

## IN MEMORIAM: IGOR BORISSOVITCH RAIKOV (1932–1998)



Igor B. Raikov (photograph from the author's personal collection, to which it was kindly contributed by Dr. Sergei Skarlatov of St. Petersburg, Russia)

Our beloved and highly respected colleague in ciliatology, Igor Raikov, passed away in St. Petersburg, on 27 October 1998, of lung edema. For the past five or six years, he had been uncomplainingly suffering from a rare muscle disease which, however, did not affect his keen mind: in fact, just a few weeks before his premature demise he was completing yet another paper on protozoan karyology, one of his favorite subjects of investigation over his many years of devoted service to the broad field of protistology. Igor's tremendous conceptual contributions, as well as his indefatigable productivity in both field and laboratory research, will long be remembered, not to mention his linguistic abilities (fluency in English, French, and German, as well as in Russian, his mother tongue), his demonstrated leadership prowess, and his genuine modesty and genial friendliness.

Born in the city then known as Leningrad, on 30 December 1932, a scant two months later little Igor and his mother were obliged to join his (politically) exiled father in a concentration camp (Gulag), far north at the White Sea. After two years, the family was released but, as part of the intelligentsia, dared not return to their house and property in Leningrad, first living in Medvezhya Gora (near the Gulag) and then in Arkhangelsk.

Mostly tutored by his parents, Igor (and they) finally returned to Leningrad in 1945, at the end of World War II. He attended schools there, and eventually received his Candidate of Biological Sciences (Ph.D.) degree from Leningrad University in 1959 and his D.Sc. from that institute of higher learning in 1968. Studying first under the mentorship of the world-renowned protozoologist and parasitologist Professor V. A. Dogiel (who passed away in 1955) and then under the similarly celebrated G. I. Poljansky (himself an older protégé of Dogiel), young Igor was clearly destined to become one of the foremost leaders in the burgeoning field of protistology in the USSR of those times. Following in the footsteps of his (second) advisor, Dr. Raikov became—in 1988—Head of the Laboratory of Cytology of Unicellular Organisms in the Institute of Cytology of the USSR Academy of Sciences, Leningrad; and, in 1993, on the death of Poljansky (see In Memoriam tribute, *J. Euk. Microbiol.* 41, pp. 88–89, year 1994), he was elected to succeed his distinguished mentor as President of the well established and ever-active Russian Society of Protozoologists (as it then began to be called).

Igor was always thoroughly immersed in the scientific field of biology. His father, Dr. Boris E. Raikov, was a professor in that field and a member of the Academy of Pedagogical Sciences; his mother, Antonina N. Raikova, was also a research scientist in biology. In 1957, Igor married a young lady by the name of Ekatherina; and, as Dr. Ekatherina V. Raikova, she is still today a leading researcher at the famed Institute of Cytology. Their only child, Dr. Olga Igorevna Raikova, is currently a senior research scientist at the Zoological Institute in St. Petersburg.

We shall return to Dr. Raikov's impressive productivity over the span of some 40 years as an active researcher, but first I should like to mention his equally important contributions to the progress of international protistology through his frequent sojourns abroad, his facility with languages other than Russian, and—with Professor Poljansky, especially—his ambassadorial role in keeping us all informed of the important work being done in the USSR during the long period of that country's inhibitive "Cold War" with the West. From the 1970s and into the 1990s, he was in attendance at national and international meetings of protozoologists in countries outside Russia, often delivering papers in the languages of the host nations and discussing research problems of mutual interest. He was always a well received visitor to France, carrying out investigations in the active laboratories at Clermont-Ferrand several times for periods of 4–6 months. In more recent years, he worked at labs in Orsay (Université Paris-Sud), Tübingen (Germany), and Camerino (Italy). He was also invited to spend time at such foreign field stations as Roscoff, Banyuls-sur-mer, Villefranche-sur-mer, and Besse-en-Chandesse, in France, and Sylt in Germany.

Dr. Raikov was in regular attendance, as an active participant and sometimes special plenary speaker, at International Congresses of Protozoology, from the very first one, convened in Prague in 1961, through the ninth, in Berlin in 1993. In fact, in 1969, at the marvelous meeting arranged by Georg Poljansky as President and Igor Raikov as Secretary-General to take place in Leningrad, he was one of our most genial hosts (along with other kind Russian colleagues) who helped us all feel at ease at that Third International Congress. But his world-wide activities did not stop with (mere) trips and visits outside Russia. Igor was also for some years a working member of the editorial boards of all the major journals of protozoology as well as a frequent author of research papers of his own appearing in pag-

es of such outlets. And from 1978 until the early 1990s, he was a member of the International Commission on Protozoology, whose principal duty was determining the meeting places and approving the programs, every four years, of the Congresses. He was long a member (and/or an honorary member) of foreign (as well as several USSR/Russian) Academies or Societies: for example, the Deutsche Akademie der Naturforscher Leopoldina, the Groupement des Protistologues de Langue française, and the international Society of Protozoologists.

In the important area of scientific publications, Dr. Raikov authored (often alone) some 250 works, including several books and major chapters in volumes edited by others. His principal research interest was in the cytology of the cilioprotists and in their unique dual nuclear apparatus. While such work sometimes led him into the field of ciliophoran taxonomy (with electron microscopy often involved), it also aroused his interest in mitotic and meiotic mechanisms and in the nuclear genome of (all) protozoa; and it especially inspired him to promulgate convincing hypotheses concerning the phylogeny and evolution of major ciliate assemblages. His ideas about the origin of nuclear dualism in ciliates stimulated a great amount of research by others (too) on the chromosomal material of micro- and macronuclei, their cytochemistry, genetics, and detailed molecular biology. They certainly affected ciliate systematics (e.g., bringing about the creation of an order—later elevated to separate class status—for the so-called “karyorelictid” species). Like Jean Dragesco of France (who is still working actively in the

field and at the bench), Raikov was a recognized authority on the overall biology of sand-loving ciliates.

Professor Dr. Igor Raikov always had a number of graduate students under his direction. They, along with undergraduates and professional colleagues alike, respectfully called him “a walking encyclopedia” because of his brilliant powers of memory. One of his outstanding doctoral students—and his successor in several positions long held by him—was/is Dr. Sergei O. Skarlato, to whom the present writer is gratefully indebted for supplying both many of the data presented above and the photograph accompanying this tribute. I also wish to acknowledge additional information from the fine tribute by Dr. Anna V. Uspenskaya that appeared in the April 1999 issue of the journal *Protist*.

Along with Raikov's students, colleagues, and friends in Russia, many of us from countries around the world who knew and admired Igor over the decades of our association with him in one connection or another, now deeply mourn his premature passing, a great loss to the international protozoological/protistological community. But we are sustained by the fact that his memory will long endure, not only because of the lasting nature of the research publications he so ably produced but also, perhaps even more significantly, because of the exemplary and inspiring life he led as an unselfish scientist and as a true “philosopher of little things” thoroughly dedicated to unstintingly carrying out investigations on his favorite “little animalcules.”—JOHN O. CORLISS, P. O. Box 2729, Bala Cynwyd, Pennsylvania, USA. 19004!

John

Dear Dyre:

Oct 11 '99

I just wrote the author of this 'in memoriam' the famous Ciliophora expert Dr John Corliss, friend since 1948 - via Nigrelli I received a card from him, so I sent him the one of Jean (look him up on website) and asked if he would be willing to read over the paper in English I am rewriting, for J. of Parasitology. He said Parasitologists are meeting in Puerto Rico in 2000 - we could present Love  
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