Russian, Soviet, and Post-Soviet Scientific Migration: History and Patterns

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The founding of modern science in Russia, early 18th century: mostly by migrants, primarily from German countries
Franz Ulrich Theodore Aepinus (1724-1802)
“Treatise of Electricity and Magnetism” 1759

Russian-Germans: Georg Wilhelm Richmann (1711-1753)
First casualty of electrical experiments

Mid-19th century: university system established, approximately half of the scientists - of “German” origin
Dorpat University as the intermediary
1859: Natalia Corsini started auditing lectures by in law at St. Petersburg University
1860: Nadezhda Suslova started auditing lectures at the Medico-Surgical Academy in St. Petersburg

The Ministry of Enlightenment considers a University reform, including opening the university education to women

The latter plan dropped after the 1861 student protests, which the officials blamed partly on women auditors: "révolutionnaires in crinoline"
1864: Maria Kniazhnina applied to study Medicine at the University of Zürich
1866: Nadezhda Suslova officially accepted as the first female student there

The first doctoral degrees:
1867: Suslova (medicine, Zurich)
1873: Anna Evreinova (law, Leipzig)
1874: Sophia Kovalevskaya (mathematics, Göttingen)
1874: Yulia Lermontova (chemistry, Göttingen)
The first feminist movement: women’s higher education an established, if not yet legally recognized fact by the end of the 19th c.

Sofia Vasilievna Kovalevakaya (1850, Moscow – 1891, Stockholm)
  1883 - professorship of mathematics at Stockholm högskola
Maria Skłodowska (Curie) (1867, Warsaw – 1934, Paris)
  Licentiate in mathematics at the Sorbonne, 1894; DSc, 1903
  Nobel Prize in Physics, 1903 and in Chemistry, 1911
Circa 1900: Jewish migrants and go-betweens, and the spread of theoretical physics internationally (also by pre- and postdoctoral fellows)

Epstein, Pavel Sigizmundovich (Paul Sophus) (1883, Warsaw - 1966, Pasadena, CA)

Ehrenfest, Paul (1880, Vienna - 1933, Amsterdam)

Mandelstam, Leonid Isaakovich (1879, Mogilev - 1944, Moscow)
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Grants and WWI

Eizezmann, Chaim (1874, Pinsk – 1952, Rehovot, Israel)

Klovsky, Konstantin Vasilievich (1880, Ryazan – 1958, New York)

Edeeriks, Vsevolod Konstantinovich (1885, Warsaw – 1944 Gorky)
Post-Revolutionary Migration:

Arykin, Vladimir Kozmich (1888, Murom - 1982, Princeton, NJ)
Korsky, Igor Ivanovich (1889, Kiev - 1972, Easton, CT)
Shliakowsky, Georgi Bogdanovich (1900, Kiev - 1982, Boston, MA)

Piatzha, Piotr Leonidovich (1894, Kronstadt - 1984, Moscow)
Remin, Lev Sergeevich (1896, St. Petersburg - 1993, Moscow)
Mow, Georgy Alexandrovich (1904, Odessa - 1963, Boulder, CO)
The launch of Sputnik, 4 October 1957 and its effects on global science:

- Educational expansion
- Brain drain
- Affirmative action
- Decline of the ideology of pure science
- Deamericanization of American science

Soviet science largely isolated from international migration by Cold War barriers until 1988; foreign travel as a limited and treasured privilege
Post-Soviet migration:


Rough estimates: Funding for science in Russia: decreased by more than 90% during the 1990s; rebounded to some 40% of the late Soviet levels during the 2000s; Loss in scientific manpower: over 50%; possibly over 200,000 migrant scientists worldwide.
Next generations: postdoctoral researchers and graduate students

The largest scientific migration ever? Russian, post-Soviet, or Russophone?

Transnational scientific subculture:
- entire team of researchers;
- transnational exchanges and links;

Global effects: still unknown and not studied