

## CURRICULUM VITAE

**Name: Zaharia Corneliu Nicolae** – Actual position: Senior researcher 1<sup>st</sup> at Roumanian Academy – Stefan S. Nicolau Institute of Virology, 285 Mihai Bravu street, Bucharest.

**Education:** University of Bucharest Faculty of Physics; PhD - University of Bucharest

**Other Specializations and Qualifications:** Postgraduate Course, Institute of Internal Medicine, Bucharest, 1976 biostatistics; International course Postgraduate, University Bucharest ,1977, Computer and mathematical statistics; Postgraduate Course, Ministry of National Education, Informatics Training Center, 2000, Oracle; Postgraduate Course, Ministry Educatiei Nationale, Informatics Training Center, 2002 Database Access with Visual Basic programming; Postgraduate Course, Ministry Educatiei Nationale, Informatics Training Center, 2003, Programming in Java.

**Professional experience in** Institute of Virology "Stefan S. Nicolau": Study of viruses using physical methods, computational methods AI (neural networks, genetic algorithms, cellular automata), modeling of epidemics of AIDS, influenza, hepatitis , automatic data collection and processing epidemiological, medical informatics, bioinformatics, hardware applications in laboratory medical research, databases, web applications, lipid bilayers mathematical modeling, molecular simulation, nanostructures analysis.

**Project manager:** The study of disease / infection viral using modular systems ranked by artificial intelligence; Management of a computerized system for collecting information and tele morbidity data analysis results in respiratory viruses, according to European standards; Epidemiological and socio-economic impact of acute respiratory viral infections in the context of care given by family doctors; Retrospective studies on specific influenza infection epidemic prevention through vaccines; The developing a training system based on knowledge management for initiating risks acting on the human factor; Interdisciplinary cooperation in health using telematics technology; The study of mechanisms of depression and anxiety by molecular dynamics simulation and docking; Nanostructured systems for identifying viral antigens for use in medical diagnosis; Research on development of a structure (cognitive) complex including referential definition of serious risks in various socio-economic activities; System based on semantic knowledge and specific occupational protection against major risks (risk-Expert).

**Books and chapters (7), articles (more than 190) scientific communications (more than 200) and patents (10).** Books in the project field: C.N. Zaharia, Al Cristea, Algoritmi genetici si retele neuronale - doua noi paradigme de calcul, Editura Academiei, Bucuresti, 314 pp, ISBN: 973-27-0889-1, 2002; Al. Cristea, C.N. Zaharia, Sisteme modulare ierarhizate - Modele ale sistemelor biologice si sociale complexe, ierarhizate, cu algoritmi genetici, retele neuronale si automate celulare pe diverse niveluri de ierarhizare, Editura Universal DALSI, Bucuresti, 285 pp, ISBN: 973-8157-53-6, 2002.