

ABSTRACTS

Levina E. S. «Krucin» Has Its Fate... (Experimental Biology in Oncology: Past and Present). The article gives an account of the development of oncology in Russia in the second half of the 20th century, paying particular attention to the influence of experimental biology on the establishment of oncotherapy as a special branch of contemporary biological medicine. Its central theme is the shaping of biological approach to cancer therapy in the USSR, exemplified by the joint work of the cytologist G. I. Roskin and the clinical microbiologist N. G. Kliueva in the 1930s–60s. The history of a new anti-tumor drug, "krucin," developed in the course of their work, is traced in detail, from theoretical inception to clinical implementation. The social background of this work is illustrated by the documents pertaining to the "Trial of Honor" (held in May–June 1947), which condemned the two scientists for submitting their unpublished monograph on "Biotherapy of Cancer" for publication in the USA. It is shown that the recent attempt to revive the work on krucin, performed by the students of Roskin in Russia, was hampered by monopolistic ambitions and aversion from international cooperation, quite similar to the attitudes underlying the 1947 Trial. The current state of krucin research, outlined on the basis of the latest studies (including the author's own experimental work in the 1990s), demonstrates the prospects of this drug, as well as the possibility of their realization through the interplay between the new biotechnological and analytical techniques.

Sonin A. S. The "Case" of Zhebrak and Dubinin. The article documents the case of two outstanding geneticists, A. R. Zhebrak and N. P. Dubinin, persecuted in the course of the Soviet post-war campaign against "bowing down before the West." The case against them was initiated by the followers of Lysenko, who accused Zhebrak and Dubinin of ignoring the "achievements of Michurinist biology," supposedly neglected in their articles published in *Science* in 1945 and 1947. The party officials committed Zhebrak for a special "Trial of Honor"; without waiting for its final decision, however, they already had him fired from the presidency of the Belorussian Academy of Sciences. The trial itself, which took place in November 1947, was a grandiose political show: an audience of more than one thousand persons was gathered to hear him accused of proposing the development of a unified world biology. Its verdict was a "public reprimand," which translated into his lasting excommunication from scientific work: no matter what attempts Zhebrak made to rehabilitate himself – either by appealing to the Central Committee of the Soviet Communist Party, or by writing a self-critical letter to "Pravda," they were all of no avail. Similar charges were raised against Dubinin, but he was lucky to escape the "Trial of Honor," thanks to the intercession of academician Orbeli, the then Head of the USSR Academy of Sciences' Biological Division, supported by its President, Sergei Vavilov. Just a few months thereafter, however, both Dubinin and Orbeli were subjected to a persecution at the 1948 Session of VASKhNIL. Still it turned out that eventually both of them managed to resume their scientific careers.

Hosfeld U., Junker Th., Kolchinskii E. Protagonists and Cornerstones of Evolutionary Synthesis in Germany. The modern evolutionary synthesis took shape between 1935 and 1947, elaborated mainly in Russia, the USA, the UK, and Germany. Notwithstanding certain differences in emphasis and interest exhibited by the scientists from these countries, the common space of fundamental concepts shared across the boundaries was broad enough to speak of its largely parallel and simultaneous development in various parts of the world. In Germany, the main architects of evolutionary synthesis were the biologists Bernhard Rensch, Gerhard Heberer, Walter Zimmerman, and Nikolai W. Timofeeff-Ressovsky. The article gives an account of their major contributions to the field, such as *Vererbung erworbener Eigenschaften und Auslese* (Zimmerman, 1938), *Die Evolution der Organismen* (edited by Heberer, 1943), and *Neure Probleme der Abstammungslehre* (Rensch, 1947).

Vasiliev Iu. S., Cheparukhin V. V. Fragments of the History of Saint-Petersburg State Technical University. Conceived as Russia's gateway to the 20th century, this educational establishment has always been home to its elite cadre of liberal-minded engineers and scientists. Its teachers and students played an invaluable role in Russia's defense industry in the two

world wars; their work eventually made their home institution an emblem of the Soviet scientific and technological policy. The rich traditions of the university, as well as the vicissitudes of its history, have never been studied in any detail, and the article aims to fill this gap by outlining the major trends in the development of this famous institution over the hundred years of its existence.

Gvozdet'skii V. L. The Scientist and His Time. Dedicated to the centenary of an outstanding historian of technology and educator, V. V. Danilevskii (1898–1960), the article provides an overview of his major works, such as *I. I. Polzunov, Russian Gold, M. V. Lomonosov and Artistic Glass-work*, and others. Basing his studies on archival research and field examinations of technical facilities and industrial objects, Danilevskii developed the principles of field history of technology, which were given a detailed exposition in the many textbooks he wrote. The leading ideologist and organizer of the historico-technological education in the Soviet Union, Danilevskii had to work in the difficult epoch of 1930s–50s, and was faced with many hardships which the article brings to light.

Agamova N. S., Allakhverdian A. G. Women in Russian Science: Historical and Sociological Aspects. The article gives a concise account of the complicated process of women's entrance upon the stage of Russian science and higher education, and their growing role in this field from the mid-19th century till the present day. Up to the early 20th century, discrimination against women in Russia's system of higher education had been a state policy, forcing them to leave the country for studying in the foreign universities. Moreover, for those of them who would return with doctoral degrees obtained in France, or Germany, or Switzerland, there had been no possibility in Russia for pursuing careers in science and education on a par with men. The 1917 revolution granted women equal rights for higher education and scientific pursuits, providing for a steady "feminization" of Soviet science. By 1993, the percentage of women in such areas of science as pharmacology, biology, chemistry, medicine, technical disciplines, and geography, and in the humanities on the whole equaled 50 or more. Only in two areas – those of physico-mathematical and political sciences – the percentage of women was lower than 40. On the other hand, certain forms of discrimination against women (copyright violations, inadequate representation in the administrative quarters of science) have survived to date. These "remnants of discrimination" should be given special consideration in planning science policy studies.

Sirotkina I. E. Psychopathology and Politics: the Origins of the Ideas and Practice of Psychohygiene in Russia. Toward the end of the 19th century, the idea that humanity is degenerating as a result of inherited illnesses led to the birth of psychohygiene. According to the British "historian of the present" Nicholas Rose, psychohygiene emerged as a response of the medical profession to the supposed threat of degeneration, the idea which was carefully cultivated by its practitioners themselves. The history of Russian psychiatry provides rich material in support of this hypothesis. Just as it was in the West, Russia established its clinics for alcoholics, sanatoria for neurotics, and neuropsychiatric dispensaries following the physicians' call to stop the propagation of nervous diseases. As a means of preventing them, they proposed examining the most risk-prone social strata – the workers and the poor. In contrast to the West, however, the emergence of psychohygienic movement in pre-revolutionary Russia came on a wave of political turmoil. Using an overt political rhetoric, physicians blamed the tsarist regime as the major cause of alcoholism and nervous diseases in general. They either demanded, when they could, a change in the regime, or at least required what they would call "palliative" measures, such as sanatoria and dispensaries for the poor people. After the 1917 revolution, physicians succeeded in implementing the state-supported system of mental health care, which satisfied the bulk of their demands and gave them an important authority. Under the aegis of this system, for example, even psychiatry persisted through the Soviet period, though it was officially disapproved because of its supposed "individualism." Eventually, the belief in the threat of degeneration, as well as the idea of mental prophylactics that followed from it, acquired both a prominent place in culture and institutional support in the Western and Eastern European countries alike. The medical policy which led to the emergence of psychohygiene proved more stable than certain political regimes of the 20th century.