

## **Abstract**

After defending my doctoral thesis and obtaining my Ph.D., my academic career advanced in two main directions: theoretical philosophy (especially metaphysics and philosophy of biology) and applied ethics (bioethics and research ethics). In both areas of research I addressed and approached important and difficult issues, and I tried to advance theoretical solutions and to formulate original arguments through systematic philosophical analyses, which could contribute to a real conceptual progress in those areas of research. In the area of theoretical philosophy, the research I have conducted during these years was developed, largely, as a continuation of some important themes approached in my Ph.D. thesis: the ontological status of categories, the issue of biological species, personal identity, the reality of external world etc. In the field of applied philosophy the topics covered in my studies and also in the research programs that I coordinated have reflected creatively my teaching interests and also important topics from the courses I taught after obtaining my Ph.D.: Ethics of science, History of evolution, Knowledge management. The results of my research have been published in national and international journals, and also in books and collective volumes published at some prestigious publishing houses. Furthermore, a significant part of my contributions have been inserted, after publication, into courses and seminars at the Faculty of Philosophy, in an attempt to offer students an up to date study material, and to familiarize them with some of the most difficult debates in contemporary philosophy.

Regarding my teaching activities, my main objectives were to develop and constantly refine the lectures and bibliography offered to students through courses and seminars. I have developed and periodically updated the content and the subjects of my lectures, and in the near future I intend to develop and publish these lectures as introductory courses for undergraduate students (Introduction to Philosophy, Introduction to Metaphysics, and Introduction to Philosophy of Biology).

Another goal that I have pursued throughout my postdoctoral teaching career and one which I will continue to pursue in the following years was that of upgrading and constantly revising the course materials and the bibliography for the disciplines I teach to M.A. students: Research Ethics, Theory of Intercultural Communication and History of Evolution. All three courses are currently of great interest for students, and some of my lectures are attracting students from other departments and faculties (especially Research Ethics and History of Biology courses). I believe

that this increased interest of students for the subjects and topics covered by these courses deserves to be rewarded with a matching up to date content, one that should provide an authentic theoretical and methodological guide to those areas of study and research.

Regarding the research objectives that I have pursued in recent years, I should mention the two interdisciplinary research projects that I have coordinated as director, the first one developed in collaboration with researchers from the Faculty of Biology from the University of Bucharest (2004-2008) and the second one with researchers from the University of Medicine "Carol Davila" and the Institute of Legal Medicine (2012-2016), and also the research project that I developed during my postdoctoral scholarship (2010-2012). All three projects have been completed with a number of articles and studies published in important national and international journals. In the next years I intend to continue to work on two main research directions and projects. The first of these projects aims to develop a subject that interested me for a long time, namely the topic of emergent systems and the ontology of emergent properties in natural sciences, especially biology. I will attempt to elaborate a systematic critical analysis of the meanings associated with the concept of "emergence" in scientific explanations and hypotheses, in order to formulate, on this basis, a trans-disciplinary definition of emergence. The second research project that I intend to develop in the next period correlates both theoretically and methodologically with the previous project, and covers another important issue from the philosophy of natural sciences, namely the methodological strategies used in fundamental and applied research - reductionism and holism. More specifically, I intend to realize a critical assessment of those elements that determine the disagreement between the two methodological models and, at the same time, of those elements that could be preserved for their explanatory virtues; subsequently, I intend to advance a new model of explanation as a third option, a model which could successfully overcome the difficulties encountered by the two traditional models of explanation (holism and reductionism), that are competing for preeminence and supremacy in the area of natural sciences for over a century.