Code:



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scientists and doctors, neurologists and neurosurgeons, presented in these collectibles.

Obtained research results, formalize following generally accepted academic requirements, and present them in the form of a structured article.

## MATERIALS AND METHODS

In preparing the article, such research methods were used as: search and selection of necessary materials on special Internet sites; computer processing (using special programs) of illustrative and text materials; literary critical analysis of the information found; bibliographic formatting of all available sources of information, in accordance with generally accepted academic requirements.

## RESULTS AND DISCUSSION

At the beginning of my article, I would like to present philatelic (postage stamps, postcards and maximum cards), numismatic (commemorative coins and table commemorative medals) and faleristics (thematic commemorative badges) materials, the plot of which is devoted to the anatomy and physiology of the central and peripheral nervous systems Figure 1; [1-10]. Also, there are various collection materials, the plot of which reflects the study of the human nervous system and, in particular, the brain, by scientists of past years, for example, such as the famous anatomist and surgeon, Andreas Vesalius and Dr. Samuel Thomas von Sömmering (1755-1830). A selection of these materials is presented in Figure 2; [1-3].



**Figure 1:** Collectible materials dedicated to the anatomy and physiology of the human nervous system.



**Figure 2:** A selection of collection materials devoted to studies of the anatomy and physiology of the human nervous system in the past.

Further, in a variety of collectibles, I would like to tell you about the world-famous students who dealt with the anatomy and physiology of the nervous system, both in name and in various pathological conditions. The first, in this series, will be presented the Nobel Prize laureate, the world-famous Spanish scientist, Santiago Cajal [11-13], whose life history and scientific feat will be

presented in the reflection of philately, numismatics and bonistics. A selection of collection materials dedicated to this great scientist is shown in Figure 3. In the next collection set, shown in Figure 4, we will talk about another world-famous Portuguese scientist dealing with issues of neurology, Nobel Prize laureate in medicine and physiology (1949) related to the conduct and consequences

of lobectomy (1936), Egas [14-22]. These are portuguese postage stamps, commemorative medals and a banknote, a par value of

10,000 Portuguese Escudo dedicated to this famous Portuguese scientist.



**Figure 3:** A selection of collection materials dedicated to the scientific work of Santiago Ramon y Cajal's.



**Figure 4:** Collectible materials dedicated to Egas Moniz.

Further, it will be discussed by the world-famous French by the French Neurologist and Psychiatre-Jean Martin [23-27], which will also be praised in Figure 5, in a small selection of collectible materials. In the following selection of collectible materials presented in Figure 6; [28-32], presented collectible materials (postage stamps, envelopes and blocks, commemorative coins, medals and badges) dedicated to the famous Russian scientist and a neurologist, psychologist, Vladimir [33-38], director of the USSR, and the world, Brain Institute, in Moscow (USSR).

Then we will discuss the contribution to the world neurological science, a well-known Romanian scientist and a neuropathologist, George [39-43]. His name is named a number of famous neuropathologists in the world, the symptoms of George Marinescu.

A small selection of collectible materials (postage stamps, memorable coins and medals) is presented in Figure 7. In Figure A, presented a selection dedicated to the famous neuropathologists from different countries of the world. Thus Poland's postal card dedicated to the famous Polish neurologist Brudzinsky [1], whose name is symptoms (upper, middle and lower symptoms of Burudzinsky) characteristic of the diagnosis of acute meningitis.

The same figure shows a postage stamp and a block dedicated to the well-known Italian neuropathologist Karlo [44]. and the Institute of Neurology of his name Figure B. The same drawing, represented by the postage stamp of Austria, dedicated to the well-known Austrian scientist, Greek origin, Konstantino [45]; (Figure C) the same figure, a commemorative medal (in Avers and

Reverse) is presented, dedicated to the 100<sup>th</sup> anniversary of the famous American neurologist, John Hugh lings Jackson [46], issued

in connection with the 1<sup>st</sup> International congress of neurologists in London, 1935 (Figure D).



Figure 5: A selection of collectible materials dedicated to Camillo Golgi.



Figure 6: Collectible materials dedicated to V.M. Bekhterev.



Figure 7: A selection of collectible materials dedicated to G. Marinescu.

Also, on the same (Figure E), the bronze Italian medal dedicated to the 7<sup>th</sup> International Congress of Neuropathologists in Rome, in September 1961, with a portrait of a famous Italian neurologist Giovanni Mingazzini [47], on avers of this commemorative medal. Laureate of the Nobel Prize [48], in the field of medicine and physiology, Roger W. Sperry, is dedicated to the artistic marked envelope of the United States (Figure F). In (Figure G) Famous Spanish neurologist, researcher of the structure and functioning of the human nervous system, Luis [49].

The 10<sup>th</sup> International congress of neurology physicians in Barcelona 1973, a silver commemorative medal is devoted to the Rio Hortega and Oterid Forster profile portraits, as well as the French bronze medal (1963) dedicated to the French neurologist Andre (Figure H); [50-52]. Here, it is represented in the obverse and reverse, the Czech bronze medal (1972), dedicated to the scientist Jan Kolda [53], which was studied by the human brain (Figure I).

Also, in (Figure J), a commemorative medal and postage stamps is presented, dedicated to the Swiss scientist-physiologist WRH [54-56]. who studied the work of the brain. This scientist has developed, in 1924, the method of the impact of electrodes for studies of the function of subcortical structures of the brain. He opened the mechanism of influence of the intermediate brain on the activities of the internal organs, for which the Nobel Prize was received in 1949 "For the opening of the functional organization of the intermediate brain as the coordinator of the activity of the internal organs." Divided the award with Egas M, awarded "For the opening of the therapeutic effects of leukotomy (lobectomy), with some mental illness".

Also, on the same [Figure K], information about the French doctor neurologist and Psychiatry, Theophile Alazhuanin [57,58] is given. He was engaged in epilepsy questions, studied Foix-Alajouanine Disease: a rare disease of the spinal cord, characterized by the dysfunction of the spinal cord due to the foal arteriovenous malformation.

Also known to the Marie-Foix-Alajouanine Syndrome Cerezegchik ataxia in old age, often due to alcohol abuse. He also dealt with the study of the "phonetic disintegration of speech" syndrome, an angiodisgenetic necrotic myelopathy. This disease, also called Fua-Alazhuanin (subacute necrotic myelitis), includes lesions caused by vessel atrophy in combination with heart attacks localizing most often in the lower breast and lumbar departments. In Figure L, also presented a commemorative medal dedicated to the German scientist neurologist and psychiatry Alfred M [59].

At the next commemorative medal shown in (Figure M), the portrait of Jean Jacques Lermitta is represented. Jean [60] is a French neuropathologist and a psychiatrist, a member of the Paris Medical Academy [61].

Numerous scientific works of J. Lermitt are devoted to the issues of the morphology of the nervous system, clinical neurology, psychiatry and psychology. During world war I, he studied the injuries of the spine, was interested in neuropsychiatry. Studied post-war psychoneurosis, diencephalic epilepsy, rheumatic lesions of the nervous system, the catalip of the awakening, bilateral senile Para preps due to the compaction of the muscles with the subsequent contractures of flexors, senile atrophic changes in the cerebellum worm leading to incinders.

The author of the eponymov called him by name (a symptom

of Lhermitte), as well as the disease of Lermitt-Dukelo, Lhermitte-Levi syndrome, Lermitta Telles syndrome, Lermitta-Makalpine syndrome and others. Next, it will be about Majandi [62,63], the famous French physiologist of the first half of the XIX century.

He dedicated himself to the study of anatomy, due to physiology, primarily the human nervous system. The memorable medal dedicated to this scientist depicting his portrait on the obverse and nervous cell with all the components of it with elements, on the reverse of the medal, is presented in (Figure N) and in conclusion. In (Figure O) two colorful postal blocks dedicated to the Spanish neurobiologist engaged in the functioning of the human brain - Rafael [64] and a memorable bronze medal, french neurologist, theofily alayonin questions of neurophysiology in particular, the problem of the transmission of nerve impulses was studied by such scientists as Sherington [65,66] neurophysiology (Figure P). Otto [67]; (Figure Q). Also, famous neurologists were french neurologist David [68]; (Figure R,S) and Andre Thomas (187-1963) (Figure T,U), French neurologist Jean [69]; (Figure V).

In (Figure 8); [70-72] in a separate group, philately, numismatic and faleristic materials dedicated to the world congresses of neurologists, held in the world, in different years. The next, a large section of this article is devoted to the history of the world neurosurgery, and its representatives. Start your story, I would like, with a presentation of a small selection of philatelic, numismatic and faleristic materials neurosurgery, the main surgeon of the soviet army, during the second world war, academician Nikolay [73-76]; (Figure 9).

In (Figure 10), in the recovery of collectibles, presented the world-famous American neurosurgeon, Harvey [77-79], the founder of world and American neurosurgery. Further in a selection of collectible materials (postage stamps, small vintage sheets, memorial medals plaque), (a commemorative coin), in (Figure 11) [A], other well-known neurosurgery doctors are represented, such as Canadian Wilder [80], Cuban neurosurgeon - Carlos [81]; (Figure B), founder of Cuban neurosurgery famous Austrian neurosurgeon-ANB Eizelsberg [82-83] (Figure C), the famous Romanian neurosurgeon - Sophia [84]; (Figure D) famous Ukrainian scientist and neurosurgeon-practitioner Andrei [85]; (Figure E), Madjid [86]; (Figure F) Romanian academician and neurosurgeon-Leon (Figure G), Romanian neurosurgeon Dimitri Bagdasar (1893-1993) (Figure H), Austrian neurosurgeon-Leopold [87]; (Figure I), Estonian neurosurgeon-Ludvig [88-90]; (Figure J).

In [91-95]; (Figure 12), presents various methods of research and treatment are presented, used in the past and modern neurosurgery. (Figure 13); [96-99] shows a small collectible selection (postage stamps, stamps and envelopes, memorable medals) on the international congresses on neurosurgery, held in the world in recent decades.

(Figure 14,15), a small pharmlastic selection is presented, in the form of a set of memorable icons, the period of the USSR, dedicated to neurosurgery and all-union congresses of neurosurgeons, held in different cities of the country: in Saratov, Chisinau, Alma-Ata, Riga, Dnepropetrovsk, Poltava [100]. This concludes the first article devoted to the reflection of information about neurology and neurosurgery in collectibles. The next article will be devoted to the reflection of data on the rowan neurological diseases in philately and floristics.



**Figure 8:** A selection of collectible materials dedicated to the famous neurologists from different countries of the world.



**Figure 9:** A selection of collectible materials dedicated to the international congresses of neurologists doctor.



**Figure 10:** A selection of collectible materials dedicated to NN Burdenko.



Figure 11: A selection of collectible materials dedicated to Harvey Cushing.



Figure 12: A selection of collectible materials dedicated to famous neurosurgeons doctors around the world.



Figure 13: Modern methods of diagnosis and treatment in neurology and neurosurgery.



Figure 14: A selection of collectible materials dedicated to NN Burdenko.



Figure 15: A selection of collectible materials dedicated to NN Burdenko.

## CONCLUSION

The article presents the materials of the new study on the reflection in the collectibles, the memory of many world-famous scientific and practitioners, neurologist and neurosurgeons, their scientific contribution to world medical science. The presented text and illustrative materials, considering the limited the volume of this article, is quite fully consistent with the objectives and tasks of writing this research work, presenting thematic information in a format convenient for the reader. Article materials can be interesting to a wide range of interested readers: scientists, teachers and students at medical universities, practitioners, and other categories of medical professionals of various profiles interested in neurology, neurosurgery and medicine, in general. The presented illustrative materials can be used as an auxiliary informative the tool when studying the disciplines "Clinical neurology", "Neurosurgery" and "History of World Medicine" in profile universities and departments. Modern items of collectibles, in all its diversity, quite fully, brightly and creatively, reflect information about any medical discipline and its heroes. In the nearest future, in its new article, the author plans to continue research in the field of reflection of various sections of neurology and several neurological diseases presented in the reflection of such collectibles such as philately, numismatics and faleristics.

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