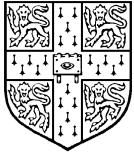


UNIVERSITY OF CAMBRIDGE DEPARTMENT OF GENETICS

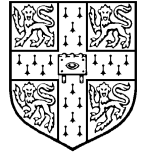


Downing Street, Cambridge, CB2 3EH, England.

Michael Ashburner FRS. Emeritus Professor of Biology.

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Igor Zhimulev

11 – 12 – 2014.

Director, Institute of Molecular and Cellular biology SB RAS

Novosibirsk 630090

Lavrentyeva ave 8/2

Russia

Dear Igor,

I am delighted to offer you and your Institute my support. I first visited your Institute in 1970, for an International Conference. At that time it was a significant beacon for scientific research in cytology and genetics in the former USSR and it has been internationally a leading center on the world stage in the fields of Genetics and Cytology for the last 50 years or so. Indeed I would go so far as to say that, in these fields, it has been the most important centre in Russia and has been a center of international status.

Igor Zhimulev joined the Institute of Cytology and Genetics as PhD student in 1971 and has risen through the ranks to become Director, in 2012; He is probably the best known, internationally, scientist in the general fields of cytology and genetics in Russia. This is internationally recognised by his election to the Academia Eueopaea and by an international cohort of collaborators.

His speciality is the polytene chromosome, the best model for eukaryotic interphase chromosomes. He and his colleague predicted and demonstrated the cytogenetic and molecular anatomy of individual chromomeres, showed their polygeny and functional independence of the genes which they include/. He obtained the evidence of transcriptional activity of interchromomeres and cloned DNA sequence of interchromomere region using P-element mediated transformation. He formulated the idea of heterochromatic regions as a system of highly repressed parts of the genome. He discovered that the genes controlling both hormonal induction the genes and the structure and replication of chromosomes, and described the components of the system of genetic silencing of the early embryogenesis genes and the genes subject to position effect variegation. He discovered gene clusters with coordinated replication and expression on the genome of *Drosophila*. He elaborated the concept of functional organization of interphase chromosomes and chromomeres. He pioneered the molecular analysis of a cloned puff, controlled by ecdysterone, demonstrated the complex organization of genes there placed; he formulated the idea of intercalary heterochromatin as highly repressed chromosome regions and described its parameters and discovered the *SUUR* gene, most important for delayed of replication in *Drosophila*.

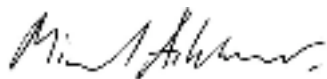
He grounded the idea of position effect variegation, functioning as a result of DNA compactization under the influence of inactive heterochromatin

He is an author of more than 350 scientific works including 3 monographs on Russian and 3 monographs on English (published in Academic Press, USA) about polytene chromosomes, 4 editions of the textbook "General and molecular genetics" (in Russian) and the textbook "Chromosomes. Structure and functions" 2009 (in Russian).

I can think of no more distinguished scientist to be Director of this Institute as National Research Institute in the Russian Federation.

I am emeritus professor of Biology in the University of Cambridge. I am a Fellow of the Royal Society of London since 1980, a Member of EMBO, of the Accademia Europea and Foreign Member of the American Academy of Arts and Sciences. I have been a member of the Miller Institute of The University of California, Berkeley and hold honorary degrees from the Universities of Crete and Edinburgh,

Please let me know if I can be of further help.



Michael Ashburner, FRS
Emeritus Professor of Biology,
University of Cambridge.