



Valery Danilenko

Straight talk with... Valery Danilenko

Russian medicine is—at long last—undergoing a renaissance. The country's rocky economic ride following the collapse of the Soviet Union disrupted its research rubric and impoverished its healthcare system. Now, however, the nation's leadership is spearheading various initiatives to reverse the situation. One of them, the US-Russian Scientific Forum, established two years ago by a bilateral presidential commission, hopes to bring improvements by facilitating public-private research in biomedicine and innovative drugs. The Forum, which on the Russian side is represented by the country's Ministry of Health and Social Development and the Russian Academy of Sciences, among others, held its inaugural planning meeting in late April in Moscow. Valery Danilenko, who is helping to spearhead the effort and also leads the biotechnology division at the Vavilov Institute of General Genetics in Moscow, told *Nature Medicine* about the meeting and Russia's hopes for the Forum. The interview was conducted in Russian and translated by the interviewer, **Gary Peach**.

How would you grade the Forum's inaugural planning meeting?

In our opinion it was quite productive. We worked out priorities, including brain-related science and the possibility of obtaining new therapeutic drugs that would help solve some of the problems that exist [in the US], primarily Alzheimer's. For Russian and American scientists, infectious diseases and their diagnosis are also very important, and here the creation of drugs against tuberculosis, including for children, is of great interest. Solving this problem is a global challenge—not just for Russia and the United States—but for India, China and Africa.

This level of cooperation in medical research between the US and Russia seems to be unprecedented. Why do you think it is necessary?

Having witnessed what's transpired over the past 20 years, one can say that we—American and Russian scientists—have definitely been given a new chance, a new format, for cooperation. Of course, the bilateral

presidential commission laid the foundation, but scientific initiative has moved it further along.

When will the forum meet next, and what are your expectations?

[In April], there were about 45 American scientists and businesspeople at the meeting and approximately the same number of Russians. At the next meeting, which will take place in Moscow in November, we're expecting two, if not three, times more participants. There will also be more discussion of new ideas from a wider group of scientists. So if the first meeting was mainly among leaders and administrators, the next one will have scientists from various fields who will work closely with those carrying out specific projects.

What about financing and the projects timeframe?

In general, we in Russia are counting on the government's financial support. Obviously, this is a fundamental issue, but based on what we're seeing it will be solved. As far as timeframes, we're planning for the next five years. Beyond that, development should take its own course. Priorities will be identified by a joint planning committee and the Russian-American organizational committee. Our goal right now isn't to attract a great number of people. Rather, our goal is quality, to create projects that will be success stories. But all this depends on the intensity of our work and the amount of finance that we can jointly attract.

What will be the exact role of pharmaceutical companies in this project?

One thing is clear here—and this has taken place over the past year to the surprise of our colleagues from the [US] National Institutes of Health—and this is that the pharmaceutical companies have shown up and started cooperating with the Forum. These include some of the biggest names, such as Eli Lilly, Bristol-Myers Squibb, Johnson & Johnson and Pfizer. Of course, the companies are just observing right now; at the [April] meeting they said that [in the future] they would like to participate in some projects. I think in the beginning they will be part of a management committee being planned. Later, together with the organizational committee and expert council, they will select projects that interest them, and they might begin financing [those projects], either in part or completely.

What can Russia bring to the project, and what does Russia hope to get from the American side?

We have several thousand scientists, first and foremost the Russian Academy of Sciences and the Medical Academy of Sciences, who understand and have the experience how to create and make new pharmaceutical products for curing widespread diseases. We have strong chemistry and medical schools, and we are strong in computers. We can carry out work starting from the synthesis of new molecules, or obtaining them from natural sources such as plants or marine microorganisms, and continue further with computer design, screening and clinical research.

We can do all that, but we understand that it would be faster and more effective by cooperating with colleagues who work on the technologically most advanced level—American scientists. Russia also lacks big pharmaceutical companies that would want our project results and products. We are quite aware that if there's no final consumer, no state orders, no big pharmaceuticals, then all the research really isn't needed.

Are there any specific biomedicines that you would like to see created as a result of the Forum?

Sure, new antituberculosis drugs, for starters. In my opinion, this is a good example, because American scientists and Eli Lilly have been working more than ten years with Russian scientists in this sphere, helping to diagnose and cure this disease.