

CURRICULUM VITAE

Dumitru Andrei Iacobas, PhD

Research Professor of Systems Biology and Director of the Personalized Genomics Laboratory

I. GENERAL BIOGRAPHICAL INFORMATION

A. Personal

1. DOB: 4/1/1952
2. US citizen, Romanian (European Union) citizen
3. Address: 22103 Cassini Ct, Richmond, TX 77407

B. Education (include institution/location, degree, and dates of attendance)

1. Undergraduate Education:

- Baccalaureate (1967-1971) – National College Vasile Alecsandri, Galati, Romania. Major in Mathematics and Physics. **Valedictorian**.
- BS Physics, University of Bucharest (Romania) – College of Physics (1971 – 1974), 9.64/10

2. Graduate Education (include thesis/dissertation title, advisor):

- MS-equivalent Biophysics, University of Bucharest (Romania) – College of Physics (1974 – 1976), Thesis: “Theoretical and experimental contributions to the study of membrane ionic channels”. Advisor: Prof. Dr. V. Gheorghe
- MS-equivalent Physics Teaching, University of Bucharest (Romania) – College of Physics (1976 – 1978), Thesis: “An Atomic Faust”. Advisor: Prof. Dr. IL Popescu
- MS-equivalent Medical Physics, University of Bucharest (Romania) – College of Physics (1989 – 1990), Thesis: “New calibration method for gamma-scintillation chambers”. Advisor: Prof. Dr. V Grecu
- PhD (Bio)Physics, University of Bucharest (Romania) – College of Physics (1990 – 1994), Thesis: “Effects on gamma-lactonic compounds on the dynamics of ionic channels”. Advisor: Prof. Dr. G Turcu.

3. Postgraduate Training (research fellowship, etc.; source of support, advisor, if applicable):

2001-2006 Visiting Associate Professor, DP Purpura Dept of Neuroscience, Albert Einstein College of Medicine
2017 - 2018 Computation Systems Biology, CCSB PVAMU, Dr. S Kim

4. Other Advanced Training/Experience

- Summer Schools of Biophysics (Zakopane 1984, Patras 1996, Ladej Zroj 1997)
- International Schools of Mathematical Ecology (Trieste 1990, 1992, 1994, Lujan 1994, Buffalo 2000)
- International Schools of Biomathematics (Panama 1997, Valparaiso 1998, Mendoza 1998, Manizales 1999)
- Short courses and trainings in genomics (Bar Harbor 2001, Orlando 2002, Austin 2003, Denver 2004, Portland 2005)

C. Academic Appointments

2018 – present: **Research Professor** of Systems Biology and Director of the Personalized Genomics Laboratory, CRI Center for Computational Systems Biology, Department of Electrical and Computer Engineering, Roy G Perry College of Engineering, Prairie View A&M University, Prairie View, TX 77446.
2013 - 2017 **Associate Professor** of Pathology and Director of Systems Biology Core laboratory, New York Medical College, Valhalla, NY
2006 - 2013 **Assistant Professor** of Neuroscience, Albert Einstein College of Medicine, Bronx, NY

2001 - 2006 **Visiting Associate Professor** of Neuroscience Albert Einstein College of Medicine, Bronx, NY
1990- 2001 **Associate Professor** (1994)/Assistant Professor of Biophysics and Biostatistics, Ovidius University School of Medicine, Constanta, Romania
1981 - 1990 **Instructor** Biophysics and Physiology, Carol Davila University of Medicine and Pharmacy – School of Medicine, Bucharest, Romania (1981-1990)
1978 1981 **Lecturer** Physics and Biophysics, National College of Natural Sciences Mihai Eminescu, Constanta, Romania
1976 - 1978 **Lecturer** Physics, National College of Mathematics and Physics, Mircea cel Batran, Constanta, Romania

D. Senior Administrative Appointments in Academic Institutions:

2002 - 2006 **Associate-Director** Molecular Biology & Neurogenomics Core Laboratory, Kennedy Center for Research in Mental Retardation and Human Development, Bronx, NY
2002 - 2005 **Co-Director** Biometry Core, Kennedy Center for Research in Mental Retardation and Human Development, Bronx, NY
1990-2001 **Head Division** Biophysics, Informatics, Biomathematics & Biostatistics, Medical School, Ovidius University, Constanta, Romania
1990-1992 **Director** Nuclear Medicine Laboratory, Constanta District University Hospital, Constanta, Romania
1978-1981 **Associate Principal** for Student Affairs, National College “M. Eminescu” of Natural Sciences, Constanta, Romania
1977 – 1978 **Director** of (Transmission) Electron Microscopy Laboratory, Central Institute for Sheep Research, Constanta, Romania

E. Other Information

1. Honors or Awards (titles, dates):

2015-2017 Member in New York Medical College Dean Research Committee
2002 Scholarship award for the Short course on gene microarray development and analysis, JacksonLab, Bar harbor, ME, 04/24-28
2001 **Scientific Research Award**, Literary Fund, Romania
1999 **Honorary Citizen** of Louisville, KY, commissioned by David L Armstrong, Mayor
1999 **Honorary Citizen** of Jefferson County, KY, commissioned by Hon Rebecca Jackson, County Judge/Executive
1995 1st European PHARE Prize “Young scientists in politics”
1994 Soros Foundation award to attend the 3ro Encuentro Latinoamericano de Ecologia Matematica, Lujan, Argentina
1994 International Center for Theoretical Physics (Trieste, Italy) award to attend “College on Medical Physics”
1992 Tempus European Exchange Program Award for 2 month training in the Dept Biophysics & Nuclear Medicine, Universite Bretagne Occidentale, Brest, France
1990, 1992, 1994 Awards of the International Centre for Theoretical Physics to attend 2nd, 3rd and 4th Autumn Courses of Mathematical Ecology at Trieste, Italy
1984 (Polish) National Academy award to attend the 7th Summer School of Biophysics, Zakopane
1983 (Romanian) Academy award to attend the International Summer School of Theoretical Physics
1971-1976 National Merit Scholarship, University of Bucharest, College of Physics
1971 **Valedictorian** of the National College of Mathematics and Physics “Vasile Alecsandri”, Galati

2. Board Eligibility/Certification (dates):

1978 University of Bucharest, Physics teacher
1990 University of Bucharest, Medical Physicist

II. RESEARCH INFORMATION

A. Research Support (*only since 03/01/2001 when immigrated in the U.S. 20 grants (not listed) also in Romania between 1981-2001*)

- NIH R01 NS34931** PI DC Spray 04/01/98-3/31/03
Gap junction and Schwann Cells
Role: **Co-Investigator** (2001-2003)
To determine the effects of gap junction expression on Schwann cell function and the interactions between gap junction proteins and cell adhesion molecules in glia cells from wild type and connexin knockout mice
\$430,000
- NIH R21 NS42807** PI DC Spray 09/29/01-9/28/03
Optimized microarray analysis of neural differentiation (Co-PI)
Role: Co-Principal Investigator
The primary objective of this grant is the development of algorithms to optimally detect genes that are up- or down-regulated using gene microarrays prepared in-house.
The project was ranked in the 2.0 percentile.
\$415,000
- NIH 3P30 HD001799-40S1** PI DS Faber 07/01/02-06/30/06
Support for RF Kennedy Mental Retardation Research Center
Role: **Co-Director** Biometry Core
Role: **Associate Director** Molecular Biology & Neurogenomics Core
To provide technical assistance in cDNA microarray experiments, and to implement, maintain and update acquisition software, correction/normalization algorithms and data mining procedures for genomic studies.
\$2,075,000
- NIH PO1 (DK060037)** PD A Melman 04/01/03-1/31/08
Role: **Investigator** Project #4 “Smooth Muscle Differential Function and Diabetes”, (PI D Spray)
Role: **Investigator** Core C Mathematical modeling (PI S Schwartz)
The primary objective of Core C is to develop a mathematical model of the intercellular calcium signaling in diabetic smooth muscle
\$11,666,000
- NIH PO1 HD32573** PD: GG Haddad 02/10/05-7/31/10
Hypoxia in development: injury and adaptation mechanisms
Role: **Principal Investigator and Director Core D** “Computational and Functional Genomics”
The objective of this Core Facility is to assist investigators in designing, processing and managing cDNA, oligonucleotide, antibody and protein array experiments to analyze alterations of transcriptome and proteome and of protein-protein interactions in cultured cells, selected tissue regions or whole organs of mice exposed to hypoxia or in mutant mice, and to provide consultation and training in the use of advanced statistical methods and mathematical modeling.
The PO was ranked in the 0.5 percentile with Core D getting the best score.
\$12,125,000
- NIH RO1 HL073732** PI: AC Campos de Carvalho 7/15/**2003**-6/30/2012
Stem Cell Based Therapies in Chagasic Cardiomyopathy
Role: **Investigator**
This grant dealt with use of hematopoietic stem cells in treatment of an animal model of dilated cardiomyopathy. Dr. Iacobas was responsible for designing and processing microarray analysis as an unbiased approach for evaluating therapeutic efficacy of stem cell treatment.
\$4,150,000

NIH 5R01HL092001

PI: DA Iacobas

7/01/2009-6/30/2012

Connexin-Dependent Transcriptomic Networks in Controlling the Heart Rhythm

Role: Principal Investigator

This grant has identified and studied the networks of genes that generate, maintain and modulate the rhythmic waves of contraction that spread through the heart and make it beat. Disruption of these regulatory gene networks may underlie heart failure, the leading cause of death in the U.S. This research will lead to novel insights into heart disease and to new approaches to restore normal cardiac function by manipulating gene webs.

\$830,000

App ID#: 256455

MPI: L Velisek, CE Stafstrom, DA Iacobas

01/01/13-12/31/14

Agency: Citizens United for Research in Epilepsy (CURE)

Developing and testing novel treatments for infantile spasms

Role: (Multiple) Principal Investigator

We propose that melanocortin analogs and other hypothalamus-linked peptides have equal or better efficacy, fewer adverse effects, and are easier to use than ACTH for treatment of IS. We will test this hypothesis and elucidate the molecular basis of action of these compounds with the goal of improving the treatment armamentarium for children with IS. Remodeling of genomic fabrics will be used as biomarkers of drug efficacy.

\$333,000

NIH 5R01AI045801-12 ADM SUPPL.

PI I Schwartz

7/01/13-6/30/14

B Burgdorferi tick phase genes and Lyme disease

Role: Investigator

In the parent grant, we proposed to perform transcriptional profiling of B. burgdorferi at various stages during the tick phase of the enzootic cycle. In this supplemental request we propose to extend and strengthen the transcriptome data by employing a systems biology approach that will integrate data from the various stages of the enzootic cycle so as to build a comprehensive model B. burgdorferi gene expression, and its regulation, as it transits from an infected host through the tick and back to a naïve mammal.

\$166,000

UNIVERSIDADE FEDERAL DO RIO DE JANEIRO

PI: DA Iacobas

3/21/14-4/30/14

Retina cytoprotection by overexpressing Max gene

Role: Principal Investigator

This subcontract completes a series of experiments that analyze the remodeling of several genomic fabrics in injured rat retina subjected to various treatments.

\$5,000

NYMC INTRAMURAL

PI: R Mathew

7/1/2014-6/30/15

Endothelial Disruption Precedes Neointima Formation in Pulmonary Hypertension

Role: Investigator

Dr. Iacobas investigated the genomic alterations in pulmonary hypertension (PH) that distinguishes reversibility vs. irreversibility of PH

\$20,000

BOEHRINGER-INGELHEIM

PI: G Williams

9/1/2014-8/31/2016

Phase 3: Chicken Egg (CE) Genotoxicity and Carcinogenicity Assessing Assay for Use as an Alternative Preclinical Model to Investigate Drug-Induced Toxicity with Special Interest in Carcinogenicity Testing

Role: Investigator

Dr. Iacobas investigates the genomic fabric remodeling in the liver of chicken exposed in ovo to selected carcinogenic toxins

\$1,245,000

NYMC Department of Pathology

PI: DA Iacobas

11/1/2014-10/31/2015

Genomic fabric remodeling and daptomycin resistance in *E. faecium* infection
This Pilot study evaluates the genomic mechanisms of the antimicrobial resistance in blood isolates.

Role: **Principal Investigator**
\$10,000

WESTCHESTER MEDICAL CENTER **PI: DA Iacobas** 7/1/2015-6/30/2017

Computerized system for cardiology services
Develop a multiscale mathematical model and the associated software and implement them at the Cardiology Services of Westchester Medical Center.

Role: **Principal Investigator**
\$10,000

NYMC Department of Pathology **PI: DA Iacobas** 7/1/2015-6/30/2017

“Quantifying cancer-associated remodeling of key genomic fabrics by next gen sequencing”
Develop and validate the “genomic fabric remodeling” approach as a holistic alternative to the biomarker paradigm in cancer diagnosis and treatment.

Role: **Principal Investigator**
\$10,000

UNIVERSIDADE FEDERAL DO RIO DE JANEIRO **PI: DA Iacobas** 3/01/2017-6/30/2017

Agency: Universidade Federal do Rio de Janeiro Retina cytoprotection by overexpressing Max gene

Role: **Principal Investigator**

This subcontract adds a new series of experiments that analyze the remodeling of major genomic fabrics in injured rat retina subjected to various treatments.

\$5,000

NSF 1736196 (2018-2020) **PI L Qian** 09/01/17-08/31/20

“HBCU-RISE: Bridging Quantitative Science with Biological Research: Jumpstarting Computational Systems Biology Research at PVAMU”

Role: **Investigator**

The aim of this project is to study and analyze the dynamic evolution of drug/cell interactions using biomedical big data, including both public domain data and dynamic time series data from systematic drug perturbations experiments. Innovative image processing, machine learning, dynamic modeling and control techniques are proposed to help understand the genetic regulation of cancer cells and the mechanism of action of molecularly targeted agents on gene regulation.

\$1,000,000

Texas A&M University System Chancellor's Research Initiative **MPI: L Qian, P Obiomon, S Kim**
09/01/17-08/31/20

The Computational Biology and Bioengineering Research Center

Role: **Investigator**

The Computational Biology and Bioengineering Research Center is a multidisciplinary center to study complex biological processes such as cancer, head injury in football, Parkinson's disease, pulmonary hypertension, and herbicide-resistant weeds, by employing state-of-the-art computational and engineering skills.

\$6,000,000

PVAMU – Undergraduate scholarly research award **Nneka Ede** 10/01/18-08/31/19

“Development of Cancer GMR Software Package for Personalized Cancer Gene Therapy”

Role: **Advisor**

\$10,000

PVAMU Faculty Research Development Grant Program **PI: DA Iacobas** 01/25/19-08/31/19

“Complement C5ar1 Antagonists for the Treatment of Autism Spectrum Disorders”
\$16,000

UNIVERSIDADE FEDERAL DO RIO DE JANEIRO **PI: H. Peters-Silva** 3/01/2019-9/30/2019
Agency: Universidade Federal do Rio de Janeiro Retina cytoprotection by overexpressing Max gene
Role: **Investigator**
This subcontract adds a new series of experiments that analyze the remodeling of major genomic fabrics in injured rat retina.
\$15,000

SUBMITTED

Cancer Prevention & Research Institute of Texas (CPRIT) - Early Translational Research Awards
“Gene master regulators approach for personalized cancer gene therapy”
Role: **Principal Investigator**

B. National Scientific Participation (include dates and titles)

1. Journal Editorial Boards:

Editor: Tilia Press International Ltd., Constanta, Romania (1997-2001).
Published college textbooks in Romanian, English and Spanish.

Associate Editor: Series on Advances in Ecological Sciences/Ecosystems and Sustainable
Development, WIT Press, Ltd., Southampton, UK; 2001-2005.

Board Member:

- AIMS Biophysics, 2014-present
- Ars Medica Tomitana (Romania), 1995 - 2000
- Estudio de Sistemas Biologicos (Colombia); 2000-2002
- ISRN Genomics, 2012 – present
- Journal of Bioinformatics and Proteomics, 2014-present
- Journal of Cardiovascular Disorders, 2014-present
- Journal of Genetics Study, 2013 - present
- Medical Science Monitor, 2007-present
- Neurology and Clinical Sciences Journal, 2018-present
- Open Journal of Genomics, 2009-present
- Research Journal Developmental Biology, 2013-present
- Romanian Journal of Rare Diseases, 2010-present
- Romanian Revue of Applied Ecology, 1997-2001
- The Open Gene Therapy Journal, 2007-present

2. Review Panels:

Grant Reviewer: 2010 NIH SBIR Topic 110
2010-present General Directorate for Health and Technologies Research, Ministry of
Labor, Health and Social Policies, **Italy**
2011-present National Council for Scientific Research, **Romania**
2014-present National Science Centre, **Poland**

Book Reviewer: - Advances in Medical Physics, Biophysics and Biomaterials, Male
Centrum, Bratislava, Slovak Republic; 1997

Review Editor: - Frontiers in Integrative Neuroscience, 2007-present
- Frontiers in Bioinformatics and Computational Biology, 2018-present

Peer Reviewer: - Neural Regenerative Research, 2007-present

Ad-hoc Reviewer: - Brain Sciences, Frontiers in Cellular Neuroscience, Frontiers in Genetics, Frontiers in Neurosciences, Frontiers in Microbiology, Genomics, Molecular Neurobiology, Nature Scientific Reports

3. Professional Societies:

American Epilepsy Society (2016-2017)
Academy for Medical Development and Collaboration (AMDEC): 2002-2013
American Heart Association: 2011-2012
American Society for Cell Biology (ASCB): 2002-2003
American Society of Neurochemistry (ASN): 2011-2012
Association of Biomolecular Resource Facilities (ABRF): 2001-2005
Asociation Latino-Americano de Biomatemática (ALAB): 1994:1999
Biophysical Society (BF): 1990-2000, 2005-2009
Eastern and Central European Society of Mathematical ecology (ECESME): 1994-2000
Encuentro Latino-Americano de Ecología Matemática (ELAEM): 1994-1999
European Biomatemáticos: 1990-1994
European Society of Medical Informatics (MISE): 1996:2003
International Society for Computational Biology (ISCB), 2011-2012
Romanian Physicists (1990-present)
Society for Neuroscience (SFN): 2006-2012

4. Elected Positions:

2012 **Chair** Colloquium “Intercellular Signaling and Myelination”, 43rd Ann Meeting of the American Society for Neurochemistry, Baltimore, MD, March 03-07/2012.
2002-2011 **Board of Microarray Core Directors, Member** Genomic Analysis and Technology Excellence (GATE) group of the Academy for Medical Development and Collaboration (AMDeC)
2001-2007 **Member** International **MARG** (Microarray Research Group) of the ABRF (Association of the Biomolecular Research Facilities)
2003 **Member** **International Scientific Advisory Board and Session Chair** 1st Intl Conference on Medical Informatics and Bioengineering, Craiova (Romania)
2002 **Chair** Tutorial Session 13 International Symposium “Biomolecular Technologies: Tools for discovery in proteomics and genomics”, Austin, TX
2001, 2003, 2005 **Member** **International Scientific Advisory Board and Session Chair** 3rd 4th and 5th International Conference on Ecosystems and Sustainable Development, Alicante (**Spain**), Siena, (**Italy**), Cadiz, (**Spain**)
2001 **Member** **Intl Scientific Advisory Board and Session Chair** 1st Intl Conference on Sustainable Planning and Development, Skiathos Island, (**Greece**)
2001 **Member** **Intl Scientific Advisory Board and Session Chair** 13th International Conference of the International Society for Environmental Epidemiology, Garmisch-Partenkirchen, (**Germany**)
1995, 1996 **Chair** 1st and 2nd **International Conference** “Sustainable Development: System Analysis in Ecology”, Dnepropetrovsk (1995), Sevastopol (1996), (Ukraine)
1994-2000 **President** **Eastern and Central European Society of Mathematical Ecology** with regular members from: Belarus, Bosnia-Herzegovine, Bulgaria, Croatia, Czech Republic, Greece, Hungary, Lithuania, Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia and Ukraine, and associate members from: Argentina, Brazil, Chile, Colombia, India, Italy, Germany, Mexico, Panama, Peru, USA, Venezuela
1990-2001 **Member** Committee on Appointments and Promotions, Inventors Committee, Ovidius University, Constanta, Romania

5. Invited Lectures, Presentations, Seminars

a. International

"The Gene Master Regulators of tissues and cells collected from patients with blood, lung, kidney, prostate and thyroid cancer", 3rd Symposium of Translational Oncology "STOP Cancer Romania", Bucharest, **Romania**, 05/10-12/2019.

"The Gene Master Regulators Approach Provides the Best Targets for the Personalized Cancer Gene Therapy", International Conference on Disease Biomarkers and Precision Medicine (DBPM-2018), 10/22-24/2018 in Houston, TX

"Gene Master Regulators not Biomarkers should be tested for personalized cancer medicine", 4th World Congress on Cancer Research & Therapy, Rome (**Italy**), 08/13-15/2018.

"Gene Master Regulators and the Personalized Timely Cancer Gene Therapy", 3rd International Conference on "Cancer Research and Targeted Therapy", London, **UK**, 08/06-08/2018.

"Gene Master Regulators in Cancer Gene Therapy", 2nd Symposium of Translational Oncology STOP Cancer, Bucharest, **Romania**, 04/13-15/2018.

"Prenatal exposure to corticosteroids: hypothalamic changes relevant for postnatal impairments, 7th International Meeting Steroids and Nervous System, 02/16-20/2013, Torino, **Italy**.

"Connexins as nodes in heart rhythm networks", 7/13/2011. Gap Junction Conference, Ghent, **Belgium**.

"New analytical tools to characterize remodeling of the transcriptomic networks in rodent models for human immunological diseases", 10/9/2009, MUGEN, Athenes, **Greece**.

"Pan-glial transcriptomic continuity of the myelination substrate in the mouse brain" 8/23/2009. Euroglia, Paris, **France**.

"Myelination substrate in immortalized oligodendrocytes is controlled by connexin-dependent transcriptomic networks of Ca²⁺-signaling and enhanced by astrocyte proximity". 8/23/2009. Euroglia, Paris, **France**.

"Compensatory" transcriptional mechanisms: Comparison of Cx43 null and knockdown astrocyte transcriptomes", 7/26/2007, Gap Junction Conference, Elsinore, **Denmark**.

"Coordinated transcriptomics – a new tool to identify functional pathways in the cell", 1st International Conference on Medical informatics and Engineering, Craiova, **Romania**, 10/10/2003.

"Improved procedures for cDNA array mining", Tutorial International Symposium "Biomolecular technologies: Tools for discovery in proteomics and genomics", Austin, TX, 03/9-12/2002.

"Dracula's postulates and biocoenosis stability". 4^o Encuentro Latino Americano de Ecologia Matematica. Valparaiso, (**Chile**).

"Thermodynamics of biomass storage, exchange and conversion in agrosystems". 2nd International Conference on Sustainable Development: System Analysis in Ecology. Sevastopol, **Ukraine**, 1996.

"The stability of ecosystems in the Theory of many-population correlation functions. Spruce III International Conference, Statistics in Public Resources, Utilities and care of the Environment. Merida, **Mexico**, 1996.

"Thermodynamics of biomass storage, exchange and conversion in agrosystems. International Workshop on Biomass Production and Utilization. Trieste, **Italy**, 1996

"The Theory of many-population correlation functions. 1st Practical International Conference on Sustainable development: environmental pollution and ecological safety. Dnepropetrovsk **Ukraine**, 1995.

"New ideas in thermodynamical ecology. 1st Practical International Conference on Sustainable development: environmental pollution and ecological safety. Dnepropetrovsk **Ukraine**, 1996.

"Problems in the dimensional analysis of ecosystems. 3^{ro} Encuentro Latinoamericano de Ecologia Matematica, Lujan - Buenos Aires, **Argentina**, 1994.

"Standard versus normal mathematical approach of ecosystems". 3^{ro} Encuentro Latinoamericano de Ecologia Matematica, Lujan - Buenos Aires, **Argentina**, 1994.

"Computer simulation of membrane single-channel currents". International Workshop "What is computer simulation of biological systems good for?", Liblice, **Czechoslovakia**, 1991

"A pre-Hilbert space for physiological states and some functions which could be used to simulate the human body behaviour during the medical treatment", International Workshop "What is computer simulation of biological systems good for?", Liblice, **Czechoslovakia**, 1991.

b. National

“Transcellular transcriptomic networks in remodeling the myelination genomic fabric”, C10 Colloquium “Intercellular signaling and myelination”, 3/7/2012 43rd Annual Meeting of the American Society for Neurochemistry (ASN), Baltimore, MD.

“Ankyrins and the genomic sex dichotomy of the heart rhythm”, 5/25/2011. American Heart Association Ann Meeting, Orlando, FL.

"Astrocyte and oligodendrocyte - love at first sight with myelination consequences", 09/22/2010 Institute of Biochemistry of the Romanian Academy, Bucharest, **Romania**, Host: Dr Stefania Petrescu, Director.

"Connexin-dependent networks and the heart rhythm determinants", 10/05/2008, Canada Research Chair in Gap Junctions and Disease, University of Western Ontario, London (ON) **Canada**. Host D. Laird, Chair.

“Coordinated transcriptomics-principles and applications”, AMDEC meeting of Microarray Core Directors, Cold Spring Harbour Laboratory, Woodbury, NY. 02/24/2006. Host: Dr S. Welle, Director AMDeC Steering Committee.

“The Theory of Pathologic to evaluate and optimize the medical activity. Segunda Jornada Nacional en Biomatemática. Universidad del Quindío. Armenia (**Colombia**).

“Stability and evolution in the Theory of Many-Population Correlation Functions”. Segunda Jornada Nacional en Biomatemática. Universidad del Quindío. Armenia (**Colombia**).

c. Local (Abroad)

“ACTH and PMX53 recover synaptic transcriptome alterations in a male rat model of infantile spasms”, Champalimaud Centre for the Unknown, Lisbon, **Portugal**, 10/13/2017, Host: Dr. Z Mainen, Director Neuroscience Program

“Sex, brain and synapses”, Federal Universidade do Rio de Janeiro, **Brazil**. 10/01/2015. Host: Dr. R. Linden.

“Genomic fabric remodeling in Chagas disease and treatment”, Chagas Filho Instituto de Biofísica, Rio de Janeiro, **Brazil**. 9/28/2015. Host: Dr. AC de Carvalho.

“The Theory of Genomic Pathology”, Dept. Mathematics, Universitat Jaume I, Castellon, **Spain**. 06/08/2001. (Host: Prof. J.L. Uso, Chairman)

“Theory of Potential Life: a new hypothesis on life origin and evolution”. Universidad Central de Venezuela. Caracas, **Venezuela**. 20/05/1999. (Host: Prof. J.A. Leon, Chairman)

“Aplicaciones Clínicas de la Teoría del Patológico”. Facultad de Medicina, Universidad Tecnológica de Pereira. Pereira, **Colombia**. 13/05/1999. (Hosted: Prof. H. Moreno-Rojas, Dean).

“Bioelectrogenesis of the lumbricus terrestris ganglia chain”, Dipartimento di Fisiologia e Biophysica, Università di Trieste, **Italy**. 10/10/1998. Host: Dr F Ruzzier, Chair.

“Drug efficiency Estimate with the Theory of Pathology”. Instituto de Farmacología y Bioquímica, Universidad de Buenos Aires, **Argentina**. 08/14/1998 (Host: Prof. M.Rubio, viceDean)

“Problemas teóricos y experimentales en los estudios electrofisiológicos”. Facultad de Medicina. Universidad Nacional de Cuyo, Mendoza, **Argentina**. 08/25/1998. (Hosted: Prof. F. Saravi, Chairman)

“The Theory of potential life”, University of Panama, Panama City, **Panama**. 08/25/1997. Host: Prof.

“The Theory of Pathology”, University of Patras, **Greece**. 08/15/1996. Host: G Lefterakis, Dean

“Modulation of the ionic channel activity by gamma lactones”, Department of Experimental Biophysics, Humboldt University, **Germany**, 06/21/1996. Host: Dr. R Glaser, Chairman.

“The stochasticity of the membrane ionic channel”, Department of Biophysics, Eötvös Loránd University, Budapest, **Hungary**, 07/22/1994, Host Dr. S György, Chair.

“A quantum model of the Cl⁻ ionic channel in axolemma”, Université Bretagne Occidentale, Brest, **France**. 06/25/1992. Host: Dr. JP Pennec, Chair of the Department Animal Physiologie et Biophysique.

d. Local (U.S.)

“Validation of the Gene Master Regulators Theory for Cancer Gene Therapy”, Center for Computational Systems Biology Seminar series, 02/13/2019

“Gene Master Regulators approach may provide the most legitimate targets for cancer gene therapy”, Baylor College of Medicine, Houston 10/25/2018, host: Dr. Terzah, Division of Pediatric Hematology-Oncology.

“A Physicist eye-view on biology”, Graduate Seminars in Electrical Engineering, Host: Dr. M Sadiku, 10/10/2018

“A 3D pseudostochastic model of intercellular calcium signaling alteration in the diabetic smooth muscle”, Dept of Mathematics, College of Arts and Sciences, Prairie View A&M University, Prairie View 09/07/2018. Host Dr. N Hritonenko

“The personalized GMR approach of thyroid cancer gene therapy”, MD Anderson Cancer Center, Houston, TX, 1/26/2018. Host: Dr. G. Calin, Co-Director, The RNA Interference and non-coding RNA Center.

“Hierarchical gene master regulators of papillary and anaplastic thyroid cancer phenotypes”, New York Medical College Dept of Otolaryngology, Valhalla, 9/9/2017, host Dr. A Moscatello, Chair

“The Gene Master Regulators Approach of the Personalized Cancer Gene Therapy”, PVAMU College of Engineering, Host Dr. L Qian, 08/24/2017.

“Towards a personalized cancer medicine”, Philips Health Care Research, BioInc Valhalla, NY 2/3/2017, Host: Dr. N. Dimitrova

“Remodeling of host and pathogen genomic fabrics’ topology and interplay in infections”. Dept. of Microbiology and Immunology, New York Medical College, Valhalla, NY. 3/12/2015, Host. Dr. Cabello F.

“Genomic fabric remodeling in microflora-induced colon cancer”, Gastroenterology Grand rounds, New York Medical College, Valhalla, NY. 12/11/2014, Host. Dr. E. Lebovics, Chief Division of Gastroenterology and Hepatobiliary Diseases, Department of Medicine.

“Mathematics of the cardiovascular disorders – correlation between pathophysiological and genomic data”, Cardiology fellow’s research conference, New York Medical College, Valhalla, NY. 12/3/2014, Host. Dr. G. Lanier, Director, Heart Failure & Pulmonary Hypertension, Department of Medicine.

“Alteration of the 3D calcium waves in the diabetic smooth muscle”, Dept. Pathology, New York Medical College, Valhalla, NY. 03/05/2014, Host. Dr. TJ Fallon, Chair.

“Remodeling of Cardiac Genomic Fabrics in Disease and Treatment”, Pharmacology Dept., New York Medical College, Valhalla, NY. 12/11/2013. Host. Dr. ML Schwartzman, Chair.

“Tumorigenesis: a genomic fabric interplay going bad?”, SUNY Stony Brook, NY Dept. Pathology. 08/09/2012. Host: Dr. Y Hannun, Director of Stony Brook Cancer center, Vice Dean for Cancer Medicine.

“Sex, stress and the brain: genomic fabric paradigm above functional pathway”, Rockefeller University, Harold and Margaret Milliken Hatch Laboratory of Neuroendocrinology, host Bruce McEwen, Head Laboratory, 06/12/2012.

“Sex dichotomy and remodeling of neurogenomic fabrics”, SUNY Stony Brook, NY Dept. Biophysics. 02/15/2012. Host: Dr. P. Brink, Chairman Dept Biophysics.

“Differential topological analysis of functional genomic fabrics”, New York University, Dept Biomedical Engineering, CCNY, CUNY, 09/07/2011. Host: Dr. J Tarbell, Chair

“Remodeling of Ca²⁺-signaling genomic fabric in stimulated DRG neurons”; 07/06/2011, NIH-NICHD, Bethesda, Host: DR Douglas Fields, Chief Nervous System Development & Plasticity Section

“Intercellular signaling and myelination”, New York University Langone Medical Center) 5/11/2011. Host: Dr James L Salzer, Co-Director Center of Excellence for Multiple Sclerosis.

“Topology and dynamics of the myelination genomic fabric”, 01/08/2010, NIH-NICHD, Bethesda, Host: DR Douglas Fields, Chief Nervous System Development & Plasticity Section

“Physics of the transcriptome”, 2005, Dept Physics, NMSU, Las Cruces, NM. Host Dr. G Kyle, Chair Dept. Physics.

“A 2D stochastic model of calcium signaling in hypoxic brain”, 11/17/2005, Yale University School of Medicine, host: Dr. N. Siegel, Chair Division of Pediatric Nephrology, Department of Pediatrics.

“Mining the cDNA array through the Theory of genomic pathologic”, Rockefeller University Microarray Facility, Manhattan, NY, 10/12/2001. (Host Dr. G Khitrov, Director).

“Cancer patterns in the pre-Hilbert space of standard gene expressions”, Montefiore Hospital, Bronx, NY. 28/07/2000. (Hosted: Dr. L. Augenlicht).

“Mathematical mining of the microarray data through the Theory of Pathologic”. Roswell Park Cancer Institute, Buffalo, NY. 21/08/2000. (Host: Dr. SP Hui, Chairman)

C. Publications (complete citation, listed in reverse chronological order)

1. Full Papers in Peer Review Journals

a. Published

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3. Selected Published Abstracts (since 2017) based on posters or oral presentations

- 9 "Complement C5ar1 Antagonists for the Treatment of Autism Spectrum Disorders", PVAMU 2019 Research Week, 4/10/2019.
- 8 "Development of Cancer GMR Software Package: Personalized Cancer Gene Therapy", PVAMU 2019 Research Week 04/11/2019, PVAMU 14th Annual Research Symposium. Author N Ede, Mentor DA Iacobas.
- 7 "Alterations of Expression of RNA Modification Regulators by Carcinogens in the Alternative Chicken Egg Model", 58th Annual Meeting of the Society of Toxicology, Baltimore, MD, 03/10-14/2019
- 6 "The Gene Master Regulators Approach Provides the Best Targets for the Personalized Cancer Gene Therapy", International Conference on Disease Biomarkers and Precision Medicine (DBPM-2018), 10/22-24/2018 in Houston, TX; <https://unitedscientificgroup.com/conferences/disease-biomarkers-and-precision-medicine>
- 5 "Gene Master Regulators not Biomarkers should be tested for personalized cancer medicine", 4th World Congress on Cancer Research & Therapy, Rome (Italy), 08/13-15/2018.
- 4 "Gene Master Regulators and the Personalized Timely Cancer Gene Therapy", 3rd Intl. Conf on "Cancer Research and Targeted Therapy", London, UK, 08/06-08/2018.
- 3 "The GMR Approach of Cancer Gene Therapy", <http://q-bio.org/wp/qbconference>.
- 2 "Gene Master Regulators in Cancer Gene Therapy", 2nd Symposium of Translational Oncology STOP Cancer, Bucharest, Romania, 04/13-15/2018; <http://www.stop-cancer-romania.ro>.

1 “Gene networks activated by specific patterns of action potentials in dorsal root ganglia neurons”, National Institutes of Health Research Festival, Bethesda, MD, 09/12-14/2017. <https://researchfestival.nih.gov/2017/poster-sessions>

4. Books

a. Complete Books Written:

- 19-25 **Iacobas DA.** (2000, 4th English edition). Ideas and Methods in the Physics of the Living. (total 7 editions: 4 English + 3 Romanian), Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-6-4
- 18 **Iacobas S, Iacobas DA** (2000). Pharmacology of the nervous system (in Romanian). Constanta: Tilia Press Intl. ISBN 973-98470-8-0.
- 17 **Iacobas DA, Iacobas S** (1998) Electrophysiology of the cell membrane (in Romanian) Constanta: Tilia Press Intl., Ltd. ISBN 973-98470-1-3.
- 10-16 **Iacobas DA.** (1997, 3rd English edition). Medical Biostatistics. (Total 7 editions: 3 English + 2 Romanian + 1 Spanish + 1 Greek), Bucharest: Bucura Mond. ISBN 973-97977-3-3.
- 6-9 **Iacobas DA.** (1996, 2nd English edition) Molecular Biophysics. (Total 4 editions: 2 English + 2 Romanian) Bucharest: Bucura Mond. ISBN 973-97977-0-9
- 2-5 **Iacobas DA.** (1996, 2nd English edition) Cell Biophysics. (Total 4 editions: 2 English + 2 Romanian), Bucharest: Bucura Mond. ISBN 973-97977-2-5
- 1 **Iacobas DA.** (1995) (Romanian: Social pathology and therapy, A systems approach on social and political transition in post-communist Romania), Bucharest: Bucura Mond Ltd. ISBN 973-96889-5-0 (1st European PHARE Prize for “Young scientists and politicians in the civil society”).

b. Books Edited (include names of other editors, if applicable):

- 1 **Iacobas DA** (1993-2000, Editor) Practical works of Biophysics. Ovidius University Press, 7 Romanian editions + 5 English editions).

c. Book Chapters Written:

- 28 Veliskova J, **Iacobas DA**, Iacobas S, Velisek L. (2017). Hormonal modulation of neuronal excitability. In *Reference Module in Neuroscience and Biobehavioral Psychology*, Elsevier, 1-6. <http://dx.doi.org/10.1016/B978-0-12-809324-5.00082-1>
- 27 **Iacobas DA**, Iacobas S, Chachua T, Goletiani C, Sidyelyeva G, Velišková J, Velišek L. (2013). Prenatal corticosteroids modify glutamatergic and GABAergic synapse genomic fabric: Insights from a novel animal model of infantile spasms. In: RC Melcangi, GC Panzica (Editors) *Steroids and the Nervous System*, 25 (11) 964-979, Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/jne.12061>
- 26 Iacobas S, Neal-Perry G, **Iacobas DA** (2013). Analyzing the cytoskeletal transcriptome: sex differences in rat hypothalamus. In: Rolf Dermietzel (ed.), *The Cytoskeleton: Imaging, Isolation, and Interaction, Neuromethods*, 79: 119:133, Springer New York Heidelberg Dordrecht London, ISBN 978-1-62703-266-7 (eBook).
- 25 Iacobas S, **Iacobas DA** (2012). Effects of Chronic Intermittent Hypoxia on Cardiac Rhythm Transcriptomic Networks. In: L XI & TV Serebrovskaya (Editors): *Intermittent Hypoxia and Human Diseases*, New York: Springer. Pp. 15-28. ISBN 978-1-4471-2906-6 (eBook)
- 24 Adesse D, Goldenberg RC, Fortes FS, **Iacobas DA**, Iacobas S, Campos de Carvalho AC, de Narareth M, Huang H, Tanowitz HB, Garzoni LR, Spray DC. (2011). Gap junctions and Chagas’ disease. In: Louis M Weiss & Herbert B tanowitz (Editors) *Chagas Disease, Part B*, London Academic Press (by Elsevier), ISBN: 978-0-12-385895-5
- 23 Thi MM, **Iacobas DA**, Iacobas S, Spray DC. (2008). Fluid shear stress regulates vascular endothelial growth factor gene in osteoblasts. In *Skeletal Biology and Medicine, Part B* (Editor: Mone Zaidi), Wiley-Blackwell. ISBN: 978-1-573-31728-3.
- 22 **Iacobas DA**, Iacobas S, Spray DC (2005). Use of cDNA arrays to explore gene expression in genetically manipulated mice and cell lines. In: S Dhein, FW Mohr & M Delmar (Editors) *Practical Methods in Cardiovascular Research*, Berlin-Heidelberg-New York: Springer-Verlag. ISBN: 3-540-40763-4. pp. 907-915.
- 22 **Iacobas DA**, Scemes E, Iacobas S, Urban M, Fan C, Haddad GG, Werner P, Iacobas I, Spray DC (2003).

Coordinated Transcriptomics - A new tool to identify functional pathways in the cell. *Proceedings of the 1st MEDINF International Conference on Medical Informatics and Engineering*, Craiova, 72-82

21 **Iacobas DA**, Urban M, Iacobas S, Spray DC (2001). The “patholog” of the gene expression profile in evaluating the ecotoxin effects. In: C Brebia, Y Vilacampa & J Uso (Editors) *Ecosystems and sustainable development*, WIT Press, Southampton, U.K. 733-742.

20 **Iacobas DA**, Wilson D. (2000). Survey of the public awareness campaign on domestic violence. Proceedings to *Medinf'2000*. www.umfiasi.ro/medinf

19 Spray DC, **Iacobas DA**, Urban M. (2000). Theoretical and practical optimization of microarray technique. Proceedings to *Medinf'2000*. www.umfiasi.ro/medinf

18 **Iacobas DA**. (2000). Cancer classification by analyzing the patterns in the pre-Hilbert space of gene expression. Proceedings to *Medinf'2000*. www.umfiasi.ro/medinf

17 **Iacobas DA**. (1999). Statistical study on woman’s health in the city of Constanța. *Proceedings of the American - Romanian workshop “Healthy Communities”*. Mamaia. 14-15.

16 Steiner RWP, **Iacobas DA**, Verman D. (1999). The Project “Healthy Communities”. Proceedings to *Medinf'99*. <http://atlas.ici.ro/ehto/MEDINF99/papers/Iacobas/Iacobas1.htm>

15 **Iacobas DA**. (1999) Stability and evolution in the Theory of many-population correlation functions. <http://atlas.ici.ro/ehto/MEDINF99/papers/Iacobas/Iacobas1.htm>

14 **Iacobas DA** (1998). Modelling of life origin and evolution. Proceedings to *MEDINF'98*. 204-212.

13 **Iacobas DA** (1998). Ecosystem modelling by network of virtual biocoenosis. Proceedings to *MEDINF'98*. 320-331.

12 **Iacobas DA**, Iacobas S. (1998). Drug efficiency estimate with the Theory of Pathologic. Proceedings to *MEDINF'98*. 80-85.

11 Georgescu G, Mihalas G, Spircu T, Tigan S, **Iacobas DA**. (1998). The current necessities of medical informatics education. Proceedings to *MEDINF'98*. 363-364.

10 **Iacobas DA**, Iacobas S. (1997). Evaluation and validation of the health care system by the Theory of Pathologic. In: E Kukurova (Editor) *Advances in Medical Physics, Biophysics and Biomaterials*, Bratislava (Slovak R) Male Centrum, pp. 175-179, ISBN-80-967064-7-0.

9 **Iacobas DA** (1997). Instead of introduction... In: E Kukurova (Editor) *Advances in Medical Physics, Biophysics and Biomaterials*, Bratislava (Slovak R) Male Centrum, p. 1, ISBN-80-967064-7-0.

8 **Iacobas DA**. (1986). La thermodynamique des reseaux a l'analyse des phenomenes de transport dans les ecosytemes. In M Godeanu (editor): *Aspects energetiques et informationels dans les systemes vivants*, pp. 138-143.

7 Iacobas S, **Iacobas DA**. (1986). Le pathologique - synthese des informations sur l’organisme humain. In: M Godeanu (Editor) *Aspects energetiques et informationels dans les systemes vivants*, 127-134.

6 **Iacobas DA**. (1990). A cooperative model in the steady-state bioelectrogenesis. Proceedings to *The 8th Balkan Biochemical and Biophysical Days*. Cluj-Napoca. 256-257.

5 **Iacobas DA**, Stan V, Iacobas S. (1990). Computer simulation of some hydrated ion configurations in the presence of an external electric field. Proceedings to *The 8th Balkan Biochemical and Biophysical Days*. Cluj-Napoca. 263-264.

4 Spataru C, **Iacobas DA**. (1988). L'ordinateur personnel du medecin à la surveillance de l'évolution du malade. *Archives de l'Union Medicale Balkanique*. Tome XXVI. No.1-4. 118-119.

3 Spătaru C, **Iacobas DA**. (1987). The correlation function approach in describing the structure of water in biological systems. Proceedings to *The Fourth International Conference "Water and ions in biological systems"*. Bucharest. 135-136.

2 **Iacobas DA**, Sanda Iacobas. (1985). Algoritm pentru optimizarea pe computer a unor tratamente medicamentoase. In: A Florescu & E Niculescu Mizil (Editors) *Cibernetica aplicata*, Editura Academiei, Bucuresti, p.117-122

1 **Iacobas DA**, Iacobas S. (1980). Model of a theory of ecological efficiency (Romanian) In: A Ionescu, R Stancu (Editors) *Ecologie si protectia ecosistemelor*. CMSN Pitesti, Romania, 62-66.

5. Other Works Communicating Research Results to Scientific Colleagues (e.g., professional newsletters, blogs, video presentations, etc.)

- 5 **Iacobas DA.** (2018 video conference) "Gene Master Regulators in Cancer Gene Therapy", <http://www.stop-cancer-romania.ro/prezentari/prezentari-2018/>
- 4 Iacobas S, Thomas NM, Spray DC, **Iacobas DA.** (2010). Connexin-dependent regulatory networks in controlling the myelination gene fabric in mouse brain. 1st Intl Online and Onsite Ann Conf of Models of Human Diseases. http://www.vetbiotech.com/resources.php?id=29&p=1&site_cat=26
- 3 **Iacobas DA,** Spray DC. (2008). Connexin dependent transcriptomic networks. Scirus Topic Page. http://www.scitopics.com/Connexin_dependent_transcriptomic_networks.html
- 2 Knudson K, Brooks AI, Griffin C, Iacobas DA, Johnson K, Khitrov G, Levy S, Massimi A, Nowak N, Viale A, Grills G. (2003). A current profile of microarray laboratories: 2002-2003 Microarray Research Group Survey of laboratories using microarray technologies. http://www.abrf.org/ResearchGroups/Microarray/EPosters/MARG_Survey_Poster2003.pdf
- 1 Knudson KL, Griffin C, Brooks A, **Iacobas DA,** Johnson K, Khitrov G, Lilley K, Massimi A, Viale A, Zhang W, Bao Y, Grills G. (2002). Factors contributing to variability in DNA microarray results: the ABRF Microarray Research Group 2002 Study. J Biomol Tech. Posters on line http://www.abrf.org/ResearchGroups/Microarray/EPosters/MARG_2002_Poster.pdf

6. Other Works Communicating Research Results to General Public

- Numerous national and local TV radio talk shows, including 1 h weekly National TV broadcasting of "Universe, Matter, Life" in 1987
- Numerous columns and national and local journals on scientific, political and social issues

D. Innovation and Commercialization

1. Patents (list applications, patents awards, business development resulting from patents)

- 3 **Iacobas DA,** Amuzescu B. (1991). Device to clean and stabilise the patch-clamp pipettes (Romanian: Instalație pentru curățirea și stabilizarea micropipetelor de patch-clamp). Patent No.108844 (Romania).
- 2 **Iacobas DA,** Amuzescu B, Ciontu C. (1988). Procedure to fabricate the micro-pipettes for single-channel current recording (Romanian: Procedeu de realizare a micropipetelor pentru culegerea curenților ionici unicanal din biomembrane). Patent no. 102203 (Romania).
- 1 **Iacobas DA,** Ailoaie, C. (1986). Micro-pipette puller (Romanian: Aparat pentru confecționarea micropipetelor din sticla). Patent no. 96704 (Romania).

2. Device, Software or Other Development:

- numerous technical innovations in biophysics, nuclear medicine and genomics

3. Evidence of Impacting Health/Scientific Policy or Clinical Practice Guidelines (e.g., note policy or guidelines where publications were cited) N/A

"Women health at Constanta, Romania". University of Louisville, KY. 09/14/1999. (Host: Prof.P.W.Steiner).

"Survey of the project "Healthy communities for empowering women's health". 12th Conference "Environmental epidemiology in Pan America and the World: Building connections." Buffalo (USA), 2001

4. Participation in Business Development and Commercialization

- **Editor-in-Chief** Tilia Press Intl, a publishing house dedicated to publish textbooks for students at accessible prices

5. Other Activities: Contributions to the National Library of Medicine National/Center for Biotechnology Information (<https://www.ncbi.nlm.nih.gov/search/?term=iacobas>)

a. Bioprojects:

- 7 **PRJNA479438:** Overexpression of miR-155 alters the hierarchy of gene master regulators in the adenocarcinomic human alveolar basal epithelial cell line A549 (human)
- 6 **PRJNA130217:** Alterations in the Brain Transcriptome in Plasmodium Berghei ANKA Infected Mice. Organism: Mus musculus.

- 5 **PRJNA119085:** Gene expression changes associated with myocarditis and fibrosis in hearts of mice with chronic chagasic cardiomyopathy. Organism: *Mus musculus*
- 4 **PRJNA119013:** Transcriptomic alterations in *Trypanosoma cruzi*-infected cardiac myocytes. Organism: *Mus musculus*
- 3 **PRJNA113619:** Effect of microgravity on brain gene expression in mice. Organism: *Mus musculus*
- 2 **PRJNA100989:** Fluid Shear Stress Up-regulates Vascular Endothelial Growth Factor Gene. Organism: *Mus musculus*
- 1 **PRJNA100967:** Gap junction and purinergic P2 receptor proteins as a functional unit: insights from transcriptomics. Organism: *Mus musculus*

b. Nucleotides:

5. Homo sapiens proline rich 7, synaptic (PRR7), transcript variant 3, mRNA; 1,375 bp linear mRNA; NM_001174102.2; GI:1134928664
4. Homo sapiens proline rich 7, synaptic (PRR7), transcript variant 1, mRNA; 1,543 bp linear mRNA; NM_030567.4; GI:291575151
3. Cloning vector 5A4 NP1, complete sequence 6,955 bp linear other-genetic; KM576780.1; GI:732555979
2. Homo sapiens proline rich 7, synaptic (PRR7), transcript variant 2, mRNA 1,458 bp linear mRNA; NM_001174101.1; GI: 291575153
1. [Mus musculus plakophilin 2 \(Pkp2\), mRNA](#); 2,891 bp linear mRNA; NM_026163.2; GI:142349260

c. Proteins:

22. proline-rich protein 7 [Homo sapiens]; 274 aa protein; NP_001167573.1; GI:291575156
21. proline-rich protein 7 [Homo sapiens]; 274 aa protein; NP_001167572.1; GI: 291575154
20. proline-rich protein 7 [Homo sapiens]; 274 aa protein; NP_085044.2; GI:21361937
19. RecName: Full=F-box/WD repeat-containing protein 7; 713 aa protein; D3Z902.2; GI: 1270743855
18. RecName: Full=Proline-rich protein 7; AltName: Full=Synaptic proline-rich membrane protein; 269 aa protein; P0C6T3.1; GI:182676480
17. RecName: Full=Proline-rich protein 7; AltName: Full=Synaptic proline-rich membrane protein; 269 aa protein; Q3V0I2.1; GI:123785534
16. RecName: Full=Proline-rich protein 7; AltName: Full=Synaptic proline-rich membrane protein; 274 aa protein; Q8TB68.1; GI:74730435
15. RecName: Full=F-box/WD repeat-containing protein 7; AltName: Full=Archipelago homolog; Short=hAgo; AltName: Full=F-box and WD-40 domain-containing protein 7; AltName: Full=F-box protein FBX30; AltName: Full=SEL-10; AltName: Full=hCdc4; 707 aa protein; Q969H0.1; GI:44887885
14. RecName: Full=Glutamate receptor ionotropic, NMDA 2B; Short=GluN2B; AltName: Full=Glutamate [NMDA] receptor subunit epsilon-2; AltName: Full=N-methyl D-aspartate receptor subtype 2B; Short=NMDAR2B; Short=NR2B; AltName: Full=N-methyl-D-aspartate receptor subunit 3; Short=NR3; Short=hNR3; Flags: Precursor; 1484 aa protein; Q13224.3; GI:14548162
13. RecName: Full=Glutamate receptor ionotropic, NMDA 1; Short=GluN1; AltName: Full=Glutamate [NMDA] receptor subunit zeta-1; AltName: Full=N-methyl-D-aspartate receptor subunit NR1; Short=NMD-R1; Flags: Precursor 938 aa protein; P35439.1; GI: 548379
12. RecName: Full=Glutamate receptor ionotropic, NMDA 1; Short=GluN1; AltName: Full=Glutamate [NMDA] receptor subunit zeta-1; AltName: Full=N-methyl-D-aspartate receptor subunit NR1; Short=NMD-R1; Flags: Precursor 938 aa protein; Q05586.1; GI: 548377
11. RecName: Full=Glutamate receptor ionotropic, NMDA 2B; Short=GluN2B; AltName: Full=Glutamate [NMDA] receptor subunit epsilon-2; AltName: Full=N-methyl D-aspartate receptor subtype 2B; Short=NMDAR2B; Short=NR2B; Flags: Precursor 1482 aa protein; Q00960.1; GI:548372
10. RecName: Full=Disks large homolog 4; AltName: Full=Postsynaptic density protein 95;

- Short=PSD-95; AltName: Full=Synapse-associated protein 90; Short=SAP-90; Short=SAP90 724 aa protein; P31016.1; GI:400891
9. RecName: Full=Transcription factor AP-1; AltName: Full=Activator protein 1; Short=AP1; AltName: Full=Proto-oncogene c-Jun; AltName: Full=V-jun avian sarcoma virus 17 oncogene homolog 334 aa protein; P17325.1; GI:135300
 8. RecName: Full=Transcription factor AP-1; AltName: Full=AH119; AltName: Full=Activator protein 1; Short=AP1; AltName: Full=Proto-oncogene c-Jun; AltName: Full=V-jun avian sarcoma virus 17 oncogene homolog; Short=Jun A 334 aa protein; P05627.3; GI:135299
 7. RecName: Full=Transcription factor AP-1; AltName: Full=Activator protein 1; Short=AP1; AltName: Full=Proto-oncogene c-Jun; AltName: Full=V-jun avian sarcoma virus 17 oncogene homolog; AltName: Full=p39 331 aa protein; P05412.2; GI:135298
 6. GFP [Cloning vector 5A4 NP1]; 238 aa protein; AIZ73052.1; GI:732555984
 5. bbb22, partial [Cloning vector 5A4 NP1] 261 aa protein; AIZ73051.1; GI:732555983
 4. bbb19 [Cloning vector 5A4 NP1] 210 aa protein; AIZ73050.1; GI:732555982
 3. bbb20 [Cloning vector 5A4 NP1] 36 aa protein; AIZ73049.1; GI:732555981
 2. accC1 [Cloning vector 5A4 NP1] 177 aa protein; AIZ73048.1; GI:732555980
 1. [plakophilin-2 \[Mus musculus\]](#); 795 aa protein; NP_080439.1; GI:21312960

d. Gene Expression Omnibus (GEO) DataSets:

- 73 **Iacobas DA**, Chachua T, Iacobas S, Benson MJ, Borges K, Velíšková J, Velíšek L. (2019) Recovery of the synaptic transmission genomic fabrics in the hypothalamic paraventricular nucleus of a rat model of autism treated with PMX53, <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE128090>
- 72 **Iacobas DA**, Chachua T, Iacobas S, Velíšková J, Velíšek L. (2019) Remodeling of synaptic transmission genomic fabrics in the hypothalamic paraventricular nucleus of a rat model of autism. <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE128091>
- 71 **Iacobas DA**, Chachua T, Iacobas S, Velíšková J, Velíšek L. (2019) Recovery of the synaptic transmission genomic fabrics in the hypothalamic paraventricular nucleus of a rat model of autism treated with ACTH, <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE124615>
- 70 **Iacobas DA**, Chachua T, Iacobas S, Velíšková J, Velíšek L. (2019) Prenatal betamethasone remodels the genomic fabrics of the synaptic transmission in the rat hypothalamic paraventricular nuclei, <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE124613>
- 69 **Iacobas DA**, Chachua T, Iacobas S, Benson MJ, Borges K, Velíšková J, Velíšek L (2018) Sex differences in the synaptic genomic fabrics of the rat hypothalamic paraventricular node <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE123721>
- 68 **Iacobas DA**, Iacobas S, K van Roosbroeck, Calin GA (2018) Overexpression of miR-155 alters the hierarchy of gene master regulators in the adenocarcinomic human alveolar basal epithelial cell line A549 [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE116575>
- 67 **Iacobas DA**, Iacobas S, K van Roosbroeck, Calin GA: Hierarchical gene master regulators of adenocarcinomic human alveolar basal epithelial cells A549 [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE116361>
- 66 Kobets T, Iatropoulos MJ, Duan JD, Brunnemann KD, **Iacobas DA**, Iacobas S, Vock E, Deschl U, Williams GM (2018) Genotoxicity of nitrosamines [*Gallus gallus*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE110906>
- 65 Kobets T, Iatropoulos MJ, Duan JD, Brunnemann KD, **Iacobas DA**, Iacobas S, Vock E, Deschl U, Williams GM (2018) Gene expression in chicken embryo liver [*Gallus gallus*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE110904>
- 64 **Iacobas DA**, Iacobas S (2018) Proximity of oligodendrocytes remodels astrocytes' transcriptome [*Mus musculus*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE109035>
- 63 **Iacobas DA**, Iacobas S, Nebieridze N, Velisek L, Veliskova J (2018) Estrogen protects neurotransmission transcriptome during status epilepticus <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE107725>

- 62 Iacobas S, Tuli N, Geliebter J, Tiwari RK, **Iacobas DA** (2017) Validation of the Personalized Gene Therapy by stably transfection of UBALD1 in the papillary (BCPAP) and anaplastic (8505C) thyroid cancer cell lines [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE97427>
- 61 **Iacobas DA**, Iacobas S, Tuli N, Geliebter J, Tiwari RK (2017) Validation of the Personalized Gene Therapy by stably transfection of NEMP1 (TMEM194A) in the papillary (BCPAP) and anaplastic (8505C) thyroid cancer cell lines [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE97031>
- 60 **Iacobas DA**, Iacobas S, Tuli N, Geliebter J, Tiwari RK (2017) Validation of the Personalized Gene Therapy by stably transfection of PANK2 in the papillary (BCPAP) and anaplastic (8505C) thyroid cancer cell lines [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE97030>
- 59 **Iacobas DA**, Iacobas S, Tuli NY, Geliebter J, Tiwari RK (2017) Validation of the Personalized Gene Therapy by stably transfection of DDX19B in the papillary (BCPAP) and anaplastic (8505C) thyroid cancer cell lines [*Homo sapiens*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE97028>
- 58 **Iacobas DA**, Iacobas S, Tuli NY, Geliebter J, Tiwari RK (2017) Hierarchal gene master regulators of papillary (BCPAP) and anaplastic (8505C) thyroid cancer cell lines [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE97002>
- 57 **Iacobas DA**, Iacobas S, Geliebter J (2017) Hierarchal gene master regulators of one case of papillary thyroid cancer [*Homo sapiens*] <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE97001>
- 56 Lee PR, Cohen JE, **Iacobas DA**, Iacobas S, Fields RD (2016) Gene-regulatory networks activated by pattern-specific generation of action potentials in dorsal root ganglia neurons [*Mus musculus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE84872>
- 55 **Iacobas DA**, Chachua T, Iacobas S, Benson MJ, Borges K, Velíšková J, Velíšek L (2016) Remodeling of synaptic transmission genomic fabrics in the hypothalamic arcuate nucleus of a rat female model of infantile spasms [*Rattus norvegicus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE84585>
- 54 **Iacobas DA**, Chachua T, Iacobas S, Benson MJ, Borges K, Velíšková J, Velíšek L (2016) Remodeling of synaptic transmission genomic fabrics in a model of infantile spasms [*Rattus norvegicus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE81061>
- 53 **Iacobas DA**, Iacobas S, Chachua T, Sidelyeva G, Goletiani C, Velíšková J, Velíšek L (2016) Transcriptomic effects of prenatal exposure to corticosteroids on synaptic transmission [*Rattus norvegicus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE76694>
- 52 Mathew R, Huang J, Sangeap A, Iacobas S, **Iacobas DA** (2015) Genomic alterations during the progress of pulmonary hypertension, <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72707>
- 51 **Iacobas DA**, Iacobas S, Veliskova J, Velisek L (2015) Haploinsufficiency in bromodomain containing 2 (Brd2) gene remodels synaptic transmission in female mouse striatum in a sex-specific manner [*Mus musculus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72563>
- 50 **Iacobas DA**, Iacobas S, Veliskova J, Velisek L (2015) Haploinsufficiency in bromodomain containing 2 (Brd2) gene remodels synaptic transmission in male mouse striatum [*Mus musculus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72562>
- 49 Iacobas S, Ervolina Y, Hintze TH, **Iacobas DA** (2015) Transcriptomic effects of low salt diet on the mouse left ventricle [*Mus musculus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72561>
- 48 **Iacobas DA**, Suriano R, Mukherjee P, Gupta T, Gupta A, Iacobas S, Fallon JT, Geliebter J, Mittelman A, Tiwari RK (2015) Transcriptomic effects of Capridine on the acute promyelocytic leukemia HL-60 cell line [*Homo sapiens*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72415>
- 47 **Iacobas DA**, Suriano R, Mukherjee P, Gupta T, Gupta A, Iacobas S, Fallon JT, Geliebter J, Mittelman A, Tiwari RK (2015) Remodeling of DNA transcription genomic fabric in Capridine-treated LNCaP human prostate cancer cell line [*Homo sapiens*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72414>
- 46 **Iacobas DA**, Suriano R, Mukherjee P, Gupta T, Gupta A, Iacobas S, Fallon JT, Geliebter J, Mittelman A, Tiwari RK (2015) Remodeling of major genomic fabrics and their interplay in Capridine-treated DU145 classic human prostate cancer [*Homo sapiens*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72333>
- 45 **Iacobas DA**, Iacobas S (2015) Remodeling of major genomic fabrics and their interplay in metastatic clear cell renal carcinoma [*Homo sapiens*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE72304>

- 44 Savariego DO, Hrdinka M, Iacobas S, **Iacobas DA**, Kreutz MR, Jordan BA (2014) PRR7 is a novel NMDA-dependent inhibitor of c-Jun ubiquitination in neurons [*Rattus norvegicus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE62686>
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- 3 Massimi AB, **Iacobas DA** (2004) AECOM Mouse 27k cDNA array, <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL1698>
- 2 **Iacobas DA**, Urban-Maldonado M, Iacobas S, Scemes E, Spray DC (2003) CX43 KO vs WT cortical astrocytes [*Mus musculus*], <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE580>
- 1 **Iacobas DA** (2003) AECOM mouse 9k chip. <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL369>

III. TEACHING INFORMATION

A. Educational Leadership Roles (title, dates, responsibilities)

1990 - 2001 **Chair Division of Biophysics, Biostatistics and Medical Informatics**, Ovidius University School of Medicine, Constanta Romania

B. Didactic Coursework

1) High school level (in Romanian):

"Mircea cel Batran" National College of Mathematics and Physics, Constanta, Romania

Physics, Physics Laboratory (20h/week) 1976-1978

"M. Eminescu" High School of Natural Sciences, Constanta, Romania

Physics, Biophysics, Physics Laboratory (18h/w) 1978-1981

2) Undergraduate College level (in Romanian):

"Carol Davila" University of Medicine & Pharmacy, Bucharest, Romania

Biophysics - practical classes, credit 2 semester hours 1981-1988

Seminars of Bioinformatics, credit 2 semester hours 1981-1988

Physiology & Clinical lab - practical classes, credit 2x2 semesters hours 1988-1990

Computational Methods in Physiology – Open course, credit 2 semester hours 1988-1990

"Connexins, Calcium waves and myelination", 2h/y Invited lecture within the optional Neuroscience course of Prof. L. Zagrean, Chair Department of Physiology, Carol Davila University of Medicine and Pharmacy, Bucharest 2008-2009

"Ovidius" University, Constanta, Romania

Biophysics Lectures in Romanian, English and French for MD, DDR, Biology and Ecology students, credit 2 semester hours 1990-2001

Biostatistics Lectures in Romanian and English for MD and DDR students, credit 2 semester hours 1992-2001

General Physics for foreign MD students in English and French, credit 2 semester hours 1992-1994

Mathematical Modeling of Biosystems for Biology and Ecology students, credit 2 semester hours 1994-2000.

PVAMU College of Engineering

Biophysics and Medical Physics for Bioengineers, Fall semester, 3 credit hours 2019

3) Postgraduate level:

Universidad de Caldas, Manizales, Colombia

Bioestadística médica (in Spanish), 14 hrs, Intensive Introductory Course within an exploratory MS program in biomathematics in Colombia. 1999

Albert Einstein College of Medicine of Yeshiva University, Bronx, NY

"Transcriptomics" within E. Scemes course "Modern techniques applied to neuroscience", 6h/year 2003-2012

"A 2D stochastic model of calcium wave propagation in glia", 2hrs, Kennedy Center Computational Neuroscience Club 2005

"Microarray technology between fishing expedition and hypothesis driven research", 2h, Kennedy Center Computational Neuroscience Club 2005

New York Medical College, Valhalla, NY

"Microarrays to explore functional genomic fabrics" within C Ojaimi course, 2h/y 2013-2016

"Ecosystems stability and evolution" within N Haque course "Evolutionary Medicine", 2h/y, Graduate School of Basic Medical Sciences (GSBMS) 2016-2017

Prairie View A&M University, Prairie View, TX

"Biophysics and Medical Physics for Bioengineers", Special topic, ELEG 4103, Credit 3 semester hours 2018-

C. Curriculum Development Work (include institution where work was done)

1. Course(s)/Curricula to Which Contributions Have Been Made

I have introduced the following new courses:

“Ovidius” University, Constanta, Romania

Biophysics Lectures in Romanian, English and French for MD, DDR, Biology and Ecology students, credit 2 semester hours 1990-2001

Biostatistics Lectures in Romanian and English for MD and DDR students, credit 2 semester hours 1992-2001

General Physics for foreign MD students in English and French, credit 2 semester hours 1992-1994

Mathematical Modeling of Biosystems for Biology and Ecology students, credit 2 semester hours 1994-2000

Prairie View A&M University, Prairie View, TX

“Biophysics and Medical Physics for Bioengineers”, Special topic, ELEG 4103, Credit 3 semester hours 2018-

D. Non-didactic Teaching

- mentored numerous postdocs, post graduate (PhD and MS) students and undergraduate students

E. Faculty Development or Continuing Medical Education (CME accredited seminars):

“Gene Master Regulators approach may provide the most legitimate targets for cancer gene therapy”, Baylor College of Medicine, Houston 10/25/2018, host: Dr. Terzah, Division of Pediatric Hematology-Oncology.

“The personalized GMR approach of thyroid cancer gene therapy”, MD Anderson Cancer Center, Houston, TX, 1/26/2018. Host: Dr. G. Calin, Co-Director, The RNA Interference and non-coding RNA Center.

“Hierarchical gene master regulators of papillary and anaplastic thyroid cancer phenotypes”, New York Medical College Dept of Otolaryngology, Valhalla, 9/9/2017, host Dr. A Moscatello, Chair

“Remodeling of host and pathogen genomic fabrics’ topology and interplay in infections”. Dept. of Microbiology and Immunology, New York Medical College, Valhalla, NY. 3/12/2015, Host. Dr. Cabello F.

“Genomic fabric remodeling in microflora-induced colon cancer”, Gastroenterology Grand rounds, New York Medical College, Valhalla, NY. 12/11/2014, Host. Dr. E. Lebovics, Chief Division of Gastroenterology and Hepatobiliary Diseases, Department of Medicine.

“Mathematics of the cardiovascular disorders – correlation between pathophysiological and genomic data”, Cardiology fellow’s research conference, New York Medical College, Valhalla, NY. 12/3/2014, Host. Dr. G. Lanier, Director, Heart Failure & Pulmonary Hypertension, Department of Medicine.

“Developmental sex dichotomy of the heart rhythm determinant gene fabric”, 6/28/2010. Albert Einstein College of Medicine, Department of Obstetrics & Gynecology and Women's Health. Host: Dr. A Etgen.

“Topology and dynamics of the myelination genomic fabric”. 12/4/2009. Albert Einstein College of Medicine, Department of Neuroscience. Host: Dr. D.C. Spray.

“3D mathematical model of intercellular Ca²⁺ signaling in healthy and diabetic rat bladder and corpora”. 2/8/2009. Albert Einstein College of Medicine, Department of Urology. Host: Dr. A. Melman.

“Alteration of transcriptomic networks in adoptive-transfer experimental autoimmune encephalomyelitis”. 6/30/2007. Albert Einstein College of Medicine, Department of Neuroscience. Host: Dr. E. Scemes.

“Large scale transcriptomic analysis using oligonucleotide and cDNA microarrays”, 6/11/2006. Albert Einstein College of Medicine, Department of Genetics. Host: A. Massimi, Director Microarray Core.

“¿Porque estudiar las biomatemáticas en las ciencias de la salud?” Facultad de Enfermería Universidad Libre de Pereira, Pereira, **Colombia**. 12/05/1999 (Host: Prof. Liliana E Achury, Dean)

F. Lectures and Presentations

1. International

“Evaluation and validation of the health care system by the Theory of pathologic”. 20th International Congress on Medical Physics, Biophysics and Biomaterials, Stara Lesna, **Slovak R**, 1997.

“Ecology and politics. A mathematical approach. Report. 8^o Congreso Internacional de Biomatemática, Panama City (**Panama**), 08/15/1997.

“Ecological reconstruction between science and politics”. Spruce III International Conference, Statistics in Public Resources, Utilities and care of the Environment. Merida, **Mexico**, 1996

“For a U.N. Ministry of Peace. The Summer Festival of Peace University. Berlin, **Germany**, 1995

“The problem of ecological reconstruction. Sommerfestival der Friedensuniversität. Berlin, **Germany**, 1995

G. Visiting Professorships (include location, dates)

- Visiting Associate Professor, Dept. of Neuroscience, Albert Einstein College of Medicine (2001 – 2006)
- Visiting Associate Professor, Dept. Experimental Biophysics, Humboldt University, Berlin (Germany), 1996, Prof R Glaser, (German Academy)
- Visiting Assistant Professor, Institute of Biophysics, University of Ljubljana, Ljubljana, Slovenia, 1993, Prof S Svetina (Slovenian Academy of Sciences)
- Visiting Assistant Professor, Dept. Biophysics & Nuclear Medicine, Universite Bretagne Occidentale School of Medicine, Brest, France, 1992, Prof Morin (Tempus Program).

IV. PATIENT CARE AND CLINICAL CONTRIBUTIONS

A. Patient Care Responsibilities

1990-1992 **Chief Medical Physicist**, Nuclear Medicine Laboratory, Constanta District University Emergency Hospital

B. Clinical Leadership or Business Development (describe roles and documented outcomes)

1990-1992 **Director** of Nuclear Medicine Laboratory, Constanta District University Emergency Hospital

C. Voluntary Health Organization Participation

“Women health at Constanta, Romania”. University of Louisville, KY. 09/14/1999. (Host: Prof.P.W.Steiner).

“Survey of the project “Healthy communities for empowering women’s health”. 12th Conference on Environmental epidemiology in Pan America and the World: Building connections. Buffalo (USA), 2001.

V. OTHER NOTABLE ACHIEVEMENTS

A. FICTION:

3 **Iacobas DA.** (2000). “Tucapai”. (Romanian: Tucapai, philosophical novel on a possible quantum theory of cognition) Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-9-9.

2 **Iacobas DA.** (1998) “Noul Tetractys”. (Romanian: The New Tetractys, philosophical novel on a possible quantum refinement of Darwin’s Theory of Evolution). Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-3-X.

1 **Iacobas DA.** (1998) “Deseara, nu veni la gara! - Jurnalul lui Argon” (Romanian: Don't come at station tonight! Argon's diary, Thriller) Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-

B. DRAMAS/SCRIPTS/MUSICAS:

4 Iacobas DA (2004) “Urzici, ciuperci și caltabosi”. (Stinging nettles, mushrooms and blood puddings, in Romanian) Lumea libera - A Worldwide Romanian Weekly, New York (in Romanian)

3 Iacobas D.A. (2000) “Deseara, nu veni la gară!” (Romanian: Don't come at station tonight!, in Romanian), Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-2-1 - Student theater.

2 Iacobas DA (1982) “Yellow submarine in water with ions”, student musical.

1 Iacobas D.A. (1980) “Un Faust atomic”. (An Atomic Faust, in Romanian) Constanta: Dobrogea noua. Musical.

C. MEDIA

- “Universe, matter, life” - 1 hr weekly for 4 weeks original series at the national Romanian Television –Channel 1 in 1987
- numerous talk shows on various scientific, political, social and cultural issues at (Romanian) national and local TV and radio stations (1990-2000)
- numerous articles in (Romanian) national and local newspapers and magazines