
Life Sciences Can Transcend Political Animosities

Glenn Schweitzer, The National Academies, August 2014

| U.S. FOREIGN POLICY |

Shared health, agricultural, and environmental interests of the United States and Russia, together with common biosecurity concerns, involve activities of national and international interest spread over 34 percent of the land surface of the northern hemisphere. The countries have two of the world's largest scientific workforces, skilled in virtually all aspects of the life sciences. Their specialists have repeatedly demonstrated how bioengagement can advance science, contribute to economic and social progress, and promote international security. Many scientists in the two countries have developed long-term professional and personal relationships across the ocean that have helped advance their scientific capabilities and broaden their global perspectives. These and other cadres of bioscientists in the two countries are now well positioned to capitalize on joint achievements of the past while pursuing emerging opportunities to advance research frontiers of great interest to both countries, and indeed the entire global community.

Currently, Russia is reshaping its scientific infrastructure. The responsibilities of

the Russian Academy of Sciences, Academy of Medical Sciences, and Academy of Agricultural Sciences have changed significantly. The Russian government is taking over ownership and management of academy research and service facilities, now numbering over 900, that for more than a century operated under the direction of the academies. Shocked by this major change in directing Russian science, the leadership of the academies has reached out to American colleagues for advice and assistance in restructuring the academies and their relationship to the government, in accordance with the decrees of the government. This is an unprecedented opportunity for the leaders of American science that should not be ignored; more than one-third of the past efforts of the academies have been devoted to the biological sciences.

Now is the time to take advantage of the respect that the leadership of Russia has for American achievements in science and technology and for the strength and diversity of the higher education establishment in the United States.

Several hundred biology-oriented research laboratories in Russia are now well equipped and staffed to work routinely at an international level. Many more health, agricultural, and environmental facilities provide updated services, with broad-ranging benefits for important segments of the population. All the while, Russian scientific publications in internationally accredited journals, while still very limited in number, are commanding increased scientific interest.

In most areas of the biological sciences and biotechnology, the United States is technologically more advanced than Russia. However, in a number of subfields, Russian researchers are making contributions at the forefront of the life sciences. Russian achievements, when coupled with U.S. strengths, often offer important synergistic effects in advancing the capabilities of both countries to work in these subfields. When projects focus on conditions in specific geographical environments, each country has unique experience that, when

combined with the other, may offer remarkable scientific insights that are not otherwise possible.

Working together has dramatically reduced preconceived suspicions about the possibility of inappropriate intentions of the leaders of previously closed scientific fields in the two countries. Transparency and insights as to accomplishments and future plans have increased greatly. It is of importance for both countries and for the advancement of science more broadly that the personal relationships which have led to openness and confidence-building over the years be maintained. In short, it is better to be engaged than sitting on the sidelines guessing what is happening behind closed doors.

In short, it is better to be engaged than sitting on the sidelines guessing what is happening behind closed doors.

The two governments have decided to terminate security-driven bioengagement activities, particularly the enhancement of physical protection of biological materials in Russia. Russia has vowed to strengthen its own internal security concerns. However, prevention of proliferation has many dimensions, and joint research programs often indirectly enhance biosecurity while advancing science. Such programs can also (a) emphasize responsible science when dealing with dual-technologies in fields such as synthetic biology, (b) encourage greater emphasis on bioethics, and (c) strengthen biosafety.

In summary, the arguments for working together in the biosciences are just as potent as the considerations that have gone into decisions in both capitals for continuing people-to-people cultural programs sponsored by the two countries. In recent months, these programs that are managed on the U.S. side by the American Embassy in Moscow and by the Department of State in the United States have continued without significant reductions in number, frequency, or impacts. Now is the time to take advantage of the respect that the leadership of

Russia has for American achievements in science and technology and for the strength and diversity of the higher education establishment in the United States. The support of broader engagement in the biosciences and related fields can pay off handsomely, even if surrounded by political acrimony.

*Elaboration of these views can be found in *The Unique U.S.-Russian Relationship in Biological Science and Biotechnology*, National Research Council, National Academies Press, 2013.

Printable PDF



Add a comment...

Comment using...

Facebook social plugin

[Terms & Conditions](#) | [Privacy Policy](#) | [Contact Us](#) | [Site Credits](#)

| [Photo Credits](#)

© Carnegie Corporation of New York, 2014



The views expressed on this site are the sole opinions of the authors and do not necessarily reflect those of the Carnegie Corporation of New York.

