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About the authors

Liviu Dragomirescu had earned a BS degree in Mathematics in 1973 and had specialized in the theory of probabilities in 1974 at the University of Bucharest, and received a PhD in Mathematics in 1988 from the Center of Mathematical Statistics at the Romanian Academy, with the dissertation "*Contributions on numeric taxonomy in biology*". Working as informatician, he authored a multivariate data analysis software package designed for the entire Romanian research community. Later, he was formed as biometrician in the Victor Babes Institute and the Center for Anthropological Research at the Romanian Academy. Since 1990 he has worked with the Faculty of Biology at the University of Bucharest, becoming Associate Professor in 1996. An IREX scholarship allowed him to specialize in the United States in the "*Statistics of ecological zones*". He is member of 6 international and 3 Romanian professional associations. He published 8 books (2 in several editions), 52 papers (17 in international journals), wrote 18 research reports (1 in the US), and delivered over 100 presentations in conferences (24 in the US and Europe). He advised 10 BS theses and 6 Master theses, and was part of 5 doctoral committees with "Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics (PhD in Mathematics) and 2 with "Carol Davila" University of Medicine and Pharmacy (PhD in Medicine), and teaches biostatistics since 1998 to the Romanian Olympic Biology Lot. He formed and recommended 10 students for Master and PhD degrees in biology, environmental health sciences and biology in the US. After 2000, he has received Neurofeedback training in the US and *introduced, first time in Romania, neurofeedback techniques* (biometry applied to enhanced learning), through college-level courses at the Polytechnic University since 2003 and the University of Bucharest, Faculty of Biology, Master of Biosciences since 2008.

Alexandru-Ionut Petrisor had earned from the University of Bucharest in 1997 a BS degree with a paper on sustainable urban development, and from the University of South Carolina (United States) an MSPH degree in Biostatistics with a thesis on the Drane-Aldrich-Creanga statistic in 2000 and a PhD with a dissertation on applying geostatistical techniques in microbial ecology in 2004. Currently he is working on a second PhD with the Faculty of Geography at the University of Bucharest, with a dissertation on the application of spatial statistics in the analysis of territorial systems. He was a researcher with the University of South Carolina, using digital image analysis and the Geographical Information Techniques in the study of microbial ecology issues. Since 2007 he works with the National Institute for Research and Development in Spatial and Urban Planning in Bucharest, and teaches classes and studios on statistics and ecology at the "Ion Mincu" University of Architecture and Urbanism in Bucharest, receiving recently his tenured Assistant Professorship. Dr. Petrisor is member of 4 national and international professional organizations. He has published six books and two chapters, 57 journal papers and 48 abstracts, is the author of selected chapters of 14 urban and spatial plans, and delivered 60 conference presentations (some in the US and France) and 74 courses and lectures. He co-advised 3 BS papers. His achievements determined the inclusion of his biography in the US publications *Marquis Who's Who*, *Empire Who's Who* and *Madison Who's Who*, and Austrian *Hübner's Who's Who*, also in the biomedical experts database, and his election to the status of member of "Sigma Xi", The Scientific Research Society, and the National Registry of Higher Education and Research Experts from Romania and the award for his constant work on sustainable spatial development (National Conference Urban Concept, 2009).

Postface

This volume contains some of the texts used to shape a quantitative and structural reasoning essential for modern sciences. The texts were part of the Eco-Statistics, Mathematical Modeling in Ecology and Numeric Ecology courses of the Department of Ecology at the Faculty of Biology, University of Bucharest during 1992-2005. In this time frame, the time required for the completion of undergraduate studies was reduced from 5 to 4 years and later, following the Bologna reform, to 3 years (followed by a 2 years Master's degree). All these transformation were in conjunction with a severe and unanimously acknowledged decrease in the quality of education.

The first author of the book had introduced after 1989 the courses of Eco- and Biostatistics in the curriculum of the University of Bucharest (including textbooks co-authored by Professor Wanzer Drane, PhD, the first Doctor in Biostatistics from the United States), as well as modeling and numeric ecology courses. This curriculum has led to the formation of a biostatistics and numeric ecology “school” including some 10 former students who received Master's and/or PhD degrees focused on biostatistics in the US, or are already working on this topics in the US.

The first student formed and recommended by the first author for graduate studies in the US, also the first to return to Romania until today, is the second author. The preface also acknowledges other students who have shown remarkable achievements recognized worldwide, especially due to their training through parts of this book; some of their testimonies are included in the text.

Unfortunately, the goals of the education policies, originated from the top, were consolidated by a drastic reduction of the diversity of instructors and of valuable courses instead of being locally mitigated by the academic spirit. Consequently, the “performance” of reducing progressively the aforementioned disciplines from 4 to 3, then 2 and since 2005 to a single semester was finally achieved. The future education curriculum partially “buries” the only semester assigned to the discipline “ecological statistics” called there “biostatistics” (which remained after a suppression during 2003-2005, leaving numeric ecology without its basic prerequisite), since it is on the way to become elective. This situation must be placed in the context where the Agency for Quality Assurance in Higher Education (ARACIS) recommends the inclusion of both “ecological statistics” and “modeling of ecological processes” in the curriculum. In other words, at the time when the coordinating organism has a more correct viewpoint, local leaders consider that the ability to analyze and interpret experimental data should not be strictly required to a future ecologist of the 21st century, provided that the Master's curriculum does not include a similar course. Consequently, the programs will deliver specialists with reasoning mechanisms left many centuries behind. The results of reducing towards zero the aforementioned disciplines did not wait too long to show up: such backgrounds do not give graduates any chance to compete on valuable European markets (and even lesser in the US). Even the ability to be professionals in Romania is at least debatable.

The book was written more for historical purposes. The reader must understand that the University of Bucharest has trained for over a decade ecologists who were successful on the top markets, based on their background in biostatistics and numeric ecology, but the local policy (even though set by professors trained in ecology, who teach students that the “Number 1” task of ecologists is to conserve biodiversity) has destroyed the cultural diversity of the department. Such professors may be ecologists, but their behavior is certainly anti-environmentalist. This is why the Romanian “performance” of being brought in front of the European Justice Court for wrongful designation of Natura 2000 sites on 7 October 2009 should be no wonder.

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