

Unprecedented financial support lent to healthcare

For the first time in the world, Belarusian and Russian scientists extract unique, multi-functional human protein lactoferrin from transgenic goats' milk: a natural antibiotic

All efforts are now focused on developing industrial technologies to manufacture pharmaceutical drugs and food supplements containing the medicinal protein of lactoferrin, as part of the new BelRosFarm Union State programme.

The third stage of the BelRos-Transgen programme aims to strengthen the health of future generations, explains the Head of the Biochemistry Department at the Belarusian State University, Igor Semak. He tells us, "Lactoferrin is a unique, multi-functional protein with antiviral, antibacterial, anti-fungal, antioxidant and anti-inflammatory properties. It can help the human body protect against infection at all ages. Lactoferrin from the milk of transgenic goats can be used in pharmaceutical drugs and cosmetics, as well as in the food industry. The protein even naturally increases testosterone levels, making it ideal for athletes."

Medicines and dietary supplements containing lactoferrin help stabilise the metabolism, as well as curing diseases affecting the eyes, skin and digestive system. They can also be used to boost the immune system after chemotherapy treatment and, for children, lactoferrin is a natural replacement for breast milk.

The second phase of the BelRosTransgen programme has dealt with the breeding of the special



Medicines can help regulate our metabolism and cure eye diseases

goats. During the lactation period, milk may contain 18 to 20 grams of lactoferrin per litre, although the average ranges from 5 to 6 grams (still the highest indicator in the world). Up to 70 percent of protein

from transgenic goats' milk can be extracted and is utterly safe for human use, being identical to that found in our breast milk. Trials and tests are now being conducted, so that the protein can receive cer-

tification, and a full list of products open to use of lactoferrin is being compiled.

Alexander Budevich, who heads Reproduction and Genetic Engineering of Farm Animals Lab-

oratory at the Biological Selection Centre, tells us, "Commercial production of pharmaceutical goods will be decided by pharmaceutical companies, as in Russia. If all goes well, by 2015, we'll be able to release large amounts of lactoferrin for commercial use. Currently, the Belarusian State University is overseeing everything but, in future, industrial production will expand." Belarus and Russia have agreed to assign production to particular manufacturers, as well as launching joint product of lactoferrin as part of BelRosTransgen Stage 2 and 3.

The production of other human proteins is also being investigated, as Mr. Budevich notes. "Work continues to produce new proteins from animal milk within the BelRosFarm programme."

The Permanent Committee of the Belarusian-Russian Union State is collaborating with the Minsk Office of the Permanent Committee regarding the commercial prospects of the innovation, with Union State funds helping extend research. For the first time in Belarus and Russia, the full implementation of all phases of the BelRosTransgen programme will allow production of completely unique pharmaceutical products and food supplements containing medicinal protein, as seen nowhere else around the globe.

Learn how to professionally and responsibly take care of the planet

Minsk hosts *Youth for Peace* International Law Competition for the 8th time, gathering young students from 16 countries all over the world

By Yury Chernyakevich

Global conflict involving weapons of mass destruction, huge asteroids falling to Earth and hacker attacks on government offices were all presented to those taking part in the *Youth for Peace* Law Competition. Through role play, the young students were able to demonstrate their knowledge of international law, offering concrete solutions, while adhering to UN conventions. They 'became' legal advisers to presidents and representatives of the International Committee of the Red Cross, even recreating a criminal trial. Needless to say, such experience is extremely beneficial.

Sadly, natural disasters and international armed conflicts are part of our contemporary world: the devastating tornado in North America; the meteorite hit near Chelyabinsk; bloodshed in Syria; and the tense situation on the Korean peninsula.

MITSO International University has gained prestige through organising the event, with more participants taking



Olympiad entrants show international legal knowledge in practice

part each year, from a wider geographical area. Meanwhile, the complexity of the tasks also develops, really challenging tomorrow's legal experts, as the First Vice-Rector of MITSO International University, the Head of the Organising Committee, Andrey Kozik, explains. He tells us, "While the first competition brought together only representatives from Belarus, Russia and Ukraine, we now have 16 countries taking part." Besides students from across the CIS, those from Cuba, Singapore, Serbia, China, Kenya, Romania and Poland

took part, making the law event one of the most famous worldwide.

The jury comprised leading international experts from New Zealand, Australia, Germany and Armenia. Jury member Vladimir Vardanyan, Chief of the Advisory Service of the Constitutional Court of Armenia, comments, "From the point of view of jurisprudence, this competition offers serious experience for application in the field of international law, while being a unique opportunity for intercultural communication. It gives the chance for

representatives of different nations to understand each other better."

During the Olympiad, students showed deep knowledge of international humanitarian law, each having been chosen by their countries for their talent. The Cuban team, from Havana, were attending for the second time and have been preparing for this event for the past year; they admit that they enjoy the event as much to meet new friends from around the world as to show their knowledge of international law.

A series of public lectures by experts on international relations were organised to coincide with the contest and, as an additional bonus, our guests were given a tour of Belarus.

Many of those who have taken part in the competition in past years are now working in their ministries of foreign affairs, or in their defence or justice ministries. No doubt, they each remember the competition in Minsk fondly and their opinions on armed conflict may have been shaped by their experience at the appropriately named *Youth for Peace* Olympiad.



Vokzalnaya station will be cheaper

Third Minsk metro line to launch in 2017

Minskmetroproekt is completing its design for the first section of the third line, linking Korzhenevsky station with Yubileinaya. Nikolai Ladutko, the Chairman of the Minsk City Executive Committee, has told journalists that a tunnelling shield is being constructed with reinforced concrete, using a closed method. "This is an important element, since the third line tunnel will be the deepest, at 16-20m," Minsk's Mayor notes.

The first stage of the new section of Minsk's metro will include four stations: Kovalskaya Sloboda, Vokzalnaya, Frantisek Bogushevich Square and Yubileinaya Square. A junction is planned between the second and third lines and Vokzalnaya station will have an above-ground entrance hall, reducing cost.