DÁNIEL BONCZ



Kölcsey Ferenc High School in Zalaegerszeg

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TEACHING CAREER IN BRIEF

I graduated as a biologist (molecular biologist, immunologist) from the Faculty of Natural Sciences of Eötvös Lóránd University in 2010. During the writing of my thesis I did research work at the Department of Drug Research of the Hungarian Academy of Sciences and at the Institute of Genetics, Cell and Immunobiology of Semmelweis University. Membrane vesicles isolated from cells were examined by electron microscopy and molecular biology methods. After obtaining my degree, I turned my attention from research to teaching. In 2013 I graduated as a biology teacher at the ELTE Faculty of Pedagogical Psychology. The 4 years I spent there were decisive years for my whole career, as I received a lot of professional knowledge, mentoring and excellent pedagogical examples from my colleagues at that time. Since 2017 I have been teaching at the Kölcsey Ferenc High School in Zalaegerszeg, where I am currently the head of the science team and also the head of the laboratory. In my pedagogical practice, I feel it is important to use a variety of teaching methods, creative and innovative tasks and illustrative models, as well as a high level of professional knowledge transfer. In our high school, I have set up programmes that reflect this pedagogical approach. During the five-day Genetics Camp, our students will learn about genetics in full depth in a hands-on way, and try out games of their own design, such as building a DNA helix or a eukaryotic cell with LEGO elements. In the four-day Evolution Camp, we will summarise the phylogeny of the living world, the major evolutionary transitions and build phylogenetic trees with LEGO elements. At Genetichnology Day, our students will present the latest molecular biology methods. The Ecology Week will complement the Sustainability Week by raising awareness of environmental issues. For each of the professional programmes, we also produce our own workbooks to record the knowledge of the participating students. I am an active participant in the school-leaving examinations. Developing professional contacts, preparing for the baccalaureate and talent management are my top priorities. I strive to encourage more students to love science and to become very good professionals in any field of life, because we need bright young minds to solve the global problems facing the Earth.

PUBLICATIONS

Kittel A, Misják P, **Boncz D**, Tischler E, Palóczy K, Richter H, Sperlágh B and Buzás E (2010). Molecules, involved in purinergic signaling, are present on the surface of microglia-derived membrane vesicles. **Front. Neurosci.** Conference Abstract: IBRO International Workshop 2010. Pécs, Hungary, 21-23 Jan, 2010. doi: 10.3389/conf.fnins.2010.10.00074

SUCCESSFUL STUDENTS

Bori Blatoni

student of biology, ELTE student of ELTE talentum programme

 XV Fodor József National Biology Competition 7th place

Márton Róbert Nagy

student of dentistry, PTE

 "Science that connects" national competition PTE, 1st place

Ádám Tamás Gräff

PhD student, Department of Chemistry, King's College London

• Doctoral research on antibiotic resistance and radioactive imaging