

## *In Memoriam*

### **Professor Đorđe Fira (1959-2022)**

Jelena Lozo and Slaviša Stanković

*Faculty of Biology, University of Belgrade, Belgrade, Serbia*

Professor Đorđe Fira was someone who will be remembered by all who knew him with reverence and respect, whether as a professor, colleague, or friend. He graduated in 1981 from the Department of Molecular Biology and Physiology of the Department of Biological Sciences of the Faculty of Natural Sciences and Mathematics of the University of Belgrade and completed his postgraduate studies at the same faculty in 1985 with the defense of his master's thesis. His interest in science developed at the Research and Development Department of the "PKB-Agroeconomics" Institute in the Laboratory of Microbiological Analysis in the period 1984-1989. As a scholarship holder from the U.S. Department of Agriculture, in 1987-1988 he studied at the Food Science Department, Cornell University, Ithaca, NY (USA). The Department of Biological Sciences at the Faculty of Natural Sciences became his home institution in 1989 when he was hired as an assistant professor in biochemistry. At that time, he was one of two assistants in the Chair of Biochemistry and Molecular Biology. He was involved in conducting practical exercises in various courses held by the professors of this Chair. In 1999, after defending his doctoral dissertation, he was elected Assistant Professor and started giving lectures in biochemistry for the then-newly established Ecology and Environmental Protection Study Group at the Faculty of Biology. He adapted the biochemistry course for this study group, bringing it in line with the development of a new direction in



education, but also society, in which we are currently experiencing the importance of the issue of ecology and environmental protection today. Over the years, he became one of the most charismatic lecturers at the Faculty of Biology, even though biochemistry is a subject that students often classify as "difficult". Professor Fira, or "Fira Car (tsar)" as the students called him, enriched his lectures with his encyclopedic knowl-

edge – about life experience, stories, examples, and events, which made his lectures more interesting and akin to everyday life. The students enjoyed listening to him talk about films that dealt with biochemical topics, scientific achievements that were applied in treating people, but also simple explanations of why muscles ache and why we can go without food but not without water. The beauty of these lectures lay in Professor Fira's easy delivery but also in his charisma, which won the affection of his students, not only as a professor but also as a friend. Professor Fira made biochemistry a subject they could love and remember. His premature death in the prime of his life leaves us with the feeling that the best was yet to come.

Passionate, with ideas, enthusiasm, and an innovative approach, Professor Fira devoted himself to the scientific work he began during his postgraduate studies. The object of his interest and research were bacteria, members of different genera and species, as well as the added possibility of a suitable application. During his master's studies, he investigated the antibiotic resistance of *Salmonella* species. As part of

his doctoral research, and later as a mentor to other students, he worked on the characterization and identification of proteinases and extracellular enzymes of lactic acid bacteria. He led this research within the Laboratory of Molecular Microbiology, Institute of Molecular Genetics and Genetic Engineering. At the Faculty of Biology, he formed a new research group with his colleagues and, as project leader from 2011, opened a new research direction, biological control, focusing on the two genera *Bacillus* and *Pseudomonas* bacteria. The timeliness of this topic, which today is recognized not only in the scientific community but also in a broader context, especially in view of climate change and the need to develop sustainable agriculture, was already apparent to Professor Fira. Together with his collaborators, he made a name for himself from the very beginning, recognized in the field of biological control not only in Serbia but also beyond. By reviewing scientific papers for the most influential journals, he qualified to serve on the editorial board of the prestigious international journal *Biological Control*. In 2014, at the suggestion of the Faculty of Biology, he accepted membership in the new editorial board of the journal *Archives of Biological Sciences* and helped in restoring the damaged reputation of the journal by reviewing papers in biochemistry, microbiology, and biotechnology. He collaborated with scientists from home and abroad in joint projects, and also participated in numerous workshops in Italy and Argentina, where he was invited to lecture and share his knowledge, experience, and scientific discoveries. The International Center for Genetic Engineering and Biotechnology (ICGEB) in Trieste, Italy, was the institution with which he collaborated the most for over two decades, both in scientific projects, two of which he directed, and in conducting doctoral theses or postdoctoral training, which he made available to students who had fallen in love with biochemistry at his classes.

Thanks to his approach to both teaching and research, Djordje combined, as sports journalists would say, “the two highest titles,” of full professor and principal research fellow. His versatility and

broad education enabled him to leave an indelible mark through his involvement in the professional bodies of the Faculty of Biology of the University of Belgrade, and the Ministry of Education, Science and Technological Development. He successfully led the Chair of Biochemistry and Molecular Biology, which he headed from 2011, through the turbulent period of teaching reform in undergraduate, master's, and doctoral programs, maintaining a high level of lectures and experimental work in coordination with other faculty members. Recognizing his qualities and attitudes, the faculty and staff entrusted him with the leadership of the Council of the Faculty of Biology, which he successfully held since 2018, paying attention to socially responsible conduct. With great enthusiasm and ideas aimed at contributing to the realization of the scientific needs of the University of Belgrade, he participated in the renewal of foundations at the university. He became a member of the Board of Directors of the Endowment of Luka Čelović Trebinjac in 2016. As a representative of the Faculty of Biology in the National Scientific Committee for Biotechnology and Agriculture of the Ministry of Education, Science and Technological Development of the Republic of Serbia, he improved the work of this body with his well-reasoned positions, discussions, and proposals on the clear definition of guidelines for the evaluation of scientific and professional results required for election in scientific titles.

One of Professor Fira's outstanding qualities was his openness and readiness to talk with his colleagues about science, as well as history, sports, culture, and life. He was always ready to help his closest collaborators as well as colleagues from other fields of biology. He was willing to discuss various strategies and approaches to solving challenging scientific problems. We were privileged to know and collaborate with Professor Fira. Our conversations and discussions about topics from different spheres of life were unforgettable experiences.

A man of great erudition, knowledge, a connoisseur, scientist, and friend is no longer with us, but he will forever remain in our hearts and fond memories.