Historiae et Philosophiae Scientarium Baltica

2026

Riga, June 10—12, 2026

XXXII Baltic Conference on the History and Philosophy of Science

June 10–12, 2026
Riga, Latvia

Programme
Abstracts

Riga 2026

Organising Comittee:

Anna Atvara, Raivis Bičevskis, Artis Ērglis, Ilze Gudro, Ieva Lībiete, Ineta Lipša, Tatjana Koķe, Juris Salaks, Kaspars Zaltāns, Alīda Zigmunde

Organizers:

Latvian Association of the History and Philosophy of Science

Latvian Academy of Sciences

Institute of the History of Medicine, Faculty of Medicine, Rīga Stradiņš University

Research Center for Engineering History, Riga Technical University

Interdisciplinary Center for German Studies Riga, Faculty of Humanities, University of Latvia

In cooperation with the project Forgotten Philosophers: Erika Sehl and Kurt Stavenhagen at the Herder-Institute in Riga and in the World (LZP-2023/1-0216)

Conference administration: Association for the Support of Medical Museums

Latvian Council of Science

FLPP FUNDAMENTAL AND APPLIED RESEARCH PROJECTS

The history and philosophy of science remind us that behind every idea, theory, and discovery stands a person shaped by their own time, knowledge, experience, doubts, and courage to think differently, as well as the conditions that made it possible for that idea, theory, or discovery to emerge. May the Baltic Conference on the History and Philosophy of Science and this volume of abstracts become a source of inspiration for new scientific and philosophical explorations!

Respectfully,

Andrejs Ērglis

Head of the Latvian Centre of Cardiology,
Pauls Stradiņš Clinical University Hospital

President of the Latvian Society of Cardiology

Full Member of the Latvian Academy of Sciences

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A Living Baltic Tradition on the History and Philosophy of Science

The Baltic Conferences on the History and Philosophy of Science are one of the region's most enduring academic traditions. The first conference was held in Riga in 1958 as a meeting of scholars working on the history of medicine and natural sciences. Over time, it became a common forum for historians and philosophers of science from Latvia, Lithuania, Estonia and neighboring countries.

Over 68 years, this tradition has passed through several historical periods. During the Soviet period, the conferences helped preserve the Baltic region's memory of Baltic science and study it as a serious academic subject. After the restoration of independence in the Baltic states, they became a platform for open academic exchange, international cooperation and joint work on the region's scientific heritage.

The main theme of the XXXII Baltic Conference on the History and Philosophy of Science is "Making and Remaking Science" — the making and remaking of science in the Baltics across different historical periods and political regimes. This theme shifts attention from ready-made knowledge to the ways in which science emerges, changes its institutions, practices, professional communities and cultural forms. In the conference programme, this approach is developed in papers on the history of medicine, the natural and technical sciences, universities and academic institutions, as well as in discussions of scientific mobility, professional ethics and everyday scientific work.

The plenary lectures set a broad horizon for the conference. They connect the history of ideas, the social history of knowledge and philosophical questions of science, including a lecture on artificial intelligence as a new instrument of scientific inquiry.

Taken together, these papers show that the history and philosophy of science do not deal with the past alone. They help us understand how knowledge, scientific institutions, and the responsibility of researchers change. In this sense, the conference continues the tradition of previous meetings while also posing new questions for it.

We thank the authors, participants, organizers and all institutions that have supported the conference. Through their work, a tradition that began almost seven decades ago remains alive and important for the academic culture of the Baltic region.

Juris Salaks, Alīda Zigmunde
Co-presidents of the Latvian Association of the History and Philosophy of Science

XXXII Baltic Conference on the History and Philosophy of Science

Programme

Wednesday, June 10 — Opening Day

Latvian Academy of Sciences (Akadēmijas laukums 1)

15:00—16:00 **Registration**

16:00—16:30 **Opening**

16:30—17:15 **Keynote**

A Philosopher's Travels or a Traveler's Philosophy? On the Globetrotting and Knowledge-Making of Hermann Graf Keyserling

Jost Eickmeyer. Eutin State Library.

17:15—18:00 **Guided tour**

Stalinist Architecture: The Latvian Academy of Sciences High-Rise Building

Mārtiņš Mintaurs. University of Latvia.

18:00—20:00 **Welcome reception**

Thursday, June 11 — Conference Sessions

Conference sessions: **RSU Anatomy Museum** (Kronvalda bulvāris 9)
Evening event: **National Library of Latvia** (Mūkusalas iela 3)
Coffee breaks included; lunch at participants' own expense (recommendations provided)

09:00—10:30 **Session 1**

Moderator Elvīra Šimfa. University of Latvia.

- *Scientific Growth: Dimensions of Expansion in Nordic Research and Higher Education from the 1960s to the 2000s.*
  Heikki Mikkonen. Finnish Academy of Science and Letters.
- *Cold War Science in Finland from 1940s to 1970s.*
  Ahto Apajalahti. Finnish Academy of Science and Letters.
- *Engineering Sciences in the First Years of Soviet Rule After World War II.*
  Alīda Zigmunde, Ilze Gudro. Riga Technical University.
- *The Emerging Nuclear Science in Finland in the Early Phase of the Cold War Era.*
  Markus Ahlskog. University of Jyväskylä.
- *Institutional Contexts Shaping Biomedical Research in Latvia.*
  Baiba Tetere. Rīga Stradiņš University.
  National Institute of Research and Innovation.

Discussion

10:30—11:00 **Coffee break**

11:00—12:30 **Session 2**

Moderator Ieva Lībiete. Rīga Stradiņš University.

- *The Impact of World War II on the Number of Doctors and Its Consequences in Latvia.*
  Mārtiņš Vesperis. Jūrmala Museum.

- *Truth, Lies and Aesopian Language in Lithuanian Pharmacists' Memoirs (1957).*
  Vilma Gudienė. Lithuanian University of Health Sciences.

- *The Legacy of Pauls Stradiņš: from Surgery to Institutional Leadership.*
  Pēteris Stradiņš. Pauls Stradins Clinical University Hospital, Rīga Stradiņš University.

- *The Role of Vasily Kalbergs in Latvian Higher Medical Education During the Soviet Era.*
  Maija Pozemkovska, Romualds Gerulis-Bergmanis. Rīga Stradiņš University.

- *On the Biography of Riga Professor Vasily Nikolaevich Klimenko (1868—1941).*
  Olena Vasylieva, Yurii Vasyliev, Kostiantyn Vasyliev. Sumy State University.

Discussion

12:30—13:30 **Lunch break**

13:30—14:15 **Keynote**

Knowing the Family: Science, Law, and the Governance of Intimacy
Marianna Muravyeva. University of Helsinki.

14.15—14:30 **Coffee break**

14:30—16:15 **Session 3**

Moderator Ineta Lipša. Rīga Stradiņš University.

- *Deep Sleep Therapy in the Treatment of Schizophrenia in Soviet Latvia.*
  Marika Garnizone, Kaspars Zaltāns, Ieva Lībiete. Rīga Stradiņš University.
- *Reestablishment of the Department of Psychology at Vilnius University in 1969: Status, Function, Role.*
  Ignė Rasickaitė. Vilnius University.
- *"Learn to Master Yourself": Psychohygiene in Soviet Latvia.*
  Ieva Lībiete, Marika Garnizone. Rīga Stradiņš University.
- *The Rebirth of the Idea of Mental Work Hygiene Under the Iron Curtain: The Case of Soviet Lithuania.*
  Aistis Žalnora. Vilnius University.
- *Energopower. The Technicization of the Soviet Self.*
  Ainārs Kamoliņš. The Latvian Academy of Culture.
- *Historical Teaching Aids Produced in the Georgian SSR for Learning the Human Nervous System.*
  Iveta Skripste. Rīga Stradiņš University.

Discussion

16.15—16:45 **Coffee break. Group photo**

16:45—18:15 **Session 4**

Moderator Juris Salaks. Rīga Stradiņš University.

- *Academician Solomon Hiller (1915—1975): A Timeless Inspiration for Latvian Science.*
  Pēteris Trapencieris.
  National Institute of Research and Innovation.

- *The Significance of RMI's International Collaboration in the Development of Latvian Medicine (1950—1991).*
  Kaspars Antonovičs. Rīga Stradiņš University.

- *Dissertations Defended by Lithuanian Pharmacists, 1936—2025.*
  Austėja Kausteklytė.
  Lithuanian University of Health Sciences.

- *Transforming Pre-Hospital Emergency Care in the USSR: The Creation of the First Resuscitation Team in Riga (1961).*
  Rafaels Ciekurs. Rīga Stradiņš University.

- *Medicine at the University of Dorpat in the 17th Century and the Development of the Swedish University Network.*
  Marie Vatjus. University of Helsinki.

Discussion

18:15—19:00 **Transfer to the National Library of Latvia.**

Participants can reach the venue by taking Tram No. 5 from the Museum to the Library. Further directions will be provided on site.

19:00—21:00 **Exhibition visit & reception**

National Library of Latvia (Mūkusalas iela 3)

Friday, June 12 — Parallel Sessions & Closing

RSU Anatomy Museum & RSU Anatomicum (Kronvalda bulvāris 9).

Both venues are located at the same address and are within a one-minute walk of each other.

09:30—10:15 **Keynote**

From Consciousness Theory to Space Tech: AI as a Scientific Enabler.

Karl Johannes Lierfeld. Ludwig Maximilian University of Munich.

10:15—11:00 **Coffee break**

11:00—12:30 **Parallel Session 5 (*Anatomy museum*)**

Moderator Peeter Müürsepp. Tallinn University of Technology.

- *Machines, Models and Modalities: The Role of Theories in the Age of AI.*
  Rami Koskinen. University of Oslo.
  Ilkka Pättiniemi. University of Turku.
- *The Role of Ethics in Scientific Research: Historical Roots and Modern Challenges.*
  Aive Pevkur. Tallinn University of Technology.
- *Critique of Rein Vihalemm's Notion of φ-scientific Cognition.*
  Ave Mets. University of Tartu.
- *Conceptual and Methodological Issues Related to Folk-Biological Studies of Psychological Essentialism.*
  Edit Talpsepp. University of Tartu.
- *Shift from Institutional to Project-Based Research Funding and Changes in Epistemic Cultures: Evidence from Qualitative Interviews with Estonian Physicists (2006—2007).*
  Endla Lõhkivi. University of Tartu.

Discussion

11:00—12:30 **Parallel Session 6 (*Anatomicum*)**

Moderator Ramūnas Kondratas.
Lithuanian Association of the History and Philosophy of Science.

- *Scientific Mobility and the Formation of Knowledge at the Imperial Vilnius University (1803—1832).*
  Daiva Milinkevičiūtė-Kastunovič. Vilnius University.

- *"My Dearest Friend and Colleague" — Unknown Letters Written by Humboldt to Struve Found in the Humboldt Archives in Quito.*
  Florian Schnee. Berlin-Brandenburg Academy of Sciences and Humanities.

- *Between Poetry and Encyclopedism in Grīziņkalns (Hinterbergen) in the Middle of the 18th Century. Baroque Reflection on Nature with Enlightenment Traits by the Medical Doctor and Scientist Johann Bernhard Fischer (1685—1772).*
  Beata Paškevica. National Library of Latvia.

- *The Three Oettingen Brothers in the Changing World of Science.*
  Lea Leppik. University of Tartu.

- *The State, Philanthropy, and Medicine: The Establishment of Insane Asylums in the Russian Baltic Provinces in the 19th Century.*
  Anu Rae. University of Tartu.

Discussion

12:30—13:30 **Lunch break**

13:30—15:00 **Parallel Session 7 (*Anatomy museum*)**

Moderator Alīda Zigmunde. Riga Technical University.

- *Life and Achievements of Thomas Johann Seebeck (1770—1831).*
  Peeter Müürsepp. Tallinn University of Technology.
- *Ignotas Horodeckis — Head of the Department of Mineralogy at Vilnius University, born 250 years ago.*
  Eugenija Rudnickaitė. Vilnius University.
- *Marcin Poczobut and Other Forgotten Observers of the 18th century Venus Transit.*
  Veronika Girininkaitė. Vilnius University.
- *STE(A)M Exhibits Created by Riga Technical University Students at the RTU Curiosity Centre "Futurimo Riga" — Science Interest Boosters for Children.*
  Ilze Gudro, Alīda Zigmunde. Riga Technical University.

Discussion

13:30—15:00 **Parallel Session 8 (*Anatomicum*)**

Moderator Vilma Gudienė.
Lithuanian University of Health Sciences.

- *History of Physics Demonstration Room of Department of Physics of Kaunas University of Technology.*
  Judita Puišo. Kaunas University of Technology.

- *Science in Interwar Lithuania: The Case of Adolfas Damušis.*
  Ramūnas Kondratas. Lithuanian Association of the History and Philosophy of Science.

- *The University of Latvia During the Interwar Period — the National Alma Mater of the Republic of Latvia or the Heir to the Higher Education Institutions of the Baltic Provinces of the Russian Empire?*
  Rūdolfs Rubenis. University of Latvia.

- *Imported and Forgotten Knowledge: The 1921—1922 Archaeological Digs of the Jaunpiebalga Mound Cemetery by Anatomists Gaston Backman and Jēkabs Prīmanis.*
  Kaspars Zaltāns. Rīga Stradiņš University.

- *Professor Pauls Stradins' Morphologist Skills.*
  Māra Pilmane. Rīga Stradiņš University.

Discussion

15:15—16:00 **BAHPS General Assembly**

Jost Eickmeyer

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A Philosopher's Travels or A Traveler's Philosophy? On the Globetrotting and Knowledge-Making of Hermann Graf Keyserling

The relation between travel and the acquisition of knowledge has been well established for a long time in the cultural history of Europe. As early as in the course of the 16th century "it became a communis opinion among intellectuals that travelling was an important means of acquiring knowledge and experience, and that an extended tour abroad was a vital, if not indispensable part of humanist, academic and political education" (Enenkel/De Jong). With the transport revolution of the 19th century the already astonishing distances covered by travelers and explorers on land and sea became ever more manageable, with steam boats outmaneuvering the "aeolian" clippers on the Oceans, and in particular locomotives and trains "annihilating" space and time of land travel in previously unfathomable ways (Schivelbusch). Traveling 'around the world' — as epitomized in Jules Verne's first leisure-globetrotter Phileas Fogg from 1872 — became an option, an aspiration, and no less a means of seeing and experiencing the most distant lands an cultures in a comparably short period of time (cf. Staszak/Pieroni).

In 1919, tellingly the same year which saw the first German movie adaptation of Verne's novel Around the world in 80 Days (by Richard Oswald), another account of a Globetrotter was published in print: A Philosopher's Travel Diary by the Pernau born count Hermann von Keyserling. In the years 1910 and 1911, Keyserling had, in his early thirties, started out from Livonia via the Mediterranean, Africa, Egypt, on towards India and the Himalayas to China and onwards via Japan and Hawai'i to the United States from where he returned by ship to Europe. His travel diary was an immediate success with the public seeing

no less than five new editions until 1927. It founded his fame as a traveling philosopher, a wise man, well-versed in the world, the founder of a "School of Wisdom" [Schule der Weisheit] in Darmstadt in 1920 and of the explicitly unacademic "Society for a Free Philosophy" [Gesellschaft für freie Philosophie]. Thus, he became one of the most notorious — and from the perspective of university Scholars: contested — public figures of the Weimar Republic.

In my talk I will try to elaborate on the connection of travel writing, philosophy (as practice), and "Weltanschauung" in Keyserling's most famous book, risking a few sidesteps into some of his later works on Europe (Das Spektrum Europas, 1928) and America (Amerika. Der Aufgang einer neuen Welt, 1930). Key questions may be: How do traveling the world and philosophy as a way of (maybe) meditating on the world intersect or compete with each other in Keyserling's diary? How does Keyserling himself perform the relation of cultural contact (during travel) and knowledge-making (as a writer)?

References

Enenkel, Karl A.E. / de Jong, Jan L. (eds.), Artes Apodemicae and Early Modern Travel Culture, 1550—1700. Leiden; Boston: Brill 2019 (Intersections, 64).

Schivelbusch, Wolfgang, The Railway Journey: Trains and Travel in the 19th Century. Translated from German by Anselm Hollo. New York: Urizen 1979.

Staszak, Jean-François / Pieroni, Raphaël (eds.), La Manie des tours du monde. De Jules Verne aux premiers Globetrotters. Paris: Lienhart 2025.

Johannes Lierfeld

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From Consciousness Theory to Space Tech: AI as a Scientific Enabler

The advent of artificial intelligence (AI) marks a landmark turning point in human history: for the first time, technological progress is quicker than our adoption rate of said technology. In other words: we struggle to keep up with the momentum and dynamics this branch of innovations offers us. Hence, this presentation explores a burgeoning paradigm shift in scientific inquiry, where AI serves as the pivotal tool for navigating complex theoretical frameworks as presented in neuroscience, high-stakes engineering challenges as posed by space tech or data-heavy research areas as in medicine. By utilizing AI as a scientific enabler, researchers can decouple the traditional relationship between research depth and time. Through AI-accelerated R&D and agile iteration cycles, an ever-increasing depth of understanding can be achieved in ever-decreasing timeframes, facilitating breakthroughs by validating assumptions early and bypassing costly trial-and-error routines. The transformative power of this approach is demonstrated through two distinct fields of research led by Dr. Johannes Lierfeld:

The Conversion Theory of Consciousness: This theoretical framework addresses the "qualia problem" by proposing a process dualism. It suggests that consciousness emerges from the irreversible conversion of objective sensory data into subjective phenomenology. AI and brain-computer interfaces serve as essential lenses for modeling these conversion stages and understanding neurological conditions like Capgras or Fregoli delusions, where the "emotional tagging" or "contextual integration" of data fails.

LUNAR HABITATO: Translating high-level theory into space technology, this project utilizes AI-driven feasibility simulations and digital twins to develop a permanent, ISRU-driven (In-Situ Resource Utilization) moon habitat.

By leveraging AI agents and XR/VR/AR simulations, the project de-risks complex construction challenges — such as the patented Matryoshka Shell (MaSh) design — to achieve 95% local material usage and significant cost reductions. Implementation of AI-supported research is also a major step towards de-risking, for instance by running AI-driven feasibility simulations in XR/VR/AR. But although the implications for the medical sector are immense, the success of this paradigm relies heavily on data quality management to ensure valid results. As AI tools evolve rapidly, the primary challenge shifts from the sheer technological possibilities to our capacity to utilize these tools strategically to foster scientific breakthroughs. Only if we adapt quickly and adequately, we can unlock the full potential of AI as a scientific enabler.

Marianna Muravyeva

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Knowing the Family: Science, Law, and the Governance of Intimacy

This paper examines how the family emerged as a key object of scientific and administrative knowledge in modern societies. From the late nineteenth century onward, scholars and practitioners across law, medicine, criminology, statistics, and emerging social sciences increasingly treated the family as a domain that could be observed, classified, and governed through systematic forms of expertise. In this process, intimate life became a crucial site for the production of knowledge about social order, deviance, and population management.

The paper situates the regulation of family life within broader histories of knowledge-making, highlighting how legal doctrine, demographic statistics, and criminological research functioned as epistemic tools through which states sought to understand and shape society. By tracing transformations across imperial, Soviet, and post-socialist contexts, the talk explores how changing political regimes reshaped both the institutions and epistemic frameworks through which family life was studied and governed.

Framing family history as a history of knowledge production, the keynote argues that the family operated as an epistemic laboratory in which scientific authority, legal norms, and political power intersected. Examining these dynamics illuminates how expertise about intimacy has been continuously made and remade, revealing the entanglement of science, governance, and everyday life.

Mārtiņš Mintaurs

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Stalinist Architecture: The Latvian Academy of Sciences High-Rise Building

Construction of the present Latvian Academy of Sciences high-rise building (1951—1958) in Riga was a typical and hence interesting example of particular traits of the late-Stalinist cultural policy carried out by the Soviet authorities in the Latvian SSR. On the one hand, this building had to symbolize completion of the first phase in post-war Sovietization process of the three Baltic States repeatedly annexed by the USSR in 1945. The high-rise building holding the golden five-pointed star on its spear above Riga should mark the presence of new Soviet age for everyone approaching the city from a distance already. Intended to house a hotel and an educational center for collective farmers of the Latvian SSR, this building was meant to distribute the narrative of Soviet victory: the construction began just two years after the mass collectivization was finalized in 1949 including deportation of more than 43 000 inhabitants from the Latvian countryside to force the collectivization of agriculture and combat the militant national resistance movement still causing problems for the Soviets back then.

Yet after being built near to its final stage the high-rise lost the initial purpose as to become the headquarters for the Academy of Sciences of the Latvian SSR in the second half of the 1950s. This was due to changes in both the concepts of Soviet architecture after Joseph Stalin's death in 1953, and in the local policy of national communism subsequently implemented in Latvia for a while until 1959. However, the symbolic meaning of this building changed in the late 1980s along the gradual eruption of the Soviet regime starting with academic expertise and public discussions on ecology issues held here in 1986—1987, and with the creation of Declaration of Independence of May 4, 1990 that marked a political breakthrough towards the end of Soviet occupation in Latvia.

The Latvian Academy of Sciences high-rise building is the most significant object of Stalinist architecture preserved in Riga today holding the status of the monument of architecture as well. Created while the socialist realism style was at its peak in the USSR, it still provides a complex unity of architectural volume and proportions as well as interior qualities worth to see and learn about. The somewhat strange combination of Renaissance and Baroque elements copied from European examples with modest but persistent decorations linked to Latvian ethnographic ornament being amalgamated with the shape typical for 'Soviet skyscrapers' built in Moscow and in some Warsaw Pact countries of that time was designed by local architects. Altogether, this eclectic approach has led to an interesting conceptual object still attracting attention of the contemporaries.

Markus Ahlskog

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The Emerging Nuclear Science in Finland in the Early Phase of the Cold War Era

In Finland, as elsewhere as well, the emergence of nuclear energy as a viable technology in the 1930s led to strong cross connections between nuclear physics and the concurrent politics. Finnish nuclear physics, apart from the technology side, was for many decades dominated by Prof. Lennart Simons, who became acquainted with the field as a visiting scientist at the Niels Bohr Institute in 1938—1939, just at the time when uranium fission was discovered, partly at this institute. As is well known, in those times some among the academic people in the advanced western countries had openly or in secret sympathies for leftist ideas. In Finland, this was rare but Simons belonged to the exceptions, though apparently not with a full conviction. He was also enthusiastic about the international peace movement, which in those times became more intimate with left-wing politics. With the rise of nuclear science Simons was sailing in very favorable winds. Despite the poverty of the government, an initial funding for starting the construction of a Van de Graaff accelerator, that Simons had propagated for was granted as early as in 1947. Hence there was now a situation that was probably of much concern to many: A left-leaning scientist was in charge of an activity which suddenly had superior prospects. When the Finnish atomic energy initiative was created in 1955, Simons was completely sidelined from the investments into research on nuclear energy technology, although he continued to be the leading person in basic nuclear physics. The atomic initiative led to construction of two major nuclear power sites in the 1970's, that soon accounted for about 40 percent of Finland's electric power output. I discuss the Cold War political tensions in Finland and the long-term effects of these internal disputes within Finnish nuclear science on its research structures.

Kaspars Antonovičs

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The Significance of RMI's International Collaboration in the Development of Latvian Medicine (1950—1991)

International missions undertaken by the academic and scientific staff of the Riga Medical Institute (RMI) during the post-war Soviet period played an important role in the development of medical science and education in Latvia. These missions facilitated scientific communication, professional networking, and the transfer of research methods, medical technologies, and educational models (LVVA, Fund 507).

The Khrushchev Thaw of the mid-1950s created limited opportunities for international academic exchange. Soviet medical institutions, including RMI, were for the first time permitted to participate in international scientific events and to visit foreign medical centers (Materials of the 20th CPSU Congress, 1956). Although such contacts remained strictly regulated, they enabled RMI staff to become acquainted with international and Western medical achievements previously accessible only through secondary sources.

During these missions, RMI lecturers and researchers observed foreign systems of medical education, modern diagnostic technologies, and innovative research methodologies. The integration of this experience into teaching and research practices contributed to improving the quality of medical education in Latvia (Padomju Mediķis, 1960—1989). Knowledge transfer to students and young specialists occurred indirectly through returning academic staff.

Selection for international missions was tightly controlled, permitting travel only to politically reliable and professionally qualified specialists (LVVA, Fund 507). Archival data indicate that between 1955 and 1990, RMI staff undertook at least 146 officially documented international missions, primarily to socialist bloc countries; in total, 167 missions are recorded. These activities laid the foundation for the later modernization of Latvian medical science and its integration into the global academic community.

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Cold War Science in Finland from 1940s to 1970s

Science was globally transformed during the Cold War. In recent historiography, the concept of Cold War Science is used especially to refer to fields in the natural sciences — and, to some extent, the social sciences — that were involved in the broader ideological and political endeavours of the Cold War era. Physics, geosciences and fields related to technological, economic and social planning are most often implicated in being involved in the global Cold War, most often in terms of funding, creation of research networks, political intrusions or underlying concepts such as rationality.

As part of a research project at the Finnish Academy of Science and Letters, I'll present tentative results from my ongoing research on the transformation of Finnish science during the Cold War. I'll examine how the international ideological climate and political context of the early Cold War period affected the natural sciences in Finland.

As is well known, Finland's geopolitical situation presented challenges to pursuing certain fields of military research and to integrating into Western science institutions. However, the process sometimes described as the coproduction of American hegemony in Western science did, on the whole, also happen in Finland. Meager postwar resources contributed to a brain drain, yet some Finnish scientists with strong international networks were able to access the financial flows of Cold War Science, sometimes with impressive results.

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Transforming Pre-Hospital Emergency Care in the USSR: the Creation of the First Resuscitation Team in Riga (1961)

The establishment of the first resuscitation brigade in Riga in 1961 marked a significant turning point in the development of pre-hospital emergency medical care in the Soviet Union. At that time, emergency services were largely focused on transporting patients to hospitals rather than providing advanced medical treatment at the scene. The creation of a specialised resuscitation team introduced a new model in which life-saving interventions could begin before hospital admission.

The initiative was led by the Latvian anaesthesiologist and reanimatologist Georgs Andrejevs, who recognised the need for specialised emergency teams capable of providing advanced medical care in the pre-hospital environment. In cooperation with physicians of the Riga Emergency Medical Service and engineers of the Riga Bus Factory (RAF), a modified RAF microbus was equipped to function as a mobile resuscitation unit. This vehicle allowed medical teams to perform airway management, artificial ventilation, defibrillation and other life-saving procedures directly at the scene or during transport.

The paper examines the historical circumstances that enabled the creation of this specialised brigade and analyses its organisational structure, technical equipment and clinical functions. Particular attention is given to the interaction between medical innovation and technological development, as well as to the collaboration between clinicians and engineers in designing an ambulance suited for intensive medical care.

Using archival sources, contemporary publications and oral history interviews, the study reconstructs the development of the first resuscitation brigade and evaluates its significance within the broader context of Soviet emergency medical services. The case of Riga demonstrates that important innovations in emergency medicine could emerge from regional initiatives within the Soviet system and contribute to the transformation of pre-hospital care practices.

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Deep Sleep Therapy in the Treatment of Schizophrenia in Soviet Latvia

Deep sleep therapy (DST) was introduced in the 1920s by Swiss psychiatrist Jakob Klaesi. Although it largely disappeared from Western European psychiatry by the late 1930s, the "Pavlovian Sessions" held in Moscow in 1950—1951 led to its revival across the USSR and Eastern Bloc countries. Soviet psychiatry interpreted schizophrenia through Pavlovian physiology as a disorder caused by an imbalance between cortical excitation and inhibition. DST was therefore presented as a pathogenetically grounded treatment capable of inducing "protective inhibition" and restoring balance in the central nervous system.

After the Pavlovian Sessions, DST gained temporary popularity at the Riga Psychoneurological Hospital. Intermittent sleep therapy had been used there since 1949, but in 1953 psychiatrists introduced continuous DST, aiming to keep patients asleep for up to ten days.

These theses examine the mechanisms and actors behind this reintroduction. While the ideological framework of Pavlovian psychiatry was important, the implementation of DST in Riga was strongly shaped by Soviet psychiatrist Georgy Richter, who worked there between 1953 and 1956. Trained in the Moscow psychiatric school, Richter had worked at the Giliarovsky Clinic during the first introduction of DST in the 1930s and regarded the method as effective, though dangerous. His career was profoundly disrupted by Stalinist repression and the Second World War, and he eventually arrived in Riga in 1953. There, he actively promoted continuous DST while also attempting to improve its safety by modifying the drug mixtures used to maintain prolonged sleep.

The theses argue that the spread of DST in Riga should be understood not only through ideological pressure from Moscow, but also through the agency and professional interests of individual psychiatrists. Its disappearance after 1956 can likewise be linked both to Richter's transfer to Kharkiv and to the introduction of Chlorpromazine, which rapidly transformed psychiatric treatment.

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Marcin Poczobut and Other Forgotten Observers of the 18th Century Venus Transit

Based on the prior astronomical observations it was predicted that in the 18th century the planet Venus would enter the position between the Earth and the Sun, and visibly cross the Sun disc twice, in 1761 and 1769. The proper observation of this phenomenon could give the possibility to calculate the Earth-Sun distance. Preparations for this astronomical event became the most salient international, even global, scientific project of the XVIII century, which got the political support and united the most skilled astronomers-observers. This topic was skilfully investigated and described in the astronomy historians, described in encyclopaedias, articles and even specialised monographies. However, most of the data in these published studies are limited to the manuscripts, which were available to the authors and so focused mainly on the input of the astronomers from the western Europe (usually France and Britain). Such geographically marginal parts of the European scientific-cultural world as Poland, Lithuania or Tallinn, in which the Vilnius academy astronomers Marcin Poczobut and Andrzej Strzecki performed their observations, still are under-represented. The author aims to fill this lacune by using the archival handwritten sources and the astronomical publications of the period. At the same time the participation in such global enterprise as observing the Venus transit showed how much the science in the Baltics was becoming involved in the most actual scientific trends at the time.

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Truth, Lies and Aesopian Language in Lithuanian Pharmacists' Memoirs (1957)

In 1957, Lithuanian pharmacists were compelled to write memoirs describing their professional lives under Tsarist Russia, during the interwar period, and in Soviet Lithuania. The original intention to collect these testimonies belonged to Alfonsas Kaikaris (1925—1997), founder of the Lithuanian Pharmacy Museum, who aimed to document the history of pharmacy through personal memories. His initial appeal to colleagues remained unanswered: pharmacists were unwilling to distort the truth, yet understood that writing honestly was impossible under Soviet ideological constraints.

Subsequently, Kaikaris turned to the Head of the Chief Pharmaceutical Administration (VFV), Jonas Eišvydis, who issued an official order obliging pharmacists to submit memoirs and transfer unused pharmacy equipment, vessels, and documents to the emerging museum. Under this directive, pharmacists could no longer refuse. As a result, numerous memoirs were submitted to the VFV and are now preserved in the Museum of the History of Lithuanian Medicine and Pharmacy.

These memoirs, written in Lithuanian and Russian, typically begin with mandatory praise of the Soviet regime and harsh criticism of independent Lithuania's pharmaceutical system. Authors wrote more freely about their studies and work in pharmacies of Tsarist Russia, portrayed the interwar period negatively, and described pharmacy nationalization as a progressive achievement — despite the fact that many of them had lost their privately owned pharmacies and suffered significant emotional trauma.

The Soviet period is depicted as an era of progress, even though post-war shortages of medicines and personnel are also mentioned. This presentation analyses how pharmacists navigated ideological pressure by employing lies, selective silence, and Aesopian language, revealing the complex coexistence of truth and falsehood in historical narratives.

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Energopower. The Technicization of the Soviet Self

Anthropologist Dominic Boyer argues that power over energy has been an ally and partner of power over life and population. This insight provides a productive framework for examining how metaphors of energy and electrification shaped understandings of subjectivity in Latvia before the Second World War and during the early period of the Latvian Soviet Socialist Republic (LSSR). In interwar Latvia, consciousness and human body were frequently described through the language of energy and electrotechnology. The metaphor of the accumulator — an energy storage device — became a powerful image for the human nervous system, closely linked to contemporary notions of "electrification of nerves". Such metaphors reflected a broader cultural fascination with electrification as a symbol of modernity, progress, and rational organization. Within public education and popular science discourse, proper management of one's mental "energy" emerged as a central concern. Individuals were encouraged to regulate the balance between work and rest in order to preserve psychological equilibrium and maintain productivity. Failure to maintain this balance was believed to result in neurological disorders, most notably neurasthenia — a diagnosis widely associated with the strains of modern life. This talk examines the technicization of the self in interwar Latvia and the early Latvian Soviet Socialist Republic, analyzing how technological and energetic metaphors structured epistemologies of consciousness, health, and social responsibility. Taking public discourse around neurasthenia as a central case study, it argues that such metaphors and diagnostic frameworks did not merely represent the self but actively participated in its production. As modalities of energopower, they configured norms of conduct, disciplined bodily and mental capacities, and articulated new regimes of self-regulation aligned with broader political and socio-economic transformations.

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Dissertations Defended by Lithuanian Pharmacists, 1936—2025

Doctoral research is an important factor in scientific progress. In Lithuanian pharmacy, the analysis of pharmacists' dissertations provides insight into how historical and political conditions have influenced the development of pharmaceutical science. The aim of this study was to explore the evolution of doctoral dissertations defended by Lithuanian pharmacists focusing on changes in dissertation output, research fields, institutional context, and supervision.

The research was based on retrospective historical and document analysis, database development, comparative evaluation and qualitative analysis, using interviews with Lithuanian pharmacy doctors, who defended their dissertations during different time periods. A database of doctoral dissertations, defended between 1936 and 2025 was compiled, including information on research topics, institutions, supervisors, and scientific disciplines or departments, where dissertation was prepared.

The results indicate that doctoral activity was strongly influenced by historical circumstances. A total of 175 dissertations were defended by pharmacy specialists. Only a few dissertations were defended in the early period, followed by a notable increase during the Soviet era, when research was frequently conducted outside Lithuania and focused on pharmaceutical chemistry. After the restoration of independence, dissertation numbers initially declined but later stabilized and increased, reaching their peak in the 2011—2020 decade. Since year 2000, main dissertation topics shifted to pharmaceutical technology, clinical pharmacy, and pharmacognosy. Interview data suggests that earlier research had limited resources and a centralized system, while contemporary research benefits from better access to resources and infrastructure, although the supervisor's role remains significant.

Doctoral dissertations reflect evolution in Lithuanian pharmaceutical science and highlight the transition from externally influenced research systems to a more independent and diverse academic environment.

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Science in Interwar Lithuania: The Case of Adolfas Damušis

Adolfas Damušis (1908—2003) was a chemical engineer, inventor, author and activist in the resistance to the Soviet and Nazi occupation regimes. He is a good example of a class of intellectuals who received their higher education in newly-independent Lithuania; began successful careers which were interrupted by the Second World War and the Soviet and Nazi occupations of Lithuania; who had to flee their country and then try to make new lives and careers in exile.

In 1934 he graduated from the Faculty of Technology at the Vytautas Magnus University and received his doctorate in engineering in 1940. He specialized in silicate chemistry and building materials. He began his teaching career at the university in 1935, was made assistant professor and Head of the Department of Inorganic Chemistry in 1940, and elected dean of the Faculty of Technology in 1942. He made his name by his silicate research and organization of the cement industry in Lithuania.

During World War II he joined the underground resistance against Soviet and Nazi occupations, was one of the organizers and leaders of the June 1941 Uprising in Kaunas against the Soviets. For organizing resistance to the Nazi occupation, he was arrested by the Gestapo in 1944 and detained in a series of German prisons. He was liberated by the Americans in 1945.

After arriving in the United States in 1947, Damušis took up work in the field of paint and coating materials, and polymer research. He worked ten years for the Sherwin-Williams Company in Cleveland, Ohio and then for the BASF Wyandotte Chemicals Company in Detroit (1957—1973). After retirement he taught at the University of Detroit and was vice-director of the Polymer Research Institute. He is the author of scientific articles and a book on Sealants (1967), which is still considered a classic in its field. He holds 24 patents in the USA, Canada, England and France.

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Machines, Models and Modalities: the Role of Theories in the Age of AI

Artificial Intelligence (AI) has become virtually a social necessity; individuals, companies, and entire societies must employ AI tools in order to stay in the competition, the sentiment often goes. Science is no exception here. Looking at scientific journals evokes a strong impression that knowledge-production has decisively entered the age of machines. In several fields, ranging from chemistry to climate modeling, ML models have already been reported to outperform theory-based models in predictive accuracy. This has prompted some scientists and philosophers to dream of a science free of not only values, but of theories. Science itself is on the brink of a radical change. We present a modal argument for why this dream is presently ill-founded. More precisely, we suggest the predictive success of ML models comes at the cost of the models' modal reach, a central property of good theories. ML predictions may no longer work if there is surprising disturbance that is orthogonal to the dataset the model is trained on. One can try to fix this by extending training with synthetic data, but the problem here is the possibility of the well-known model collapse phenomenon, where cannibalistic models become increasingly worse at accounting for rare, but important real world features. Logically speaking, the space of possibilities is infinite; the choice of which alternatives to pursue is therefore critical. We call the expected narrowing of the relevant possibilities individual ML models can reason about modal collapse. While model collapse is an undesired artifact of iterative learning on biased/synthetic data, modal collapse is often a consciously pursued trade-off when huge data is harnessed for ultra precise prediction. Thus, ML models by themselves cannot replace scientific theories. Yet, there is a potential role for ML models in the refinement of theoretical frameworks through the exploration of possibility spaces using, e.g., "directed hallucinations".

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The Three Oettingen Brothers in the Changing World of Science

The European scientific world of the second half of the 19th century was characterized by two important keywords — specialization and quantification. The triumph of the natural sciences continued, on which expanding industrialization was largely based. Everything was tried to be divided, measured, and weighed, in addition to physics and chemistry, also in economics and social sciences. Without specialization, nothing significant could be achieved.

The three professor brothers Oettingen are well known in the history of Baltic science. Although they chose different fields of science, one can still see common features in their activities. Georg v. Oettingen (1824—1916) founded a special eye clinic in Tartu and later, as mayor of Tartu, contributed to improving the city's sanitary conditions. Theologian Alexander v. Oettingen (1827—1905) wrote himself into history as a social scientist with his moral statistics. He also introduced the concept of social ethics, which has rekindled interest in the 21st century. Arthur v. Oettingen (1836—1920) tried to bring more mathematical physics to Tartu, established a meteorological observatory, and achieved the separation of geophysics and physical geography from the physics department. This established the discipline of physics much more precisely and in keeping with the times.

In academic terms, all three brothers contributed to making their field more specific and quantitative, as was the case with the separation of ophthalmology from surgery; the attempt to place ethics on a statistical basis; the creation of a physical theory of music; the separation of meteorology from general physics and the introduction of systematic measurements.

All of this took place during a difficult period for the German-speaking elite in the Baltics: the national movements of Estonians and Latvians were rising and the empire's Russification pressure was growing. This was also reflected in the fate of the brothers.

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"Learn to Master Yourself": Psychohygiene in Soviet Latvia

This paper explores psychohygiene clubs in Soviet Latvia as a distinctive approach to psychohygiene and psychoprophylaxis during the late Soviet period. Established in the late 1960s by psychiatrists associated with the Latvian SSR Neurologists and Psychiatrists Association and organised within "houses of culture", these clubs promoted autogenic training and self-suggestion as methods for coping with stress, nervousness, and the psychological pressures of modern Soviet life while simultaneously compensating for the limited availability of professional psychotherapy.

In contrast to psychohygiene initiatives elsewhere in the Soviet Union, which were often tied to workplaces or sports organisations, Latvian psychohygiene clubs functioned as open public forums. Their programmes combined lectures on health and psychology with collective autogenic training sessions, film screenings, and performances, blurring the boundaries between therapy, popular science, and entertainment. By the 1970s, more than ten psychohygiene clubs were operating across Soviet Latvia, including Aleksandrs Falkenšteins's "Labā vārda skola" ("School of the Good Word") and Jānis Zālītis's "Panaceja" ("Panacea"), which had become well-known features of Riga's cultural life. Many clubs remained active until the early 1990s, while "Panaceja," though transformed, continues to exist today.

Drawing on press materials and memoirs, this paper examines how psychohygiene clubs operated as semi-public spaces where official Soviet efforts to cultivate disciplined, emotionally resilient, and productive citizens intersected with personal quests for emotional balance, self-transformation, and, at times, quasi-spiritual experience.

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Shift from Institutional to Project-Based Research Funding and Changes in Epistemic Cultures: Evidence from Qualitative Interviews with Estonian Physicists (2006–2007)

Over the past five decades, until very recently, the proportion of project-based funding in academic research has steadily increased relative to institutional block funding. The shift was largely driven by the universities' growing need for external resources. Competitive grant schemes were introduced to promote efficient, goal-oriented, short-term research projects. It was assumed that competition and peer-review evaluation would ensure high-quality research and foster innovation. Individual initiative by highly motivated researchers was expected to flourish. The expansion of competitive funding mechanisms contributed to the emergence of new epistemic cultures, as research aims and methodologies had to be aligned with short-term projects conducted in relatively small teams. Consequently, the organization of research work, task distribution, required expertise, communication patterns, and dissemination practices were substantially reshaped. While the advantages and disadvantages of these funding and evaluation reforms are now widely recognized, this presentation focuses on the immediate reflections of Estonian physicists who experienced the institutional and funding reforms of 1990—2005 and were interviewed in 2006—2007. The analysis can be understood as a "remaking" of "making", as contemporary perspectives allow for renewed interpretation of the rapid transformations of the early 2000s. The interviews vividly illustrate perceived contrasts between American and European project procedures, between European and Estonian contexts, and between motivation and demotivation, as well as uncertainty and ambiguity. The interviews were originally conducted within the project UPGEM, which examined gendered patterns of leaving academia. Given the richness of the material concerning individual career trajectories and perceptions of science policy, they offer valuable insights into broader transformation of research funding and epistemic cultures discussed in this presentation.

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Critique of Rein Vihalemm's Notion of ϕ-Scientific Cognition

Rein Vihalemm distinguished between physics-like of ϕ-sciences and non-ϕ-sciences such as natural sciences. He briefly characterised their methodologies as constructive-hypothetico-deductive for the former, and classifying-historico-descriptive for the latter. He specifies that exact (ϕ) science can only exist by constructing its object of inquiry or defining it by the (mathematical) cognitive process, whereas the study of objects as they are given via pre- or non-scientific practices can only be non-exact. Moreover, he claims that modern φ-science only started with Galileo. This raises the question: were the objects that Galileo studied clearly different in nature from all the previous mathematical studies of the world, that he probably learned from, e.g. Archimedes, the Oxford calculators and others? If Galilean idealisation is crucial to the ϕ-ness of research, and that means abstracting away material idiosyncrasies, then that is what all previous mathematical modelling of material objects did too. Moreover, any mathematical representation of the world, even just counting objects, is based on idealisation and abstraction; but counting is millennia old. On the other hand, non-ϕ-sciences such as biology and geology clearly deal with idealisations and abstractions too —classifications themselves build on abstracting away beings' individual traits and idealising them into idealised specimens of species, genera etc. The matter is complicated by his omission of statistical methods from ϕ methods, although they rely on counting among other mathematisations; and insistence that calculation is not the crucial aspect of mathematics necessary for ϕ-ness, instead, apriority and (Galilean) idealisation as the original meanings of mathematicity are. This, I conclude, renders his methodological distinction of sciences murky and unhelpful.

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Scientific Growth: Dimensions of Expansion in Nordic Research and Higher Education from the 1960s to the 2000s

Finland and Scandinavia were no exceptions to an almost universal pattern of steady expansion in science and research throughout the post-Second World War era. In terms of numbers of research and higher education institutions, scholars, students and administrative personnel, the "long 1960s" was the breakthrough decade, leaving behind a traditional, largely self-governed and socially elitist model of the European university. This paper offers an assessment of the pace and changing meanings of expansion in science and research from the 1960s, as well as the reconfigured relations between scientific and social life that resulted from this development. The latter were connected to a broad variety of factors, ranging from the increased social importance of higher education to the expanding role of science for economic growth, resulting in the expansion and systematization of science policy coordinated by national governments and intergovernmental organisations.

There were multiple dimensions of expansion, such as the democratization of research and higher education, the quantitative growth of personnel and students, and the geographical diffusion of research institutions beyond the traditional centres of intellectual life. As a result, the very meaning of concepts such "science" and "research" expanded in different ways. This paper aims to provide both conceptual clarity and empirical evidence to a topic, which has often remained theoretically abstract and empirically underdeveloped in previous historical and social scientific literature on science-society relations.

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Scientific Mobility and the Formation of Knowledge at the Imperial Vilnius University (1803–1832)

How did a university in the early 19th century shape not only what scholars learned, but also how they learned it? This paper examines the structured scientific mobility at Imperial Vilnius University (IVU) between 1803 and 1832, focusing on how detailed instructions for traveling scholars actively shaped both the content and method of their studies. University-issued guidelines went beyond mere lists of subjects: they prescribed essential readings, scientific instruments, laboratory practices, field observations, and interactions with key scholars abroad. For instance, J. Znoska was instructed to record lectures meticulously, engage with economic treatises, and study local administrative systems, while V. Herberskis combined clinical ophthalmology with vaccination research in Vienna, following Jennerian methods closely. V. Gurskis conducted systematic examinations of mining and hydraulic technologies in Prussia and Saxony, producing detailed schematics and implementation reports, whereas L. Sobolevskis navigated philological studies and manuscript research while facing significant health challenges, highlighting the university's concern for both intellectual and personal preparedness. These cases illustrate how IVU emphasized critical selection of knowledge, adaptation to local conditions, and integration into regional scientific networks, showing the university's role in cultivating transferable expertise and reshaping teaching practices. By analyzing travel reports, correspondence, and instructions, this paper demonstrates that IVU functioned not only as a center for knowledge acquisition but also as an engine of methodological innovation, mediating between European scientific trends and local institutional needs. This study situates IVU within the broader Baltic context, revealing how mobility, institutional strategy, and political circumstances combined to transform scientific knowledge production, circulation, and application during the early 19th century.

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Life and Achievements of Thomas Johann Seebeck (1770—1831)

The purpose of the paper is giving an insight into the life and works of Thomas Johann Seebeck who was born in Tallinn (Reval) into a Baltic German merchant family but moved to Germany after graduating from high school in Tallinn (the present day Gustav Adolf Gymnasium) and became an outstanding physicist there. Seebeck was close to Johann Wolfgang Goethe and to the philosopher Hegel.

Seebeck is often referred to as the discoverer of one of the basic thermoelectric effects, the Seebeck effect. Seebeck observed that a magnetic compass needle is deflected when the junctions in a closed loop of two dissimilar metals or semiconductors are at different temperatures. Seebeck called the effect thermomagnetism. Hans Christian Oersted from Copenhagen proposed a clear explanation of the phenomenon discovered. He coined also the term thermoelectricity. A single thermoelement or a thermocouple can be used as a sensor element in relatively fast-responding and exact thermometers at temperatures from -270 to +2500°C. More complex devices with a number of thermocouples connected in series are called thermopiles or thermobatteries. Since the 1960s, various types of thermoelectric generators, containing an array of thermocouples, utilizing heat, released by the decay of a radioactive material, have been exploited in remote spacecrafts, where solar cells are not viable any more. Seebeck also discovered the piezooptic effect or photoelasticity. Due to this effect, mechanical stress applied on amorphous transparent materials like glass or plastics makes them birefringent similar to crystals. In such materials, illumination with polarized light creates interference fringes, which are directly related to the stress field in the specimen. Seebeck discovered this effect by investigating tempered glass plates and blocks.

More details and general interpretation of Seebeck's contribution will be given in the talk.

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Between Poetry and Encyclopedism in Grīziņkalns (Hinterbergen) in the Middle of the 18th Century. Baroque Reflection on Nature with Enlightenment Traits by the Medical Doctor and Scientist Johann Bernhard Fischer (1685—1772)

The middle of the 18th century in Livonia could be characterised as a change time from baroque to the enlightenment. A prominente representative of this period in our region is probably the most renowned physician and natural scientist Johann Bernhard Fischer. He belonges to the family of great importance to Livonian cultural history, whose most famous name is his uncle, the Superintendent of Livonia Johann Fischer (1633—1705) — the founder of royal printing press in Riga. His brother Benjamin Fischer (1653—1695) followed him from Lübeck to Riga and founded the royal pharmacy that had been family-owned for several generations. During the reign of Anna Ioannovna (ruled 1730—1740), Johann Bernhard Fischer oversaw the entire medical system of the Russian empire, including pharmacies. After a successful career, Fischer devoted himself to literary works, gardening and scientific experiments.

The poetic work of Johann Bernhard Fischer combines the metaphysical contemplation on nature with passages of the new rational and encyclopedic view on natural phenomena. His poem "*Hinter-Bergens allgemeine und eigene Winter- und Sommerlust mit untermischten physikalischen und moralischen Betrachtungen, in Versen beschrieben*" (General and personal winter and summer pleasures of Hinterbergen, mixed with physical and moral considerations, described in verse) touches some aspects discussed in nowadays ecology, environmental philosophy and landscape thinking are also taken into account.

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The Role of Ethics in Scientific Research: Historical Roots and Modern Challenges

Ethics in science has shifted from external restraint to a constitutive element of scientific culture, reshaping how knowledge is produced, validated, and governed. A philosophical-historical perspective identifies three stages in this transformation: (1) a positivist stage, in which science was treated as value-neutral and ethical responsibility remained largely individual; (2) a post-war compliance stage, institutionalized through codified norms, ethics committees, and procedural oversight; and (3) a contemporary stage, shaped by Responsible Research and Innovation and research integrity frameworks, in which ethics is increasingly embedded in agenda-setting, methods, impact assessment, and accountability.

This institutional maturation has produced a persistent tension. While ethics governance has strengthened participant protection, transparency, and trust, it has also fostered proceduralism and "tick-box" compliance that can displace substantive ethical reasoning.

The Baltic region provides a case of this broader transition. Although research ethics review structures were established decades ago, the integration of research integrity into a coherent research culture is still unfolding. Persistent challenges include fragmented governance between ethics review and integrity systems, uneven institutional capacity, limited training in applied ethical deliberation, and resource constraints in smaller research systems.

While research ethics was developed to prevent harm, highly procedural systems can produce countereffects by displacing substantive ethical reasoning and narrowing scientifically important inquiry. The key analytical question is therefore not "more regulation or less regulation," but how ethical reasoning is integrated into routine scientific decision-making. A philosophy of ethics of science is needed to interrogate the normative foundations, purposes, and moral justifications of scientific inquiry.

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Professor Pauls Stradins' Morphologist Skills

The Anatomy and Anthropology Institute of Rīga Stradiņš University got the P. Stradins historical collection in 2003. Among many wet/dried subjects there were 3359 morphological slides what went for the inspection. We discovered following groups of slides: 599 blood vessel pathologies. Here professor mainly oriented on the arterial, venous system thrombus, including small vessel thrombosis. Next group included 179 immune system preparations: spleen, thymus and lymph nodes, mainly with metastatic nodes. 286 slides covered thyroid gland pathologies, like struma, Graves-Basedow disease, and tumors. 78 slides enrolled liver with metastasis and tumors. 558 slides were devoted to the professors' special interests in gastrointestinal system: ulcus and/or cancer ventriculi, stenosis pylori, carcinoma recti. 199 slides covered female and male reproductive system diseases. To our surprise, we revealed the other specific interests of professor, related to the skin, where 210 slides were counted including specific tip finger skin from almost each finger. Next "wonder" contained 399 appendix vermiformis slides with unusual appendices in chronic stages and at least 3 cross sections of appendix length (distal, middle and proximal part). Finally, P. Stradins has used 227 examination slides for the student teaching what was not often seen in Latvian clinical medical doctor population during the exam. The main part of these slides (300) was digitalized by the help of Boris and Inara Teterevs Foundation and found their place in RSU Repositorium. Beside the slide collection also 60 wax and gyps plastination models were digitalized and described. The specificity of plastination collection was the presence of wax in the models, as this approach was elaborated by P. Stradins and used only by him and his collaborators. Thus, we can conclude that if the professor were alive today, he would stand out among other morphopathologists and would quite easily find a well-paid job as a morphologist.

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The Role of Vasily Kalbergs in Latvian Higher Medical Education During the Soviet Era

The history of Rīga Stradiņš University (RSU) can be traced back to 1 September 1950 when the forerunner of RSU, Riga Medical Institute (RMI). After World War II, science in Latvia experienced an intense period of Sovietization, when higher education in Latvia was reorganized by all means, marginalizing as much as possible those academic staff who lived and worked here before the USSR occupation. Anatomy professor Vasily Kalbergs (Kalberg; 1893—1983) arrived in Riga in 1945 and became the Head of the Department of Anatomy of the Faculty of Medicine of the Latvian State University. After the establishment of the RMI in 1950, Professor was the Dean of the Faculty of Medicine of the RMI (1950—1958) and he continued to work at the Department of Anatomy until 1973. He was the second director of the Riga Medical Institute (1958—1963), who took office after the tragic death of the first RMI director Professor Ernests Burtnieks. Professor Kalbergs was the Chairman of the Latvian Society of Anatomists, Histologists and Embryologists (1951—1978). His scientific interests were related to the morphology of the autonomic nervous system, kidney anomalies, the structure of the venous system and other anatomical issues. V. Kalbergs received several awards. Despite his high positions, V. Kalbergs was not a communist. V. Kalbergs headed the university for a relatively short time — five years. His colleagues remember the professor as a bright personality and lecturer. He tested students' knowledge of anatomy not only during lectures, but also, for example, in the hallways in a completely sincere and private conversation. However, there are also unanswered questions about Rector Kalbergs' work in Riga.

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History of Physics Demonstration Room of Department of Physics of Kaunas University of Technology

The instruments for the Physics Demonstration Room were designed and purchased by Professor of Physics and Physical Chemistry Vincent Čepinski before 1920. The first instruments were stored in the "Aušra" Girls' Gymnasium in Kaunas, where Professor V. Čepinskis not only taught, but also gave lectures in the evenings at the Higher Courses. After the establishment of the University of Lithuania in 1922, the instruments were handed over to the Department of Physics. The first head of the Department of Physics Professor V. Čepinskis invited his student Povilas Brazdžiūnas, who later became a famous professor of Physics in Litthuania and historian in Physics, to work as the first demonstrator. These physics instruments were used not only for demonstrations during Physics lectures, but also for physics laboratory work, which was carried out by physics, chemistry and medical students. Historical documents attest to the acquisition of modern, expensive physics instruments. During World War II, the physics demonstrator Aleksas Glodenis with the agreement of the head of the Department of Physics of Vytautas Magnus University Prof. Ignas Končius, saved the instruments at his father-in-law's farm near Kaunas. After the Second World War, the physics instruments returned to the demonstration room of the Physics Department. Today, the centuries-old physics instruments are not only kept in the Kaunas University of Technology's Physics Department Museum, but are also used in physics demonstrations.

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The State, Philanthropy, and Medicine: The Establishment of Insane Asylums in the Russian Baltic Provinces in the 19th Century

The earliest institutional responses to insanity in the Baltic provinces emerged through the activities of the Kollegium Allgemeiner Fürsorge — state bodies in all three provinces through which the government implemented its social welfare programs, including medical care. In the hospitals overseen by the Kollegium, at the turn of the 18th to the 19th century, we already find separate wards for the insane. A similar example is Alexanders Höhe, a state institution for syphilitics, vagrants, criminals, and the mentally ill, established in Riga in 1824. From the mid 19th century, however, most new asylums were founded as private initiatives by Baltic German elites — such as Gregor Brutzer's (1834—1883) Heilanstalt Rothenberg (Riga, 1862) and the hospital financed through donations coordinated by Eduard von Wahl (1833—1890) in Tartu/Dorpat (1877), later affiliated with the University of Tartu. In this paper, I address the following question: while early institutional solutions for the mentally ill were clearly state driven, should the later developments be understood as the benevolent initiatives of the local Baltic German nobility, or do they represent an example of governmentality —in which the founding of mental institutions appears to be an autonomous local effort, but is in fact shaped by a biopolitical rationality?

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Reestablishment of the Department of Psychology at Vilnius University in 1969: Status, Function, Role

Between 1947 and 1969, psychology in Soviet Lithuania underwent a period of institutional extinction and pedagogization. In 1944—1947, the separate Departments of Psychology and Pedagogy at Vilnius University were merged into a single Department of Psychology and Pedagogy. Thereafter, psychology largely functioned within pedagogical frameworks at Vilnius State Pedagogical Institute, Šiauliai Pedagogical Institute, and the Institute for School Research. The reestablishment of the Department of Psychology at Vilnius University in 1969 marked not only an institutional reorganization but also a significant transformation in the status, function, and role of psychology. For the first time in over two decades, psychology regained the possibility to operate as a distinct academic discipline within the university structure. Taking into account the political and ideological context of the Soviet period, and drawing on institutional documents, written sources, and interviews with figures in the field, this paper examines the circumstances of the department's reestablishment within the Faculty of History at Vilnius University. It asks: Under what conditions was the department reestablished? How did this development reshape the status, function, and role of psychology both within the university and in the broader academic and social context?

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The University of Latvia During the Interwar Period — the National Alma Mater of the Republic of Latvia or the Heir to the Higher Education Institutions of the Baltic Provinces of the Russian Empire?

The University of Latvia (UL) was founded and developed at the same time as the independent Republic of Latvia. It is not only an educational institution, but also one of the pillars of Latvian statehood. It symbolizes the cultivation of Latvia's national intelligentsia in the spirit of the humanities, natural sciences, and technical sciences, which corresponds to its motto "For Science and Fatherland" (Scientiae et Patriae). The university itself was founded during the Latvian War of Independence (1918—1920) which determined the fate of the Latvian people and their newly established state. It should be noted that UL itself was not built from scratch. Its foundation was laid by the higher education institutions of the Baltic provinces (Estonia, Livonia and Courland) during the Russian Empire — the Riga Polytechnic Institute (RPI) and the University of Dorpat (UD). Both provided the foundation for all sciences at UL, as their graduates and teaching staff formed the new teaching staff of the UL. Students who had begun their studies at RPI also continued them at UL as a result of the changes. Due to this legacy of the Russian Empire, studies and research at UL were conducted in Latvian, Russian, and German, of which Latvian is the official language, while Russian and German were borrowed from RPI and UD. The Council of UL itself purposefully moved towards strengthening UL as a "Latvian university" in accordance with the national ideology of the Latvian state and the UL Constitution, but developments based on the legacy of the Russian Empire also left their mark on the national university. The aim of this paper is to identify elements of Latvian nationalism and Imperial Russian legacy in the UL system during the interwar period.

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Ignotas Horodeckis — Head of the Department of Mineralogy at Vilnius University, Born 250 Years Ago

Ignotas Horodeckis (1776—1824) was born in Lithuania. He was from a noble family that had lived in the Vilnius district for many generations. In 1796 after graduating from the high school in Postavy (now the Republic of Belarus), he began his studies at the Schola Princeps Magni Ducatus Lithuaniae (now Vilnius University). He studied elocution, general and natural history, physics, astronomy and chemistry. In 1799 he obtained the position as teacher of physics and natural history at Vilnius secondary school. Alongside his teaching duties, he applied to the Rector of Vilnius University for admission to sit the doctoral examination. He passed the exam in 1800. While Horodeckis continued as a secondary school teacher, he also maintained relations with the Imperial University of Vilnius (this name was instituted in 1803), and in 1811 became the assistant of professor Andrius Sniadeckis within the chemistry laboratory. In 1814 he became an assistant professor in the chemistry department resigning from his post at the high school. In 1817 Horodeckis was entrusted with giving lectures in mineralogy. In 1822 the University Council appointed Ignotas Horodeckis as Full Professor. In addition to lectures, Horodeckis led practical exercises in geology, organized many fieldtrips with students in the surroundings of Vilnius. He also conducted geological research, and was particularly interested in the fossil fauna of Volhynia and Lithuania from the Cretaceous and Tertiary (Paleogene) periods. He also analyzed the chemical composition of minerals and put together a collection of rocks. Horodeckis was an advanced scientist who connected theory with practice in nature. He was aware of the latest theories (including about meteorites) and taught them to his students. Ignotas Horodeckis died suddenly in 1824, on March 27, at the age of 48, buried in the Bernardine cemetery, Užupis, Vilnius. His memorial stone has not survived and exact location of his grave is unknown.

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"My Dearest Friend and Colleague" — Unknown Letters Written by Humboldt to Struve found in the Humboldt Archives in Quito

During his journey through Russia, Siberia and Central Asia in 1829, Alexander von Humboldt stopped twice in Tartu. On the first leg of his journey on 27 and 28 April and again on the way back shortly before Christmas 1829. Shortly after the start of his journey in spring, Humboldt met with Engelhardt, Ledebour and Struve and visited the observatory. A few days earlier, he had carried out geomagnetic observations together with Friedrich Wilhelm Bessel at the observatory in Königsberg. In Tartu, he rushed from one meeting to the next from 8 a.m. to 9 p.m. and met numerous professors from the university. However, it was 'above all Struve with his 2,000 double stars and magnificent telescope' that was of particular importance to Humboldt. Humboldt greatly appreciated Struve's astronomical achievements, especially the precise observations he had made since the Fraunhofer refractor was installed at the Tartu observatory in 1824. In Humboldt's late work, the famous 'Cosmos' (1845—1862), Struve is mentioned over a hundred times in the context of astronomical observations and findings. Alongside Bessel and Wilhelm Herschel, Struve is Humboldt's foremost authority on astronomical matters. In a previously largely unknown part of the Humboldt legacy, preserved in the Archivos Humboldt of the Archivo Histórico Ministerio de Cultura y Patrimonio in Quito, Ecuador, a series of letters Humboldt wrote to Struve has now been discovered and released to the public. The collection consists of more than a dozen letters from Humboldt to Struve from the period between 1828 and 1852, i.e. from the year before Humboldt's journey to Central Asia and his personal encounter with Struve in Tartu until the last years of Humboldt's life and the completion of his work on the third volume of 'Cosmos' concerning double stars and the Milky Way. Humboldt's previously unpublished correspondence with Struve shall be presented in short form for the first time.

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Historical Teaching Aids Produced in the Georgian SSR for Learning the Human Nervous System

In the mid-20th century, a set of anatomical models of the human nervous system was produced at the Medical Instruments Workshop of the Ministry of Health of the Georgian Soviet Socialist Republic. The set consisted of nine distinct models. Approximately 350 complete sets were manufactured and distributed to medical educational institutions throughout the USSR.

Due to their complex technical construction, the models were informationally incomplete, difficult to interpret, and poorly suited for studies of the structure of the human nervous system.

Nevertheless, despite these shortcomings, they constitute significant historical evidence of scientific efforts to provide visual three-dimensional representations of the human nervous system and are preserved in museum collections.

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The Legacy of Pauls Stradiņš: from Surgery to Institutional Leadership

Pauls Stradiņš (1896—1958) was one of the most influential figures in the history of Latvian medicine, whose work significantly shaped the development of a modern healthcare system in Latvia. As an outstanding surgeon, educator, and public figure, he combined clinical practice with scientific research and institutional leadership. Stradiņš introduced and advanced modern surgical methods, with particular focus on abdominal surgery and oncology. His professional activity contributed to raising the standards of treatment quality and clinical practice in Latvia. At the same time, he played a crucial role in improving medical education at University of Latvia, emphasizing scientific thinking, professional ethics, and humanism as fundamental principles of medical practice. A significant part of his legacy is connected to the development of hospital infrastructure, especially the establishment and growth of Pauls Stradiņš Clinical University Hospital, which became one of the leading centers of treatment and medical research in the country. He actively promoted the integration of clinical medicine with research and highlighted the quality of patient care as the core mission of healthcare. Equally important was his dedication to preserving the history of medicine. Stradiņš initiated an extensive collection of medical artifacts that later formed the foundation of the Pauls Stradiņš Museum of the History of Medicine. Pauls Stradiņš embodied professionalism, scientific excellence, and humanity, and his work firmly establishes him as the founder of modern Latvian medicine.

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Conceptual and Methodological Issues Related to Folk-Biological Studies of Psychological Essentialism

Psychological essentialism is often claimed to be a naturally selected and/or innate tendency to see certain categories as essence-based natural kinds. In the context of folk biology, this form of essentialism is said to apply to biological kinds (especially at the folk-taxonomic level of generic species). Some authors have even suggested that humans possess an innate folk-biological module that includes certain biological concepts (such as biological inheritance and innate potential) relevant to folk-biological essentialism. Claims about the innateness of psychological essentialism and about generic species as the most saliently essentialized folk-biological taxonomic level are often assumed to derive support from a number of canonical studies frequently cited in the literature. In this presentation, I examine several methodological and conceptual issues concerning the studies associated with these claims. Based on this analysis, I argue the following. 1) Despite some skepticism surrounding the notion of innateness, abandoning it or replacing it with some other notion (such as 'adaptation') is not viable. 2) Claims about the innateness and evolutionary function of psychological essentialism are overly crude; to obtain a more adequate understanding of these issues, we should study the 'component' reasoning patterns of psychological essentialism separately. 3) There may be some domain-specific nuances in the application of essentialism-related reasoning patterns to living versus non-living kinds; hence, humans may possess innate and at least partially modular cognitive structures for responding to living kinds. 4) Canonical developmental studies purported to demonstrate folk-biological essentialism typically do not support the special status of generic species as the most "essentializable" kinds. 5) Even if something like a folk-biological module exists, it is conceptually much more limited than some authors who defend this form of mental modularity have suggested.

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Institutional Contexts Shaping Biomedical Research in Latvia

This paper examines how institutional configurations have structured biomedical research in Latvia by tracing the intersecting and diverging trajectories of the Latvian Institute of Organic Synthesis (LIOS) and the Latvian Biomedical Research and Study Centre (BMC) from the Soviet period to the present. The analysis draws on Timothy Lenoir's concept of instituting science, which highlights the co-production of scientific fields through the alignment of infrastructures, material practices, epistemic cultures, and organisational forms. The LIOS—BMC case encompasses three major transformations: the Soviet centralised research system, the post-1991 restructuring following the restoration of independence, and integration into European Union research structures after 2004. Founded in 1957 within the Academy of Sciences of the Latvian SSR, LIOS institutional model integrated organic synthesis, analytical chemistry, pharmacology, toxicology, and experimental medicine, thereby creating a "full-cycle" drug development infrastructure linking fundamental research with biomedical application. The relaxation of Soviet ideological constraints on genetics and molecular biology in the 1960s enabled the expansion of molecular approaches within LIOS. In 1990 these units were reorganised into BMC. After independence, LIOS consolidated its role in medicinal chemistry and pharmaceutical innovation, strengthening European collaborations. BMC became a central institutional platform for molecular biology in Latvia and subsequently contributed to the development of research infrastructures and international integration. By situating these trajectories within broader debates on institutional formation, the paper argues that biomedical research in Latvia is best conceived as a dynamic configuration of practices, infrastructures, and organisational forms.

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Academician Solomon Hiller (1915–1975): A Timeless Inspiration for Latvian Science

As the Latvian Academy of Sciences celebrates its 80th anniversary this year, we also mark the 111th anniversary of the birth of Academician Solomon Hiller, one of the Academy's most visionary members. As Founder of the Institute of Organic Synthesis (IOS) and Director from 1957 to 1975, Hiller demonstrated how the Academy could lead the way in both fundamental research and applied science. He achieved three major goals: establishing a modern school of medicinal chemistry in Latvia, developing original pharmaceutical drugs, and bringing Latvian science to the global stage. Hiller was a master of scientific diplomacy. In 1970, he organized the 7th IUPAC Symposium in Riga, featuring four Nobel laureates: D.H.R. Barton, V. Prelog, H.G. Khorana, and R.B. Woodward. It was here that 1968 Nobel prize winner Khorana first announced the total synthesis of a gene, making Riga a part of world scientific history. Hiller was also a brilliant organizer with a rare talent for spotting "the next big thing". Long before the "biotech startup" era, he ran the IOS with that exact spirit, creating a complete cycle where a drug could be designed, tested, and manufactured in one place. His most famous success was the anticancer drug Ftorafur (Tegafur), created by Dr. Regina Zhuk. The IOS success after 1975 was carried forward by the leaders he mentored: academicians G. Čipēns, G. Duburs, J. Freimanis, E. Grēns, I. Kalviņš, E. Lukevics, and J. Stradiņš. Their work ensured that Hiller's foundations remain the core of Latvian pharmaceutical science. Through these achievements, Hiller transformed regional laboratories into a globally recognized center of excellence that continues to define the strategic direction of medicinal chemistry in the Baltic region today.

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On the Biography of Riga Professor Vasily Nikolaevich Klimenko (1868–1941)

The newly obtained archival materials made it possible to clarify several circumstances of the life and scientific activity of V. N. Klimenko, a native of Ukraine and the founder of one of the therapeutic departments at the University of Latvia. It was established that he was born in Odessa into a noble family of a military engineer-trackman N. V. Klimenko and his wife A. S. Klimenko (née Maruchina). His Ukrainian surname suggests a possible Ukrainian ethnic origin. According to archival data, V. N. Klimenko was born on April 4, 1868 (old style), corresponding to April 16 (new style). However, his Latvian passport issued in 1927 indicates April 17, 1868, which appears to be the result of a translation error when converting dates from the old to the new style. It was established that Klimenko studied internal medicine under Yu. T. Chudnovsky, a representative of S. P. Botkin's therapeutic school. As a bacteriologist, he was formed under the supervision of V .V. Podvysotsky and should therefore be included in the latter's scientific school. Accordingly, his scientific heritage consists of two main fields: bacteriology and infectious diseases. In Russia, Klimenko completed his professional formation as a physician and scientist: he defended his doctoral dissertation, undertook advanced training abroad (Zurich, Paris, Bern), and from 1905 worked at the Institute of Experimental Medicine. Simultaneously, he taught bacteriology at the Military Medical Academy (since 1908) and headed departments at Samara University in 1919—1921. After the Bolsheviks came to power, Professor Klimenko moved to Latvia, where he became one of the organizers of the Medical Faculty of the University of Latvia. In Riga, he founded and headed the Department of Medical Diagnostics of Internal Diseases with a propaedeutic clinic (1921—1938) and the Department of Medical Microbiology and Infectious Diseases (1922—1928). In 1938, at the age of 70, he retired.

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Medicine at the University of Dorpat in the 17th Century and the Development of the Swedish University Network

This presentation discusses Swedish science politics in the beginning of the 17th century concentrating on the Eastern Baltic region. I present an overview of the expansion of the Swedish university network as a part of the Kingdom's political goals in the Baltic, and illustrate the concrete challenges and possibilities of this project by taking a particular look at the careers of the professors of medicine in the Swedish Academia Gustaviana (University of Dorpat 1632—1665). Surrounding the refoundation of the University of Uppsala in 1625 Sweden entered a new phase of more aggressive recruitment of foreign scholars to the country. The incorporation of much needed foreigners was, however, not always a straightforward matter in any scientific field, as different emphases presided even in different Lutheran universities and the closeness of the universities to the court caused the politicization of scientific questions. Moreover, enticing scholars to move to the northern side of the Baltic was a difficult ask both due to the strange language and the harsh climate. These were both factors that recommended an educational expansion to Sweden's southern and more diverse Baltic acquisitions. Meanwhile, the success of the Polish-German University of Königsberg provided desirable model for Sweden which it hoped to replicate in tandem with its political struggle against Poland. Medicine provided perhaps one of the most accommodating ways of advancement in Swedish service for foreigners as there was a long tradition of German doctors within the Kingdom. This is evidenced in the careers of the professors of medicine in the Academia Gustaviana Johannes Below (1601—1668) and Sebastian Wirdig (1613—1687), who as German graduates from the University of Rostock found employment in Swedish service through the opening of the university and advanced to the closest circles of the court.

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The Impact of World War II on the Number of Doctors and its Consequences in Latvia

The events of World War II (1939—1945) had very serious consequences for the Latvian medical system. As a result of World War II, the number of doctors and dentists in Latvia decreased by more than 80%. The first changes in doctors and dentists already occurred in 1939, when Baltic Germans and Latvians were repatriated from Latvia. In 1938, 1,589 doctors and 837 dentists were registered in Latvia, but in 1940 — 1,414 doctors and 803 dentists. According to rough estimates, from 1939 to 1940, about 200 doctors and 30 dentists repatriated from Latvia. During the first Soviet occupation from 1940 to July 1941, more than 50 doctors and about 20 dentists were deported in the repressions organized. As a result of the change of power in late June and early July 1941, up to 20 doctors and dentists died. The Holocaust organized by Nazi Germany had very serious consequences for the number of Latvian doctors and dentists, as a result of which more than 200 doctors and 200 dentists were killed. In 1943, there were 1,102 doctors and 479 dentists registered in Latvia. In the second half of 1944, fearing repression by the Soviet Union, more than half of the doctors and dentists left Latvia. In 1946, there were 425 doctors in Latvia, while in 1945 there were 119 dentists. Comparing the list of doctors in Latvia in 1938 and 1946, their number decreased by 1,164 (slightly over 83%), while dentists decreased by 718 (around 83%). However, the actual number of doctors and dentists who remained in Latvia after World War II was slightly higher. After the war, Jewish physicians, a small number of deported doctors and dentists, and Latvian legionnaire doctors released from filtration camps returned from the Soviet Union as refugees. As a result of World War II, the drastic changes in the number of doctors and dentists in Latvia had lasting consequences for the Latvian healthcare system, which led to a rapid influx of foreign medical workers from various republics of the Soviet Union.

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Imported and Forgotten Knowledge: The 1921—1922 Archaeological Digs of the Jaunpiebalga Mound Cemetery by Anatomists Gaston Backman and Jēkabs Prīmanis

The start of professional archaeology in Latvia is conventionally placed in 1923, when the Monuments Board was established and Monuments Protection laws restricted excavations to professional archaeologists. Because no such professionals yet worked in Latvia, foreign specialists were invited to carry out the first protective digs. This report proposes an alternative view: professional Latvian archaeology began earlier, with the 1921—1922 excavations at the Jaunpiebalga mound cemetery led by Gaston Backman, head of the University of Latvia's Institute of Anatomy and Histology, together with docent Jēkabs Prīmanis. Backman arrived in Latvia in 1920 to establish the Faculty of Medicine at the University of Latvia. Before arriving in Latvia, he had gained experience not only in the fields of anatomy and anthropology, but also in museology and archaeology, working at the Stockholm State Museum. He applied this expertise during emergency excavations at Jaunpiebalga, a site severely damaged in 1916 during construction of railway.

In the summer of 1921, under Backman's direction, eight grave mounds were uncovered; in 1922, five more were excavated under Prīmans's supervision. Both campaigns produced systematic records documenting burial depth, skeletal orientation and preservation, and the positions of artefacts relative to the interred. The Institute's preparator and draftsman, Hiršheits, drew the artefacts. Excavation reports and finds were given to the State Historical Museum, while the palaeoosteological material remained at the Institute of Anatomy for study.

Although the report was planned for publication in 1920, it did not realize until 1935. Notably, following Kārlis Ulmanis's 1934 authoritarian takeover, there was heightened scientific and public interest in pre-Crusade Latvias' history. The 1935 publication remains the only work that frames the Institute of Anatomy's excavations as professional scientific practice rather than amateur curiosity.

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Engineering Sciences in the First Years of Soviet Rule After World War II

After World War II, only a little more than half of the intelligentsia remained in Latvia — Baltic Germans had already emigrated in 1939, many were affected by the Soviet repressions of 1940 and 1941, and at the end of World War II, many went into exile in the West. In their place, less knowledgeable specialists were employed, some of whom came from the Soviet Union, taking with them the traditions that existed there. Science and research were reorganized — organizationally and structurally, they had to be reorganized into planned science and adapt to the requirements that existed in the Soviet Union. Engineering sciences and scientists related to them in the Republic of Latvia were associated with the University of Latvia, which the new government renamed the State University of Latvia. After World War II, under Soviet rule, scientific work had to be planned in accordance with five-year plans and was coordinated both on a republican and All-Union scale. The University became a training centre for scientific personnel for other institutions. In 1944 and 1945, the University still tried to preserve the traditional structure of unified teaching and scientific institutes. In 1946, with the establishment of the Academy of Sciences, entire branches of science and research institutes were separated from the university. On their basis, scientific institutes of the Academy of Sciences were established, and gradually the most capable young scientists transferred to the Academy, which became the leading scientific centre in Latvia. This was also facilitated by the decision made in 1948 that only in exceptional cases could university teaching staff also work at the Academy under the order of combining work. The university used textbooks published in the Soviet Union in Russian and, starting in 1948, worked according to the Soviet curriculum. The university's teaching staff published a large part of their scientific research in Russian in the All-Union specialized publications. As a result of political changes, ties with Western European scientists were severed, and contacts with Soviet scientists were established. Between 1947 and 1950, not a single doctoral dissertation in engineering was defended at the university. In addition, there were repressions against individual pre-war scientists, science was supervised by the Communist Party and the State Planning Committee.

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STE(A)M Exhibits Created by Riga Technical University Students at the RTU Curiosity Centre "Futurimo Riga" — Science Interest Boosters for Children

STE(A)M education (science, technology, engineering, and mathematics) is closely linked to national development and competitiveness, has an invaluable impact on the development of interdisciplinary skills, critical thinking and reasoning, and is also important from the perspective of public and information security in the context of hybrid threats. STE(A)M education, on the other hand, additionally includes the arts to stimulate discussions and problem-solving among students about a specific subject to be learned.

There is a consistently high demand for engineering specialists in Latvia, but young people rarely choose to learn or study in depth any of the STE(A)M fields. It is important to find ways to create interest in engineering among young people. One of the platforms where young people can be introduced to science and engineering in an entertaining and exciting way is curiosity centres.

To increase the interest of children and young people in engineering and natural sciences, Riga Technical University (RTU) opened the curiosity centre "Futurimo Riga" in 2023. One of the centre's exhibitions is "City of the Future" — a story of how we can create a greener future with the development of technology and changing everyday habits. Four exhibits for the centre and this exhibition were created by students of the 4th year study program "Materials Technologies and Design" of the RTU under the leadership of the teaching staff.

The main tasks in developing the exhibits were to create interactive, educational, and entertaining products that would explain the topic in the simplest possible way and reflect the goal of the curiosity center and the exhibit — to interest young people in natural sciences and engineering.

This, in turn, will help children in the future better acquire STE(A)M education already at school, so that they can successfully study at universities and later conduct scientific research, thus promoting the development of science in Latvia.

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The Rebirth of the Idea of Mental Work Hygiene Under the Iron Curtain: The Case of Soviet Lithuania

The problems of mental illness and mental hygiene are among the most recent challenges facing the healthcare system. Already at the beginning of the 20th century, it was recognized that the nature of work plays a significant role in the etiology of mental illness. Increasingly, physical labor in modern society has been replaced by intellectual work, forcing doctors to seek new ways to protect workers' health from new threats. Therefore, mental hygiene is closely linked to occupational hygiene. During the interwar period, the Polish hygienist Kazimierz Karaffa-Korbutt (1878—1935) focused on occupational hygiene and mental work in Vilnius. He provided ideas for limiting working hours, using the most productive methods to concentrate, work planning, and other progressive solutions for fatigue, decreasing productivity, and other mental hygiene problems. These issues were also discussed in Kaunas and other cities in Lithuania by Soviet hygienists Jonas Šopauskas (1900—1968), Vladas Kviklys (1908—1985) and others. After World War II, the idea of mental hygiene was somewhat forgotten due to its connections with eugenics, but these issues were not completely forgotten. Mental work hygiene and career counseling were the subjects of hygienists' work in Vilnius during the Soviet era. Although some important new work tools, such as the computer, were not yet known to Soviet-era hygienists, the contribution of post-war hygienists and physicians to research on the hygiene of mental work remains important to this day.

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UDK 94:14(062)
Ba406

Editors of the Abstracts books: Ieva Lībiete, Artis Ērglis

The contents and language of the abstracts remains the responsibility of the authors.

Cover: Model of the autonomic nervous system No. 9, produced in the 1950s in the Georgian SSR. Collection of the Rīga Stradiņš University Museum.

ISBN 978-9934-9141-6-4