

The 60th Birthday of Irina Borisovna Ivshina

DOI: 10.1134/S0026261710060238



On June 12, 2010, Irina Borisovna Ivshina, doctor of biology and a corresponding member of the Russian Academy of Sciences, celebrates her 60th birthday.

Ivshina was born in Perm. After graduating with honors from Perm State University, since 1975, she has been working at the Institute of Ecology and Genetics of Microorganisms, Ural Branch, Russian Academy of Sciences, where she took a postgraduate course of studies and defended her Candidate of Science dissertation in 1982. In 1997, she successfully defended her doctoral dissertation based on her work on biology of alkanotrophic microorganisms.

Ivshina focused her scientific research on developing the fundamental principles of the study, maintenance, and use of the biodiversity of alkanotrophic microorganisms, which are of particular importance to ecogenoses and the practical aspects of human activities. She has made a substantial contribution to the development of biology and taxonomy of a new group of nocardioform bacteria, in particular, gas-oxi-

dizing rhodococci isolated from the subsurface waters of oil and gas fields. In 1984, a method of microbiological analysis of oil and gas deposits that had been refined by Ivshina and colleagues was awarded the VDNKh medal. The results of groundbreaking studies of the ecology of alkanotrophic rhodococci, their species and functional diversity, as well as of the development of immunoassay methods, were summarized in the monograph *Propanookislyayushchie rodokokki (Propane-Oxidizing Rhodococci)* (1987), which was the first theoretical work in Russian and world literature dealing with the biology of bacteria utilizing higher gaseous methane homologues. The monograph received a positive response from E.I. Kvasnikov, one of the cofounders of the field of oil microbiology in Russia, who published his survey in the pages of *Mikrobiologicheskii Zhurnal (Microbiological Journal)*.

At present, Ivshina is a leading specialist in the field of nocardioform actinobacteria and the author of fundamental works in this field well known in Russia and

worldwide. Ivshina is the author of more than 200 scientific works, including four monographs and numerous articles published in Russian and foreign journals, and the holder of six Patent Certificates. The high importance of the studies has been confirmed by grants issued by the Federal Target Program of the Russian Federation and the Russian Foundation for Basic Research, as well as by international programs of INTAS, NATO, and the Royal Society. In 2003, Ivshina was elected a corresponding member of the Russian Academy of Sciences in microbiology and biotechnology.

In 1975, Ivshina founded a strain collection of alkanotrophic microorganisms that could be used when studying this group of microorganisms and the possibility of their application as biological indicators of oil and gas content. This collection provided the basis for the foundation of the first collection of microbial resources in Ural, which was registered in the World Federation for Culture Collections (WFCC) and the European Culture Collections' Organization (ECCO). The culture collection founded by Ivshina possesses considerable scientific, educational, and industrial value and is applicable to carrying out various types of basic and applied research focused on biotechnology and environmental protection.

Ivshina is both a distinguished scientist and a teacher of great ability, as well as a capable organizer of the scientific process. She took active part in the development of the concept of the national research university in Perm. Ivshina, being a professor at the Department of Microbiology and Immunology of Perm State University, successfully balances her scientific and teaching activities, giving a course of lectures on microbial taxonomy and oil microbiology. A number of recipients of the Prize of the Russian Federation Government and the Demidov Prize for young scientists, as well as ten doctors of science, are among Ivshina's students. Numerous works by microbiologists belonging to Ivshina's scientific school are widely known. These works specifically deal with improving the current system of using microbial and genetic

resources in the course of biotechnological processes and remediation of damaged and polluted areas. In 2008, the group of authors working under Ivshina's guidance and supervision was awarded a Prize of the Government of the Russian Federation in the field of science and technology for the development and implementation of a scientifically based system for assessment and rehabilitation of damaged and polluted natural areas in the northern regions of Russia.

Ivshina is vice president of the Russian Interregional Microbiological Society and chair of the Perm Society of Microbiologists. She has been the organizer of numerous international conferences on microbial diversity (1996, 2005, and 2008), a member of the Executive Committee of the World Federation for Culture Collections (1996–2000, 2000–2004), an active member of the Federation of the European Microbiological Societies (FEMS), and a participant of the General Meeting of the Russian Academy of Sciences, as well as a member of various dissertation and expert boards on microbiology and biotechnology.

Ivshina's achievements in modern bacteriology and her contribution to the study and preservation of microbial diversity were marked by the awards the Order of Merit for Country of the Second Degree (1999), the Prizewinner Certificate of the Perm Region of the First Degree (2000), and a letter of gratitude from the governor of Perm krai for contribution to the development of academic science in Western Ural (2005).

Ivshina is a person of innate refinement and sensitivity; she has always been open to all kinds of positiveness. She is a distinctive leader and a very thoughtful administrator who earned her trust and deserved respect among her colleagues.

Members of the Russian Interregional Microbiological Society and the Editorial Board of *Mikrobiologiya (Microbiology)* heartily congratulate Irina Borisovna Ivshina on her birthday and wish her good health and many years of happy life, well-being, and success in her activities and creative explorations.