

## 60<sup>th</sup> Anniversary of University studies in Biology in Novi Sad

The University study program in Biology in Novi Sad is one of the few that have grown and developed along with the University of Novi Sad. Although, as part of the school for higher education, biology had been studied at a high level since 1946, formal establishment of University level studies in Biology did not take place until 14 years later. In the meantime, various biological disciplines were studied at the University level at various Faculties at the University of Novi Sad since their establishment, beginning with the Faculty of Agriculture (starting in 1954) and later at the Faculty of Food Technology (1959) and the Faculty of Medicine (1960). In 1960, student enrollment in the biology study group at the school for higher education officially ended, and together with other natural sciences, a group of subjects oriented toward studies in the natural and mathematical sciences was organized at the Faculty of Philosophy in Novi Sad. This marked the formation of the Cathedra of Biology, and the beginning of University studies in Biology in Novi Sad. Dr. Slobodan Glumac, assistant professor at the Faculty of Agriculture, was elected as first head of the Cathedra in Biology, and classes began with enrollment of the first generation of 18 students for the 1961/62 academic year. Classes were conducted by teachers and assistants from the former school for higher education, as well as from the Faculty of Agriculture, Medicine and Food Technology, in a famous building used by the Serbian Academy of Arts and Sciences, better known as "Platoneum" palace, as well as at the Faculty of Philosophy and the Faculty of Agriculture. Along with formation of the Cathedra of Biology at the Faculty of Philosophy, the scientific cadre of groups focused on the study of biological phenomena began to strengthen at other Faculties as well. This group of teachers and researchers became involved in the formation of the Institute for Biology at the University of Novi Sad in 1963. Students attended classes at the Artillery Regiment building at Petrovaradin Fortress, and two levels of studies in Biology were organized, which could be completed after either the second or fourth year of study. The first postgraduate studies began in the taxonomy group in the 1969/70 academic year, when Biology, along with other natural sciences and mathematics joined the newly formed Faculty of Natural Sciences and Mathematics. The Institute for Biology comprised six sections (in Botany, Plant Physiology, Zoology, Animal Physiology, Genetics and Evolution, and Microbiology), as well as centers for the application of radioactive isotopes and electron microscopy in biological research, and the establishment of a botanical garden. In 1973,

studies were moved to the new Biology Institute building, in which studies in Biology take place to this day. With reorganization of the University, teachers and associates from biology research groups at the Faculties of Agriculture, Medicine and Technology began to work at the Biology Institute. This institute, now the Department of Biology and Ecology, began teaching and research in a wide range of biological disciplines that are constantly evolving. Simultaneously with the beginning of general studies in Biology, a program in Biology Teacher education began in 1960. Later, studies in Ecology and Environmental Protection began in 1998, while studies in Molecular Biology started in 2003. From the first generation of 18 students in 1961, today, enrollment has grown to 180 students. Today, undergraduate studies in Biology are organized within two programs, with modules in general biology, molecular biology, microbiology and general ecology; in addition to an integrated program of study in Biology Education, as well as master studies in biology and ecology with nine modules, master studies in reproductive biology and doctoral studies in biology, ecology and molecular biology. A study program in bioinformatics is also in its infancy, and is currently realized through elective courses within the undergraduate program in Biology. These broad ranging topics are above all based on the scientific and technical expertise of teachers and researchers employed within the Department of Biology and Ecology. Back in 1960, the then newly formed Department of Biology consisted of a mere six teachers and teaching associates. Today, the Department of Biology and Ecology currently employs 140 teachers, teaching assistants, researchers and technical personnel, as well as over 20 young researchers working under various scientific research programs and projects. To date, the Department is comprised of eight Cathedra: biochemistry, molecular biology and genetics; ecology; hydrobiology and environmental protection; human biology; teaching methods in biology; animal physiology; microbiology; and zoology. Also within the department is a center for excellence in reproductive endocrinology and signaling (CeRes), a center for the preservation of biodiversity in the Balkan peninsula (CBBC), as well as the University center for electron microscopy (UCEM NS), along with several specialized laboratories: the laboratory of ecophysiology and ecotoxicology (LECOTOX); laboratory for invasive and allergenic plants (LIAP); laboratory for investigation of endocrine disruptors in cell signaling (ENDOS); laboratory for paleoecological reconstruction (LAPER); laboratory for pollen (NSPolen); laboratory for reproductive biology and signaling;

laboratory for chronobiology and aging (ChronAge); laboratory for mycology (ProFungi); laboratory for cyanobacteria research (Cyano-Lab); laboratory for microbiology (PK-Lab); and the Herbarium of the University of Novi Sad (BUNS). In addition to the herbarium collection, the department is also home to collections of strains of bacteria, cyanobacteria, fungi and lichens, an exceptional, world-famous collection of zoological materials (Syrphida, Orthoptera, Opiliones), as well as one of the largest collections of marine life in the local area. These collections are the result of exceptional efforts by teachers, associates, researchers and students, who, over the generations from 1946 until today, gathered these materials as part of national research projects and student field work. The scientific achievements of the employees at the Department

of Biology and Ecology are in effect an expression of the hard work, organization, exceptional dedication and sacrifice of its' researchers. These efforts have led to leadership positions in international projects, numerous citations in international journals, as well as a significant number of publications affiliated with the Department of Biology and Ecology. This tradition of development of Biology in Novi Sad has been maintained and encouraged by the journal *Biologia Serbica*, which has been continuously published since 1971. In addition to these numerous achievements, the real strength, prosperity and future of the Department of Biology and Ecology is above all held in the people responsible for this work, as well as the untiring inspiration provided by our students.

Goran Anackov,  
Head of Department of Biology and Ecology

