

## **Biotechnology and Russian: A Unique, Immersive Language Program for the Life Science Major**

Over the past 50 years, the conduct of research has changed dramatically. The time between discovery, development, and commercialization has been compressed and science has grown more complex. The boundaries between disciplines have been blurred and international collaborations have become increasingly necessary to bring about the advances we have come to expect.

In an effort to foster international scientific alliances and offer undergraduate science students the opportunity to experience Russian culture, The George Washington University and Lomonosov Moscow State University recently established the “Biotechnology and Russian Program.” The program supports a five-week summer program in Moscow that allows five to six students from ASEE member institutions to practice cutting-edge science in another language and culture.

The students — Sarah Bluher (Princeton), Krizia Gupiteo (New York University), Braden Larson (University of Oregon), Thomas Parmer (Indiana University), and Matthew Regner (University of Wisconsin-Madison) — were nominated by their school and chosen by program leaders to participate in the initial year of the program.

According to program director, Michael Bukrinsky, M.D., Ph.D., interim chair and professor of Microbiology, Immunology, and Tropical Medicine in GW’s School of Medicine and Health Sciences, the program “provides undergraduate life science majors with a first-hand experience in the Russian research environment, an introduction to the culture of science at our partner Moscow State University, and additional Russian language training. Students have an opportunity to initiate personal relationships that will better enable them to collaborate with foreign scientists in the future.”

During their residence in Moscow, students participated in an intensive Russian language program at the Russian Language Centre of Moscow State, a highly regarded organization providing language instruction to 700 students from more than 50 countries each year. The students also “took up residence” in the Department of Molecular Biology, where they attended seminars, toured biotechnology companies, and worked side-by-side with their Russian counterparts to isolate novel fluorescence genes from coral. Students also explored Moscow and St. Petersburg and experienced the cultural offerings of the cities.

“I never thought that I would have the chance to live in Moscow and practice Russian with native speakers,” said Krizia Gupiteo, from New York University. “It was a unique opportunity to be immersed in the language and culture, as well as the scientific community at Moscow State University. It was interesting to see the hands-on approach to learning in the biotechnology laboratory component. Overall, this program provided many great experiences, and I encourage students to apply.”

The program is funded the U.S.-Russia Program of the U.S. Department of Education’s Fund for the Improvement of Postsecondary Education. The U.S.-Russia Program supports partnerships and educational opportunities between higher education institutions from the two countries, particularly in the areas of foreign language learning.

“We have created a unique educational program, in terms of programmatic breadth and content. The students were acquainted with scientific life of the University and the educational process, while at the same time, they enjoyed festivals, attended scientific lectures, and research thesis defenses by biology undergraduates. All in all, in my opinion, it is hard to overestimate the value that both faculty and students acquired due to this program,” said Tatyana S. Kalebina, Ph.D., Co-Director of the Department of Molecular Biology in the Faculty of Biology at Lomonosov Moscow State University.

Each participant receives round-trip coach airfare from their home city to Moscow, room and board, and tuition for language and science courses. The grant also supports a visit each year by an advanced Moscow State student to Washington, D.C., to conduct part of their thesis research at GW.

Application materials for Summer 2012 will be mailed to ASEEE institutions in the fall. Dates for the program are May 17 through June 23. Additional information is available on-line at [www.gwumc.edu/microbiology](http://www.gwumc.edu/microbiology) and questions and inquiries may be directed to Jeffrey Sich, Ph.D., Program Co-Director, Associate Professor and Director of Educational Programs, Department of Microbiology, Immunology and Tropical Medicine at The George Washington University School of Medicine and Health Sciences - ([jsich@gwu.edu](mailto:jsich@gwu.edu) or 202-994-7613).