

Articoli/Articles

EMERGENCE AND DEVELOPMENT OF THE
PAULS STRADIŅŠ MUSEUM OF THE HISTORY OF
MEDICINE IN RĪGA

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SUMMARY

This paper reviews the establishment, development and present day of the Pauls Stradiņš Museum of the History of Medicine in Rīga, Latvia. The museum initially represented the hopes of one very excited enthusiast, and what was decisive was that he was able to fill the vacuum of knowledge and information, expand on it, and legalise it as an institution protected by the state. No less important, however, has been the approach taken by government structures and the public at large in support of Pauls Stradiņš' hopes. This comparatively liberal approach toward what could be seen as a private museum can be attributed to the fact that health care had been declared a priority in the Soviet Union at that time, and in ideological terms, the history of medicine was a fairly neutral issue. The museum celebrated its 50th anniversary in 2007. This paper reviews the basic functions and structures of the museum, as well as the changes which have occurred in the complex era of the 20th century. Some areas of activity are reviewed in greater detail, and there are statistics to offer a look at the museum today.

The Concept and Origins of the Museum

The Museum of the History of Medicine initially was not a properly organised and carefully considered presentation of the history of medicine. Instead, it represented the interests and passions of a single gentleman over the course of many decades. That was Dr Pauls

Key words: Latvia- Museums- Collections- History of medicine



Fig.1 - Professor Pauls Stradiņš creating diorama,1957

Stradiņš (1896-1958). He was a doctor, medical scientist, organiser, pedagogue and passionate collector of evidence of the past. Professor Stradiņš was not a professional medical historian. He was an amateur who has been always interested in the past of his profession and in history. Dr Stradiņš understood the importance of visualisation, and he always sought to present the development of medicine to his students and to the public at large in images. The originator of the museum particularly emphasised the progress of medicine, and the humanity of physicians who sacrificed themselves to serve those who were suffering and were ill.

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The origins of the museum relate to the training of medical students. Pauls Stradiņš taught classes in surgical pathology at the University of Latvia, and he began to establish a museum collection for this purpose. The inspiration for this was a clinical museum which had been established by Stradiņš' own teacher, Professor Sergey Fyodorov (1869-1936) in Petrograd, as well as a collection established in Britain by John Hunter (1728-1793). Professor Stradiņš himself used to say that the medical history museum actually began as a result of the professor's struggle against smoking. Students spent a lot of time in between lectures in the large foyer. They often put out their cigarettes on the wall panels in the room, and in order to deal with this, the professor came up with an unexpected idea – portraits of distinguished medics of the past and engravings showing aspects of ancient medicine were hung on the walls¹. That most probably helped, but very soon the collection began to expand also. Stradiņš established a substantial collection of human organs removed during surgical operations and preserved in formaldehyde. There were moulages to show malignant tumours, etc. From the very beginning, professor Stradiņš also collected objects that would show the history of medicine – engravings of images from ancient medical practice, drawings and instruments. Much of the collection was assembled during Stradiņš' extensive travels. He brought back a Stone Age axe, icons, African amulets, Medieval books, Chinese prints and old French engravings. This was by no means a systematic collection. It was based on the great man's impressions during his travels and on things which he sometimes bought almost accidentally. Of course, this less than systematic approach had a positive side – it ensured an encyclopaedic collection. Gradually it became large enough to start thinking about a universal museum of the history of medicine – one that would not stop at a single era or country, but would instead present the history of civilisation as a whole.

Certainly the development of the museum was facilitated not just by the didactic hope of illustrating the history of medicine for students, but also by professor Stradiņš' belief that this was an area of history of medicine which should be presented to the public at large in an interesting and popular way.

During World War II, politics interfered in the museum's collection as one regime replaced another. After the war, the section focused on Russian and particularly Soviet medicine had to be expanded substantially, because the ideologues of the Communist Party insisted that the first duty was to present "*the science of the fatherland*" and to emphasise the priority of Russian scientists and medics in virtually any area of discovery in invention in the history of medicine so



Fig.2 - Professor Pauls Stradiņš (1896-1958). Artist: Miervaldis Polis.

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as to enhance Soviet patriotism. This was a demand of the era, and it came straight from Stalin himself. It has to be said, however, that the division on Russian and Soviet medicine never became dominant at the museum in Rīga. There was always a sensible balance among the specialists of various nations and countries. Of course, the contributions of the West, and also those of pre-war Latvian specialists, were sometimes hushed up.²

The museum itself was perceived in different ways. Some people felt that it represented the caprices of a famous professor and an unnecessary waste of time. Others treated the collection more seriously, because it was known that Stalin himself was often interested in the history of science, particularly emphasising the “science of the fatherland” as being superior to the science of the West.³

Art professor Jānis Roberts Tilbergs had this to say about the artistic principles which Stradiņš observed when putting together his museum:

In his museum, the professor wanted to present medicine at a very vast scope, from the antique world through the Middle Ages up to Soviet medicine. Initially some phases of development in the exhibition were represented more with photographs, but the professor wanted to present everything in a more solid and fundamental way, with portraits and genre paintings. I was asked to paint the portraits of many famous medics for the museum's exhibition. Even more often, the paintings were begun by younger artists, and my job was to complete, correct or repaint their work. There was also work on retouching and restoring artworks. This work was very interesting to me. I had to take a very deep look at the styles and types of ancient eras so as to reproduce them as precisely as possible. I also always had to think about the frame that would work for one or another painting. The professor had collected a whole series of painting frames. He knew every antiques store in Rīga, he knew every frame-maker, and these men always contacted him when an older frame appeared.⁴

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Fig. 3, 4, 5 - Different permanent exhibitions since opening the museum for visitors in 1961.



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The official recognition of the museum

The political situation in the Soviet Union changed after Stalin's death in 1953. On September 3, 1957, the Council of Ministers of the Latvian Soviet Socialist Republic approved a resolution on the establishment of a special state museum on the basis of the collection about medical history which professor Pauls Stradiņš had assembled. This can be seen as a gesture of good will on the part of "national communists" who wanted to prove the great benefits which Latvia could enjoy even in the context of the Soviet Union. Alas, professor Stradiņš did not live to see the opening of his museum in the four-story building at Leona Paegles (now Antonijas) Street 1 in



Fig.6 - Main building of the Pauls Stradiņš Museum of the History of Medicine in Rīga.

July 1961. The museum was named for Stradiņš on August 18, 1958, after his death.

The Pauls Stradiņš Museum of the History of Medicine today

What is the appearance of our museum today? To what extent is it still based on the ideas of its founder, professor Pauls Stradiņš?

During its 50 years of history, the museum has grown, improved, developed, changed and strengthened its positions in the Soviet Union and then, after the restoration of Latvia's independence, in our own country. Over the last 20 years, it has also found its place in the global community of similar museums. In terms of its size, number of employees, number of museum objects related to Russian and, particularly, Soviet medicine, etc., the museum is at the top of the rankings among medical history museums in the world.

As was the case before the museum was awarded the status of a state museum in 1957, the museum has upheld the conceptual ideas of Pauls Stradiņš. It is still an educational institution focused on the history of medicine and ethics for Latvian medical students. Since 1961, when the museum opened its doors, it has mostly attracted schoolchildren, specialists in the sector, as well as many others who are interested in the past and the development of medicine.

Latvia is between the West and the East, and the same, of course, is also true of the museum. This, along with the cultural specifics of the Baltic peoples, has dictated the content of subjects related to the history of medicine in the context of how medicine developed throughout the world. This was not an easy job, particularly between the 1950s and 1980s, when the Soviet regime was in place, and the Soviet ideology stated that one-half, or at least one-third of the exhibits had to be devoted to the so-called "achievements of Soviet medicine" which had appeared since 1917. This meant that the exhibition had to be divided not into the normal periods of the history of medicine which are used in most museums, but on the basis of socio-

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economic structures instead. That is why the museum at one time divided up its exhibition into antique medicine, capitalist medicine and Soviet (USSR) medicine. This in fact allowed the museum to collect and preserve a great deal of evidence that would otherwise have been destroyed as unacceptable and harmful to the Soviet regime. This involved a great deal of heroism and risk on the part of the museum's managers and scientific personnel. Truly valuable historical exhibits had to be camouflaged. It has to be said that this was not unique for the Stradiņš Museum – employees at many museums, archives and libraries in the Baltic States did what they could to preserve the true treasures of their countries during the Soviet occupation.

The situation changed when Mikhail Gorbachev launched his process of perestroika, and particularly when Latvia regained its independence. The supposedly leading role of Lenin and the Communist Party in the provision of health care for the Soviet people could be replaced with true evidence of values which had been hidden for years in the museum's collection on the basis of encoded titles and various legends. Early in the 1990s, the museum began to change its exhibition in accordance with the world's experience, maintaining the institutions' best traditions and specifics. This was the cornerstone for that which we see at the museum today.



Fig. 7 - Different present permanent exhibitions halls.



Fig. 8, 9 - Different present permanent exhibitions halls.



Storage at the museum

Initially, researchers at the museum lacked experience in the labeling of its very specific collection of materials related to the history of medicine. There was a search for new processes, methods and tools for dealing with all of the items that had been collected over the course of the years. After the death of the museum's founder, hundreds of objects that had been collected by him and his collaborators were left without any description at all as to when they were

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found, from whom they were obtained and how. This applied to objects, documents, instruments, photographs, artworks, etc.

New methods and tools which had never been used in our region had to be adopted so that the collection could be deciphered and preserved. The museum was also continuing to acquire new objects on a constant basis. Sometimes specialists had to take their own decisions in investigating these issues, and the examination of the stored collection of the museum help us to discover our earlier mistakes and to reverse earlier decisions. In the early 1990s, ours was the first museum in Latvia to launch electronic record-keeping, but the project eventually proved unsuccessful because of the constant updating of software at the global level. The absence of appropriate templates which museums could use in common was another problem. That, of course, provided us with good reason to re-evaluate our system and methods once again. The annual replenishment of stored items applies to some 1500 units each year, and the process must constantly be adjusted to ensure the best results.

What, then, are the basic ways in which we enrich the museum's collection? We continue to observe the traditions of professor Stradiņš, working with outstanding artists and asking them to create artworks on the basis of specific subject matter. Examples of this include wooden sculptures of Hippocrates and Albert Schweitzer, which are the work of the sculptor J. Vasiļjevs. There is the genre portrait "Nikolai Pirogov at the Sebastopol Field Hospital", which is by the artist and architect I. Stradiņa. We have portraits of many famous physicians, large genre pictures showing Medieval hospitals and towns, wall paintings and a fresco which shows the most prominent doctors from all of history.

Artists have helped us to design interiors, too.

The Stradiņš Museum has taken over several collections, particularly since the collapse of the USSR. These are collections which



Fig.10 - Storage of the museum.

had no proper owners, which could not be exhibited, and which lacked research processing. Since 1991, many Soviet-era hospitals, outpatient departments, pharmacies and laboratories were shut down or began to replace Soviet-era equipment with modern Western equipment. Our museum is assessing and preserving the evidence of history in medicine in Latvia. Another example is the collection of Elie Metchnikoff (1845-1916), which we have had since 1975. Prior to that time, the collection was housed in a museum on the outskirts of Moscow, where some of it was stolen and the museum itself was shut down⁵. The anatomy branch of our museum was created when we discovered that a collection of anatomical specimens of scientific and historical value might be lost because the collection was not properly recorded, and students were using it for their own educational purposes.

The Pauls Stradiņš Museum keeps many of its exhibits on display – not just individual objects, but entire collections that have been donated by the heirs of former historians of medicine, professors and famous physicians such as Maizīte⁶, Ternovsky, Multanovsky and Müller-Dietz. We have managed to amass a unique collection of old medical texts, many of them in Latin. That is because some of the older libraries in the Soviet Union refused to accept such books, arguing that there wasn't a readership for them.

Purposeful updating of collections involves expeditions which are organised by our employees. An example is a collection which focuses on the Shaman medicine of the people of far northern Russia. We have also collected items from different parts of the former Soviet Union and the old medical establishments that are found there. We have bought objects of interest on the Internet, at antiques shops and second-hand shops, art galleries, etc. We have a special committee of experts which evaluates each potential purchase.



Figg.11 e 12 - Fragments from the present permanent exhibition: Medioeval hospital and town.

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Fig.13, 14 - Fragments from the present permanent exhibition: Medioeval hospital and town.

The collection of the museum is divided up among a number of departments:

- The Department of Medical Objects (44935 units) – medical instruments and equipment, anatomical, archaeological and paleopathological specimens, equipment from apothecaries, hygiene objects, textiles, furniture, etc.;
- The Department of Manuscripts and Documents (46963 units) – original manuscripts, journals, correspondence, certificates, forms, maps, etc.;
- The Department of Rare Books (17657 units);
- The Department of Artworks (11564 units) – sculptures, paintings, engravings, book illustrations, tapestries, models, medals, etc.;

- The Department of Photographic, Phonographic, Audio and Visual Objects (79304 units).

We also have a restoration workshop. Very unique or specific restoration work is done at other museums on the basis of separate agreements. Our greatest achievement as the 50th anniversary of the museum approached was to open up a new and modern storage facility. The most critical job now is to organise electronic records for all of the museum's objects that are in storage. This can become part of the new digital network for Latvian museums.

The permanent exhibition of the museum

Ours is a rather traditional exhibition. The basic concepts of museum founder Pauls Stradiņš have been preserved. We offer an illustrative presentation of how medicine developed from ancient times to the present day, with an emphasis on the Baltic region and Russia. These are mostly represented by unique and authentic objects. This does not mean, however, that we have ignored the rest of the world. On the contrary, we seek to demonstrate the interaction of cultures and the adaptation of medical knowledge from one part of the world to another. We use copies of well known objects, creating scenes with theatrical methods and creating our own "originals" on the basis of our own studies.

Artists produce new portraits, sculptures and genre paintings – often different from the traditional ones which are found in textbooks on the history of medicine⁷. That is why, for instance, our exhibition on ethno-primitive medicine is presented mostly in dioramas which show medical treatments in ancient times, either in natural size or in smaller dimensions. The dioramas are supplemented with glass showcases featuring paleopathological bones, various objects of worship, and traditional healing methods which have survived nearly unchanged to the present day. Some are still used all over the world. Shamanic medicine is an example of this, and this part of our

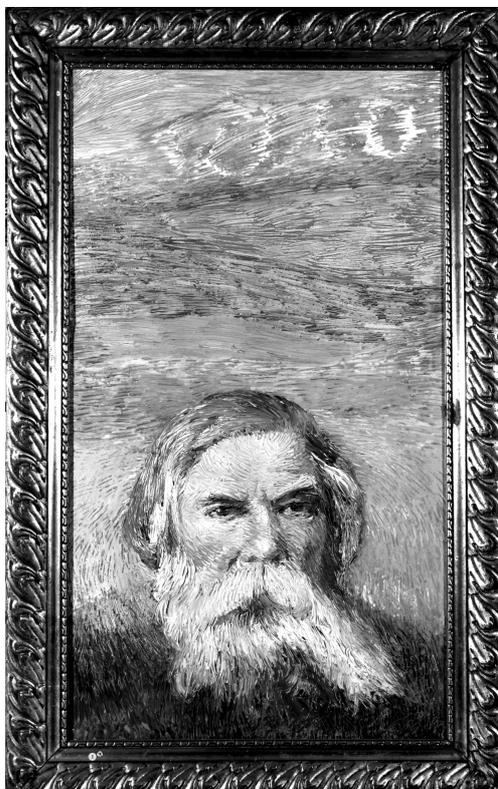


Fig.15 - Psychiatrist Vladimir Behterev (1857-1927). Artist: Mārcis Leja.

exhibition was put together by specialists who travelled to the far North of the Soviet Union in the late 1980s.

Medieval medicine is extensively represented in the collection. Against the background of a theatrical representation of a Medieval town, the museum has been able to show all of the elements of medicine from that period – hygiene, epidemics, hospitals, apothecaries, diagnostics, differentiation in medicine, etc. This is the part of our exhibition which appears to be of the greatest interest to our visitors of all ages. Even so, this spectacular part of the museum is also being changed. The presentation of the apothecaries has been restructured, bringing together colourful genre pictures that were bought from the distinguished Latvian artist Miervaldis Polis with



Fig. 16, 17 - Fragments from the present permanent exhibition: Shamanic medicine

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books, as well as symbols of an apothecary fraternity and a reconstruction of a Medieval drug shop.

Similar changes have been made to the part of the exhibition which represents the Medieval hospital. There are new objects in combination with an artistic diorama, mannequins in authentic dress, furnishings, and other attributes aimed at presenting as much reality as possible about how medical treatments were offered in Medieval times. The most difficult task is to strike a proper balance as to how people perceive this period, because the exhibition was originally designed in the 1960s, and the resources that were available back then are much different than those that are available today.

The story of the history of medicine in recent times is revealed through exhibits featuring subjects such as the development of surgery after the introduction of anaesthesia, aseptic and antiseptic, pathology, physiology, microbiology, etc. The exhibition features books, instruments, medical equipment, portraits, genre paintings and even sculptures. There are collections of stethoscopes, percussion hammers and other objects. A collection dedicated to the memory of Ilias Mechnicoff is exhibited in a separate room, where original objects are displayed together with furnishings from his period. There is also a large tapestry depicting distinguished microbiologists.

The latest developments in medicine are illustrated through a look at how this has happened in Latvia. There are three halls with a permanent exhibition – the memorial collection of museum founder Pauls Stradiņš, which was substantially expanded when the museum broadly celebrated its centennial; an exhibition featuring medicine in Latvia between the two world wars; and one which surveys medicine in the Latvian capital city of Rīga during 800 years since its establishment. There is also an unusual hall which is devoted to a permanent exhibition on medicine in outer space. Many unique objects have been collected from institutions and from individual Soviet-era

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Fig. 18, 19, 20 - Fragments from the present permanent exhibition: Medioeval drug shop.
Artist: Miervaldis Polis

cosmonauts. This is an historical exhibition in that it is the only one in the world to feature Soviet space medicine.

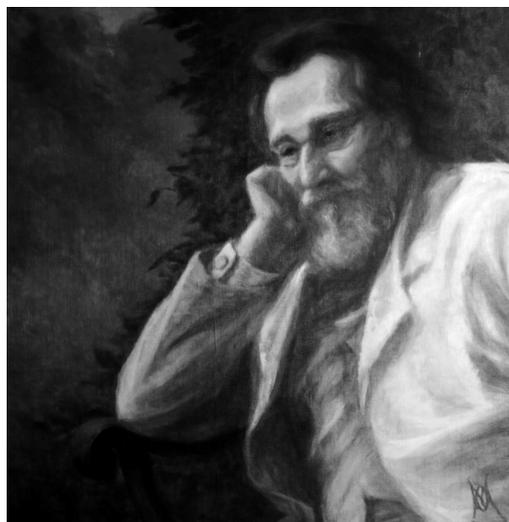
There has been much debate among museum staff about those exhibitions that should be left on display and those that should be put into storage.

Perhaps some need to be left in place to show some of the absurdities of Soviet health care. Alternatively, the space could be used to provide museum exhibitions in the commonly accepted sense of the concept. The point is that items which are on display represent just 5% of the museum's total collection, although many have been used for temporary exhibitions at the museum and abroad. I am personally inclined to believe that we need to preserve our display of the 50



Figg. 21, 22, 23, 24 - Fragments from the present permanent exhibition about microbiologist Ilias Mechnicoff

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years of Soviet history of medicine in Latvia. Our museum is the only place in the world where viewers can see such an exhibition. It is also true that the collection related to Soviet medicine which is in storage at our museum is an important source of information for students and researchers. Indeed, it is a treasure chest which differentiates our museum from other medical history museums in the world.

Research work in the museum

Research into the history of medicine has been traditional in Latvia for more than 60 years. Once the museum was founded, it was quite logical for the studies to be concentrated there. In this respect, too, we differ from other museums in Latvia.

Scientific work at the museum began while Pauls Stradiņš was still alive. In 1958, he edited a compendium of papers, *Из истории медицины* (From the History of Medicine), Vol. 1, with contributions from Stradiņš himself and from colleagues at the museum⁸. This



Fig. 25, 26 - Fragments from the present permanent exhibition about health care in Soviet Union

was the only published work of its kind in the USSR. Subsequent volumes were published, and the 20th, in 1992, came out under the new title *Acta Medico-Historica Rigensia*. It now had an international editorial board. Submissions were published not only in Latvian and Russian, but also in German and English. All told, 27 volumes of the journal have been published.

At the very end of his life, Stradiņš succeeded in satisfying another one of his hopes – organising a conference on the history of natural sciences and medicine in the Baltic region. It was held in Rīga in 1958^o. The meeting launched a new tradition, and the 23rd conference on the history of science in the Baltic States is scheduled for the latter part of 2008 in Rīga. Our museum will play a significant role in that event.

The subject matter for our scientific work remains traditional – the history of medicine in the Baltic region. The work is done under the guidance of Dr Jānis Stradiņš, son of the museum's founder and patron of the museum. Dr. Jānis Stradiņš is a former president of the Latvian Academy of Sciences. The museum also works with the Rīga Stradiņš University in defining academic topics and encouraging classroom activities related to the work of the museum. This is a great privilege for the relevant students.

The unique character of the Pauls Stradiņš Museum of the History of Medicine and the experience which it has accumulated have ensured that it was a centre of methodology in the field of museum studies in the USSR. During the last two decades, scientific relations with Russia have all but dried up because of artificial political barriers, but it seems that a new phase of development with a new set of players is now on the horizon. There is interest on both sides in joint projects. Our relations with the western world are also developing. We have contacts with the majority of medical history museums in the world, and we've been a member of the European Association of the Museums of Medical Sciences since 1986. We are repre-

sented on the association's board. This has been critically important, because it has helped us to overcome our Soviet-era isolation more quickly and more thoroughly. There were strong limitations on international scientific contacts before the Gorbachev-inspired process of *glasnost*, and the KGB kept an eagle eye on any such contacts. Because of this, and because few people in the western world read Russian, let alone Latvian, our publications remained mostly unnoticed¹⁰. Our chief achievement in 2006 was hosting the 23rd congress of the European Association of the Museums of Medical Sciences. Many delegates visited the Stradiņš museum for the first time, even if they had heard much about it in the past¹¹.

Successful co-operation with colleagues in Germany has allowed us to organise joint conferences and exhibitions, publication of books and brochures, joint editing of compendia of papers, an exchange programme for doctoral students, etc. It is no accident that the first foreign scientist to receive the Pauls Stradiņš Prize, which was established by the museum in recognition of outstanding research work in the area of medical history and museum methodology, was Professor Heinz Müller Dietz from the Berlin Free University. In 2005, the prize went to Professor Christa Habrich from Ingolstadt.

In summary, it can be said that the museum's research and educational work satisfy the criteria of an institution which deals with the history of medicine in the western manner. This is thanks to the assistance of the Rīga Stradiņš University. It studies subject matter that has been proposed by the museum, and there has been close co-operation between us and them. This doesn't mean that the museum itself has refused to take part in research work, but it does mean that our staff can concentrate on the museum's functions as such while limiting the need to do work in relation to the museum's collection, as well as the broader area of museum studies. The museum does, however, serve as headquarters for the Latvian Society for the History of Medicine¹².

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Fig. 27 - Delegates of the 13-th congress of EAMHMS in Riga, 2006.

Educational activities at the museum

The people who visit the museum most often are schoolchildren, families, tourists, and medical and nursing students. The museum has agreements with tourism firms, schools and other educational establishments on excursions and lectures. It also offers special pedagogic programmes. The museum's staff also conduct excursions at places outside of the museum which have to do with the history of medicine in Latvia.

At this time, the main educational activities at the museum involve special exhibitions, as well as featured topics about a healthy lifestyle for schoolchildren. There are also one-off events for specifically targeted audiences.

Friends of the museum, including physicians, nurses, professors and frequent visitors, take part in the meetings of the Latvian Society for the History of Medicine. They help us to collect exhibits, offer expert advice, help to determine the scientific attribution of existing and new objects in our collection, and share their recollections.

Some of the stored items that were collected by Pauls Stradiņš are meant for specialists. There are gypsum mock-ups of cancer tumours from a patient who was treated at his clinic. There are items related to teratology, a collection related to anthropology, etc. There have been numerous topical, artistic and anniversary exhibitions in the museum and beyond its walls, and this has served to increase visitor numbers. The museum's library has more than 40,000 titles, and it is used by employees, as well as by specialists, students and others who are interested in medical history.

The museum has conference facilities for rent, with room for as many as 120 people. Support for historical attribution during conferences is also available.

The museum's Web page, <http://www.mvm.lv>, will answer most of the questions that our visitors may have, and we are still developing tools that will help visitors. The Intranet within the museum accesses templates, catalogues, documents, etc.

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The present review article does not claim to open up the full scope of the activities of the Pauls Stradiņš Museum of the History of Medicine in Riga. This is the task of full studies in medical museology and serious monographs. Specific sessions of the museum as Anatomy and Pharmacy sections, are not illustrated here.

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Acknowledgements

We are grateful to our museum's patron - professor Jānis Stradiņš, son of the founder of the museum, for his support and investigations of the early beginning of the Pauls Stradiņš Museum of the History of Medicine in Riga.

BIBLIOGRAPHY AND NOTES

1. СТРАДЫНЬ Я. П., *Становление Музея истории медицины профессора П. И. Страдыня. Из истории медицины.* Рига: Зинатне, 1960; 3: с. 139-153.
2. STRADIŅŠ J., ARONS K. Ē., VĪKSNA A. *Tāds bija mūsu laiks ...* Rīga, Sprīdītis, 1996, pp. 491.
3. STRADIŅŠ J., *Staļina režīma attieksme pret Latvijas zinātniekiem un akadēmiskajām aprindām (1944-1953).* Latvijas Vēsturnieku komisijas raksti. Rīga 2007; 19: 408.-448..
4. Profesors Pauls Stradiņš dzīvē un darbā. Rīga: Latv. PSR ZA izdevn., 1961, pp. 362.
5. САЛАКС.Ю., К.Я.Арон – историк медицины в Латвии (1933-2005). In: *Медицинская профессура СССР.* Москва, 2008, стр.191
6. STRADIŅŠ J., SALAKS J., *Pharmacies and pharmacists in Latvia.* In: *The Pharmacy. Windows on history.* Basel, Roche, 1996, p.136
7. STRADIŅŠ J., ARONS K. Ē., SALAKS J., *Māksla, medicīna, muzejs.* *Acta Medico-Historica Rigensia.* Riga 1997; 3: 299-327.
8. Из истории медицины. Сборник статей. Т. I. Под ред. П. И. Страдыня и др. Рига. Изд. АН Латв. ССР, 1957, с. 279.
9. СТРАДЫНЬ Я., *Межреспубликанское совещание ученых Прибалтики по проблеме изучения истории естественных наук и медицины.* Изв. АН Латв. ССР, 1958; 8: 153-156
10. STRADIŅŠ J., SALAKS J., VĒTRA J., *Creator. Professor. Administrator. Editor. Auctor. Homo.* *Acta Medico-Historica Rigensia.* Riga 2005; 7: 11.-32.
11. SALAKS J., *13.Eiropas Medicīnas zinātņu vēstures muzeju asociācijas kongress Rīgā.* *Acta Medico-Historica Rigensia* 2007; 8: 369-376
12. SALAKS J., *P. Stradin Museum of the History of Medicine.* *Sydsvenska medicinhistoriska sällskapetets årsskrift* 1991;19-30.

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