

Biographical Sketch for Dumitru A. Iacobas

Contact information:

Dumitru Andrei Iacobas
Research Professor, Director Personalized Genomics Laboratory
Undergraduate Medical Academy
Prairie View A&M University
P.O. Box 519, MS 2900, Prairie View, TX 77446
Office: MT Harrington Science Bldg, Rm 308
daiacobas@pvamu.edu

(a) Professional Preparation

University of Bucharest	Bucharest, Romania	Physics	B.S. 1974
University of Bucharest	Bucharest, Romania	Biophysics	M.S. 1976
University of Bucharest	Bucharest, Romania	(Bio)Physics	Ph.D. 1993

(b) Appointments

Research Professor, CCSB/Physics/UMA	Prairie View A&M University (PVAMU)	2018 – present
Associate Professor (Tenure track)	New York Medical College (NYMC)	2013 – 2017
Assistant Professor (Tenure track)	Albert Einstein College of Medicine (AECOM)	2006 – 2013
Visiting Associate Professor	Albert Einstein College of Medicine	2001 – 2006
Assist/Assoc. Professor	Ovidius University, Constanta	1990 – 2001
Instructor	C Davila University of Medicine & Pharmacy	1981 - 1990
Lecturer	Eminescu Natl. College of Natural Sciences	1978 – 1981
Teacher	Mircea Natl. College of Math & Physics	1976 - 1978

(c) Publications

- 3 (Romanian) patents for inventions
- 10 books authored (total: 28 editions in Romanian, English, Spanish and Greek) + 4 books edited
- 23 book chapters
- 108 articles in peer-reviewed journals + 29 conference proceedings
- 86 genomic datasets + 7 nucleotides + 24 proteins in the (USA) National Library of Medicine
- 3 novels, drama scripts for 2 seasons x 7 episodes and 1 musical, essays, poetry, talk-shows

Most recent articles:

- 108 **Iacobas, D.A.** Molecules at play in cancer. *Curr. Issues Mol. Biol.* **2023**, *45*, 2182-2185. <https://doi.org/10.3390/cimb45030140>
- 107 **Iacobas, D.A.; Xi, L.** Theory and Applications of the (Cardio) Genomic Fabric Approach to Post-Ischemic and Hypoxia-Induced Heart Failure. *J. Pers. Med.* **2022**, *12*, 1246. <https://doi.org/10.3390/jpm12081246>.
- 106 **Iacobas, S.; Iacobas, D.A.** Personalized 3-Gene Panel for Prostate Cancer Target Therapy. *Curr. Issues Mol. Biol.* **2022**, *44*, 360-382. <https://doi.org/10.3390/cimb44010027>.
- 105 **Kertowidjojo E, Iacobas DA.** Insulin resistance and the metabolic syndrome severity – a mathematical model. *Academy of Romanian Scientists Annals – Series on Biological Sciences* **2022**, *11*(1), 91-103. <https://doi.org/10.56082/annalsarscibio.2022.1.91>.
- 104 **Iacobas, D.A.; Wen, J.; Iacobas, S.; Puttermann, C.; Schwartz, N.** TWEAKing the Hippocampus: The

Effects of TWEAK on the Genomic Fabric of the Hippocampus in a Neuropsychiatric Lupus Mouse Model. *Genes* **2021**, *12*, 1172. <https://doi.org/10.3390/genes12081172>.

103 Krishna S, Cheng B, Sharma DR, Yadav S, Stempinski E, Mamtani S, Shah E, Deo A, Achterjee T, Thomas T, **Iacobas DA**, Ballabh P. PPARG activation enhances myelination and neurological recovery in premature rabbits with intraventricular hemorrhage. *PNAS* **2021**, *118* (36) e2103084118. <https://doi.org/10.1073/pnas.2103084118>.

102 Iacobas S, **Iacobas DA**. A Personalized Genomics Approach of the Prostate Cancer. *Cells* **2021**, *10*, 1644. <https://www.mdpi.com/2073-4409/10/7/1644>.

101 Victorino, P.H.; Marra, C.; **Iacobas, D.A.**; Iacobas, S.; Spray, D.C.; Linden, R.; Adesse, D.; Petrs-Silva, H. Retinal Genomic Fabric Remodeling after Optic Nerve Injury. *Genes* **2021**, *12*, 403. <https://doi.org/10.3390/genes12030403>

100 **Iacobas, D.**; Wen, J.; Iacobas, S.; Schwartz, N.; Puttermann, C. Remodeling of Neurotransmission, Chemokine, and PI3K-AKT Signaling Genomic Fabrics in Neuropsychiatric Systemic Lupus Erythematosus. *Genes* **2021**, *12*, 251. <https://doi.org/10.3390/genes12020251>

99 Iacobas S, Amuzescu B, **Iacobas DA**. Transcriptomic uniqueness and commonality of the ion channels and transporters in the four heart chambers, *Sci Rep.* **2021** *11*(1):2743. <https://doi.org/10.1038/s41598-021-82383-1>

98 Lubbers L, ..., **Iacobas DA**, Sherr E, Cloyd III J, Veliskova J, Noebels JL, Millichap JJ, Swann JW, Koh S, Velisek L, Coles L, Patel M, Siehr MS, Jacob M, Seo R, Heischmann S, Moshe SL, Chachua T, Brima T, Mowrey WB, White S, Milder J, CURE Infantile Spasms Consortium members A Team Science Approach to Discover Novel Targets for Infantile Spasms (IS). *Epilepsia Open*, **2020**, *5*(3). <https://doi.org/10.1002/epi4.12441>

97 **Iacobas DA**, Mgbemena V, Iacobas S, Menezes KM, Wang H, Saganti PB Genomic fabric remodeling in metastatic clear cell renal cell carcinoma (ccRCC): A new paradigm and proposal for a personalized gene therapy approach. *Cancers* **2020**, *12*(12), 3678. <https://doi.org/10.3390/cancers12123678>

96 **Iacobas DA**. Powerful Quantifiers for Cancer Transcriptomics. *World J Clinical Oncology* **2020**, *11*(9):679-704. <https://www.wjnet.com/2218-4333/full/v11/i9/679.htm>

95 **Iacobas DA**. Biomarkers, Master Regulators and Genomic Fabric Remodeling in a Case of Papillary Thyroid Carcinoma. *Genes* **2020**, *11*(9):E1030. <https://doi.org/10.3390/genes11091030>

94 **Iacobas, D.A.**; Iacobas, S.; Stout, R.F.; Spray, D.C. Cellular Environment Remodels the Genomic Fabrics of Functional Pathways in Astrocytes. *Genes* **2020**, *11*, 520. . <https://doi.org/10.3390/genes11050520>

93 Nisimura LM, Coelho LL, de Melo TG, de C. Vieira P, **Victorino PH**, Garzoni LR, Spray DC, **Iacobas DA**, Iacobas S, Tanowitz HB, **Adesse D**. Trypanosoma cruzi promotes transcriptomic remodeling of the JAK/STAT signaling and Cell Cycle pathways in myoblasts. *Front. Cell. Infect. Microbiol.* **2020**, doi: 10.3389/fcimb.2020.00255.

92 Mathew, R.; Huang, J.; Iacobas, S.; **Iacobas, D.A.** Pulmonary Hypertension Remodels the Genomic Fabrics of Major Functional Pathways. *Genes* **2020**, *11*, 126. <https://doi.org/10.3390/genes11020126>

(d) Synergistic activities

- PI/Co-PI/Investigator in > \$14 mil NIH, CURE and university grant funding
- Head Division Biophysics-Biostatistics-Medical Informatics of Ovidius University (1990 – 2001)
- President Eastern and Central European Society of Mathematical Ecology (1994 – 2000)
- Director/Co-Director of:
 - PVAMU Personalized Genomic Laboratory (2018 – present)
 - NYMC Systems Biology Core Facility (2013 – 2017)
 - AECOM Neurogenomics and Biometry Core Facilities (2002 – 2006)
 - Constanta County Center of Nuclear Medicine (1990 – 1993)
 - Electronic Microscopy Lab, Sheep Research Institute, Palas (1977 – 1978)
- Guest Editor of the MDPI Special Issues: - Advanced Molecular Solutions for cancer therapy (2023)
 - Molecules at Play in Cancer (2022)
 - Genomic Fabric Remodeling in Neurological Diseases (2021)
- Associate Editor of: - Frontiers in Integrative Neuroscience (2006 – present)
 - Current Issues in Molecular Biology (2021 – present)
- Grant Reviewer for: (USA) National Institutes of Health, (Poland) National Science Center, (Italy) Directorate for Health and Technology Research, (Romania) Academy of Romanian Scientists