# **RESUME VITA**



# Dumitru Andrei Iacobaş, PhD

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Naturalized US Citizen (2011), Immigrated from Romania in 2001 on an O1 (outstanding) visa sponsored by the Albert Einstein College of Medicine, New York, NY.

EDUCATION – PhD Physics, University of Bucharest (Romania) 1994

#### ACADEMIC APPOINTMENTS

- 2018 present: Research Professor of Systems Biology, ECE, Roy G Perry College of Engineering, PVAMU
- 2013 2017 Associate Professor (2014)/Assist Prof of Pathology, New York Medical College, Valhalla, NY
- 2006 2013 Assistant Professor of Neuroscience, Albert Einstein College of Medicine, New York, NY
- 2001 2006 Visiting Associate Professor of Neuroscience Albert Einstein College of Medicine, Bronx, NY
- 1990- 2001 **Assistant Professor** of Biophysics, Biostatistics and Medical Informatics, 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 & Biophysics, Natl Coll of Natural Sciences Mihai Eminescu, Constanta,
- 1976 1978 Lecturer Physics, Natl Coll of Mathematics and Physics, Mircea cel Batran, Constanta, Romania

# ADMINISTRATIVE APPOINTMENTS

- 2018-present **Director** of the Personalized Genomics Laboratory, CCSB, PVAMU, Prairie View, TX 77446
- 2013-2017 **Director** of Systems Biology Core laboratory, New York Medical College, Valhalla, NY10595
- 2002 2006 **Associate-Director** Molecular Biology & Neurogenomics Core Laboratory, DP Purpura Department of Neuroscience, Albert Einstein College of Medicine, New York, NY
- 2002 2005 Co-Director Biometry Core, Kennedy Center for Research in Mental Retardation and Human Development, New York, NY
- 1990-2001 Head Division Biophysics, Biostatistics and Medical Informatics, Ovidius University, Constanta
- 1990-1992 Scientific Secretary Ovidius University Medical School, 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", Constanta, Romania
- 1977-1978 Director Electron Microscopy Laboratory, Central Institute for Sheep Research, Constanta, Romania

# EXPERIENCE AND ACHIEVEMENTS IN ARTS AND SCIENCE

# <u>Mathematics – Physics – Chemistry – Biology</u>

- **Teaching:** Biophysics, Biostatistics, Cellular Biophysics, General Physics, Genomics, Human Physiology and Clinic Laboratory, Mathematical Modeling of Biological Systems, Medical Informatics, Molecular Biophysics, Systems Biology at Romanian and NY medical schools.
- **\$\$\$ in Grant support** for researches in mathematics-physics-chemistry applications to biology and medicine awarded by agencies from USA, Romania, Colombia, Germany, Brazil and Italy
- **Peer-reviewed publications:** 3 patents, 7 books, 15 book chapters, 14 proceedings, 93 articles, 82 genomic databases etc (list attached), most as <u>single</u>, <u>first or corresponding author</u>.

- **Invited seminars and lectures** at numerous academic institutions worldwide (list attached).
- Organizer, chair and presenter of international schools and conferences (list attached).

# Social Work, Behavioral and Political Sciences

- **Principal Investigator** Project 4: "Survey of women's health in the city of Constanta", 01/01/98-02/28/01 within **AIHA/USAID Program:** Healthy Communities/Women's Wellness Partnership.
- Honorary Citizen of Louisville, KY (1999), commissioned by David L Armstrong, Mayor
- Honorary Citizen of Jefferson County, KY (1999), com by Hon R Jackson, County Judge/Executive
- Latinoamericano honorario awarded by the University of Lujan, Argentina
- **Book: Iacobas DA**. (1995) Social pathology and therapy, Bucharest: Bucura Mond Ltd. ISBN 96889-5-0 (1st European PHARE Prize for "Young scientists and politicians in the civil society").

# **Language & Communication, Music & Theatre**

- Written: 1 drama-script, 1 musical script, 3 novels, countless poems
- **Produced and Directed:** 1 student drama, 1 student musical
- **Presented:** "Universe, Matter, Life", 1h weekly series (1988) on the (Romanian) National TV
- Social and political debates on (Romanian) national and local media (TV, radio, magazines, journals)

# **EDITORIAL ACTIVITY**

Editor: - Tilia Press International Ltd., Constanta, Romania (1997-2001)

Guest Editor: - Special MDPI Genes Issue "Genomic fabric remodeling in neurological diseases"

**Associate Editor:** - Frontiers in Integrative Neuroscience (2007-present)

- Series "Advances in Ecological Sciences/Ecosystems and Sustainable Development",

WIT Press, Ltd., Southampton, UK; 2001-2005.

**Book Reviewer:** - Advances in Medical Physics, Biophysics and Biomaterials, Male Centrum,

Bratislava, Slovak Republic; 1997

**GRANT REVIEWER: 2010** NIH SBIR Topic 110

2010-2017 General Directorate for Health and Technologies Research, Ministry of

Labor, Health and Social Policies, Italy

2011-2017 National Council for Scientific Research, Romania

2014-2017 National Science Centre, **Poland** 

#### **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,** Academy for Medical Development and Collaboration

2001-2007 Member Microarray Research Group of the Intl Assoc of the Biomolecular Research Facilities

2002 Chair Tutorial Session 13 International Symposium "Biomolecular Technologies", Austin, TX

2001, 2003, 2005 International Scientific Advisory Board and Session Chair 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> International Conferences "Ecosystems & Sustainable Development", Alicante (Spain), Siena, (Italy), Cadiz, (Spain)

2001 **International Scientific Advisory Board and Session Chair** 1<sup>st</sup> International Conference on Sustainable Planning and Development, Skiathos Island, (**Greece**)

2001 **International Scientific Advisory Board and Session Chair** 13th International Conference of the International Society for Environmental Epidemiology, Garmisch-Partenkirchen, (**Germany**)

1999 International Advisory Group for the introduction of a Biomathematics MS in Colombia

1995, 1996 Chair 1<sup>st</sup> and 2<sup>nd</sup> International Conferences "Sustainable Development: System Analysis in Ecology", Dnepopetrovsk (1995), Sevastopol (1996), (Ukraine)

1994-2000 Founding President of Eastern and Central European Society of Mathematical Ecology.

1993-1997 **Founding President** of the charitable organization "Heart and Soul", Constanta, Romania

1993-1997 **Founding President** of SIMPAC Foundation to help young investors understanding the market economy

# TEACHING EXPERIENCE

# A. EDUCATIONAL LEADERSHIP ROLES

Credit 6h/year

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

1978-1981 **Associate Principal** for Students Affairs, National College of Natural Sciences "M. Eminescu", Constanta, Romania

# **B. DIDACTIC COURSEWORK**

# 1) <u>Undergraduate level</u>:

"Mircea cel Batran" National College of Mathematics and Physics, Constanta, Romania	
- Physics, Physics Laboratory (20h/week)	1976-1978
"M. Eminescu" National College of Natural Sciences, Constanta, Romania	
- Physics, Biophysics, Physics Laboratory (18h/w)	1978-1981
"Ovidius" University Faculty of Natural Sciences, Constanta, Romania	
- Biophysics Lectures in Romanian, English and French for Biology and Ecology majors,	
credit 2 semester hours	1990-2001
- General Physics for foreign MD students in English and French, credit 2 semester hours	1992-1994
<ul> <li>Mathematical Modeling of Biosystems for Biology and Ecology majors,</li> </ul>	
credit 2 semester hours	1994-2000
Prairie View A&M University, College of Engineering	
- Biophysics and Medical Physics for Bioengineers, Special topic, ELEG 4103,	
Credit 3 semester hours (cancelled because of not enough enrolled students)	2018
2) <u>Postgraduate level</u> :	
"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 Net course of Prof. L. Zagrean, Chair Department of Physiology 2008-2	
"Ovidius" University School of Medicine, Constanta, Romania	
- Biophysics (in Romanian, English and French) for MD and DDR,	
credit 2 semester hours	1990-2001
- Biostatistics (in Romanian and English) for MD and DDR students,	
credit 2 semester hours	1992-2001
- Medical Informatics (in Romanian and English) for MD and DDR students,	
credit 2 semester hours	1992-2001
Universidad de Caldas, Manizales, Colombia	
- Bioestadistica medica (in Spanish), 14 hrs, Intensive Introductory Course within an explo	oratory MS
- program in biomathematics in Colombia.	1999
Albert Einstein College of Medicine of Yeshiva University, Bronx, NY	
- "Transcriptomics" lecture within collective course "Modern techniques applied to neuroscience",	

"Mathematical modeling of intercellular communication", 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 - School of Medicine, Valhalla, NY

- "Microarrays to explore functional genomic fabrics" within collective course "Bioinformatics and Functional Genomics", credit 2h/y 2013-2016

# New York Medical College - Graduate School of Basic Medical Sciences, Valhalla, NY

- "Ecosystems stability and evolution" within collective course "Evolutionary Medicine", Credit 2h/y, 2016-2017

# C. CURRICULUM DEVELOPMENT WORK

# Introduced the following new courses:

## "Ovidius" University, Constanta, Romania

- Biophysics Lectures in Romanian, English and French for MD, DDR, Biology and Ecology students,
- Biostatistics Lectures in Romanian and English for MD and DDR students,
- General Physics for foreign MD students in English and French,
- Mathematical Modeling of Biosystems for Biology and Ecology students

## University of Caldas, Manizales, Colombia

- Bioestadistica medica (in Spanish), 14 hrs, Intensive Introductory Course within an exploratory MS program in biomathematics in Colombia

# Prairie View A&M University, Prairie View, TX

- "Biophysics and Medical Physics for Bioengineers", Special topic, ELEG 4103

# D. MENTORING AND NON-DIDACTIC TEACHING

#### 1. Former academic institutions

- mentored numerous postdocs, postgraduate (PhD, MD, PharmD, MS) and undergraduate students at Carol Davila University of Medicine and Pharmacy (Bucharest), Ovidius University (Constanta), Albert Einstein College of Medicine (New York) and New York Medical College (Valhalla).

#### 2. PVAMU

- mentored the Computer Engineering student Nneka Ede, recipient of the **PVAMU Undergraduate** scholarly research award with the project "Development of Cancer GMR Software Package for Personalized Cancer Gene Therapy.
- mentor of the Electrical and Computer Engineering graduate student Mohamed Ahmed with the project "Development of a mobile APP to optimize medical diagnostic"
- organizer of the public CCSB seminars on Systems Biology

# E. CONTINUING MEDICAL EDUCATION (CME accredited seminars)

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

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

"Hierarchal gene master regulators of papillary and anaplastic thyroid cancer phenotypes", **New York** Medical College **Dept. of Otolaringology**, Valhalla, 9/9/2017, host Dr. A Moscatello, Chair

"Remodeling of host and pathogen genomic fabrics' topology and interplay in infections". New York Medical College, **Dept. of Microbiology and Immunology**, Valhalla, NY. 3/12/2015, Host. Dr. Cabbelo 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, **Heart Failure & Pulmonary Hypertension**, Department of Medicine, Valhalla, NY. 12/3/2014, Host. Dr. G. Lanier, Director.

"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.

"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 Chair.

"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.

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

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

# **Visiting Faculty**

- Visiting Associate Professor, Dept. of Neuroscience, Albert Einstein College of Medicine, **NY** (2001 2006)
- Visiting Associate Professor, Dept. Experimental Biophysics, Humboldt University, Berlin, **Germany**, 1996 (2 months sponsored by the German Academy)
- Visiting Assistant Professor, Institute of Biophysics, University of Ljubljana, Ljubljana, Slovenia, 1993 (3 weeks sponsored by the University of Ljubljana)
- Visiting Assistant Professor, Dept. Biophysics & Nuclear Medicine, Universite Bretagne Occidentale School of Medicine, Brest, **France**, 1992 (2 months sponsored by the European Tempus Program).

# **RESEARCH SUPPORT** *since* 03/01/2001 when immigrated in the U.S.A.

- NIH R01 NS34931: Gap junction and Schwann Cells, Co-Investigator (PI: DC Spray), 04/01/98-3/31/03, \$860,000
- NIH R21 NS42807: Optimized microarray analysis of neural differentiation, Co-Principal Investigator (PI DC Spray), 09/29/01-9/28/03. \$415,000.

  The project was ranked in the 2.0 percentile.
- NIH 3P30 HD001799-40S1: Support for RF Kennedy Mental Retardation Research Center (PI: D Faber), Co-Director Biometry Core; Associate Director Molecular Biology & Neurogenomics Core, 07/01/02-06/30/06, \$2,075,000
- **NIH PO1 (DK060037):** Smooth Muscle Differential Function and Diabetes, (PD A Melman), **Investigator** Project #4 and Core C (Mathematical modeling), 04/01/03-1/31/08; \$11,666,000
- NIH PO1 HD32573: Hypoxia in development: injury and adaptation mechanisms (PD GG Haddad), Principal Investigator and Director of Core D "Computational and Functional Genomics", 02/10/05-7/31/10, \$12,125,000.
  - *The PD was ranked in the 0.5 percentile, with Core D getting the best score.*
- NIH RO1 HL073732: Stem Cell Based Therapies in Chagasic Cardiomyopathy, (PI: AC Campos de Carvalho) Investigator, 7/15/2003-6/30/2012. \$4,150,000
- NIH 5R01HL092001: Connexin-Dependent Transcriptomic Networks in Controlling the Heart Rhythm Principal Investigator, 7/01/2009-6/30/2012. \$830,000
- Citizens United for Research in Epilepsy (CURE): Developing and testing novel treatments for infantile spasms, MPI: L Velisek, CE Stafstrom, DA Iacobas, 01/01/13-12/31/14. \$333,000
- NIH 5R01AI045801-12 ADM SUPPL: B Burgdorferi tick phase genes and Lyme disease (PI I Schwartz), Investigator, 7/01/13-6/30/14, \$166,000
- Universidade Federal do Rio de Janeiro (contract): Retina cytoprotection by overexpressing Max gene, Principal Investigator, 03/21/14-04/30/14, \$5,000
- **NYMC INTRAMURAL:** Endothelial Disruption Precedes Neointima Formation in Pulmonary Hypertension, (PI R Mathew), **Investigator**, 07/01/14-06/30/15, \$20,000
- **BOEHRINGER-INGELHEIM:** Chicken Egg Genotoxicity and Carcinogenicity Assessing Assay for Use as an Alternative Preclinical Model to Investigate Drug-Induced Toxicity with Special Interest in Carcinogenicity Testing (PI G Williams), **Investigator**, 09/01/14-08/31/16, \$1,245,000
- **NYMC Department of Pathology:** Genomic fabric remodeling and daptomycin resistance in *E. faecium* infection, **Principal Investigator**, 11/01/14-10/31/15, \$10,000
- WESTCHESTER MEDICAL CENTER: Computerized system for cardiology services, **Principal Investigator**, 07/01/15-06/30/17, \$10,000
- **NYMC Department of Pathology:** Quantifying cancer-associated remodeling of key genomic fabrics by next gen sequencing, **Principal Investigator**, 07/01/15-06/30/17, \$10,000
- Universidade Federal do Rio de Janeiro (contract): Transcriptomic alterations in crushed rat retina, Principal Investigator, 3/01/2017-6/30/2017, 3/01/2017-6/30/2017, \$5,000
- Texas A&M University System Chancellor's Research Initiative: The Computational Biology and Bioengineering Research Center (PI L Qian), Investigator, 09/01/17-08/31/20. \$6,000,000
- NSF 1736196: HBCU-RISE: Bridging Quantitative Science with Biological Research: Jumpstarting Computational Systems Biology Research at PVAMU (PI L Qian), Investigator, 09/01/17-08/31/20, \$1,000,000
- **PVAMU Undergraduate scholarly research award:** Development of Cancer GMR Software Package for Personalized Cancer Gene Therapy, **Advisor**, 10/01/18-08/31/19; \$10,000
- **PVAMU Faculty Research Development Grant Program:** Complement C5arl Antagonists for the Treatment of Autism Spectrum Disorders, **Principal Investigator**, 01/25/19-08/31/19, \$16,000

# **RESEARCH SUPPORT** before 03/01/2001 (\$\$ not available, foreign currencies)

- (Romanian) Ministry of Culture (Literary Fund): Procedure to analyze the human genome in the pre-Hilbert space of standard gene expression, Principal Investigator, 07/01/00-06/30/01

- Ministero de Educacion Nacional de Republica Colombia: Maestria en biomatematica, Principal Investigator Biostatistics Project, 03/01/99-28/02/01
- AIHA, USAID, University of Louisville-KY: Healthy Communities/Women's Wellness Partnership. Areas of Focus: Community Health, Women's Health, Principal Investigator Project 4: "Survey of women's health in the city of Constanta, 01/01/98-02/28/02
- Lehrstuhl fur Experimentelle Biophysik des Institutes fur Biologie der Humboldt-Universitat, Berlin, Germany: Untersuchungen zur pharmacologischen Beeinflussung von Ionenkanalen, insbesondere mit der Methode der Patch-Clamp-Messung. Insbesondere soll die Einwirkung von Ascorbinsaure (Vitamin C) untersucht warden, Principal Investigator, 05/01/96-10/31/96
- **(Romanian) Ministry of Scientific Research:** Lacustrine ecosystem stability and evolution in the District of Constanța, **Principal Investigator**, 10/01/95-09/30/98
- Unita Sanitaria Triestina (Italy): Phantom design for radio-diagnostic and radio-therapy with antiinflammatory and anti-tumor drugs, Principal Investigator, 09/01/95-10/31/95
- **European program "Biomembrane Network":** The structure and dynamics of biological membranes and related lipid-water model membrane systems as revealed by the application of advanced biophysical methods, **Principal Investigator** for Romania, 09/01/93-08/31/95
- Università degli Studi di Trieste (Italy): Unsaturated gamma lactone compound action on bioelectrogenesis. Microscopical and macroscopical effects, **Principal investigator**, 09/01/90-08/31/92.

# **PUBLICATIONS**

#### I. STEM PUBLICATIONS

#### A. PATENTS

- 3 **Iacobas DA**, Amuzescu B. (1991). Device to clean and stabilise the patch-clamp pipettes (Romanian: Instalație pentru curatirea si 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 confectionarea micropipetelor din sticla). Patent no. 96704 (Romania).
- + numerous technical innovations in biophysics, nuclear medicine and genomics

#### B. BOOKS

- **Iacobas DA**. (2000, 4<sup>th</sup> 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
- 5 Iacobas S, **Iacobas DA** (2000). Pharmacology of the nervous system (in Romanian). Constanta: Tilia Press Int. ISBN 973-98470-8-0.
- 4 **Iacobas DA**, Iacobas S (1998) Electrophysiology of the cell membrane (in Romanian) Constanta: Tilia Press Intl., Ltd. ISBN 973-98470-1-3.
- **Iacobas DA**. (1997, 3<sup>rd</sup> English edition). Medical Biostatistics. (Total 7 editions: 3 English + 2 Romanian + 1 Spanish + 1 Greek), Bucharest: Bucura Mond. ISBN 973-97977-3-3.
- **Iacobas DA**. (1996, 2<sup>nd</sup> English edition) Molecular Biophysics. (Total 4 editions: 2 English +2 Romanian) Bucharest: Bucura Mond. ISBN 973-97977-0-9
- **Iacobas DA**. (1996, 2<sup>nd</sup> English edition) Cell Biophysics. (Total 4 editions: 2 English + 2 Romanian), Bucharest: Bucura Mond. ISBN 973-97977-2-5
- + **Iacobas DA** (1993-2000, Editor) Practical Works of Biophysics. Ovidius University Press, (7 Romanian + 5 English editions).

# C. BOOK CHAPTERS

- 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
- **Iacobas DA**, Iacobas S, Chachua T, Goletiani C, Sidyelyeva G, Velíšková J, Velíšek 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
- Iacobas S, Neal-Perry G, **Iacobas DA** (2013). Analyzing the cytoskeletal transcriptome: sex differences in rat hypothalamus. In Rolf Dermietzel (editor): *The Cytoskeleton: Imaging, Isolation, and Interaction, Neuromethods*, 79: 119:133, Springer New York Heidelberg Dordrecht London, ISBN 978-1-62703-266-7.
- 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)
- Adesse D, Goldenberg RC, Fortes FS, **Iacobas DA**, Iacobas S, Campos de Carvalho AC, de Nazareth 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
- Thi MM, **Iacobas DA**, Iacobas S, Spray DC. (2008). Fluid shear stress regulates vascular endothelial

- growth factor gene in osteoblasts. In Mone Zaidi (editor): *Skeletal Biology and Medicine, Part B*, Wiley-Blackwell. ISBN: 978-1-573-31728-3.
- **Jacobas 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. <a href="https://doi.org/10.1007/3-540-26574-0">https://doi.org/10.1007/3-540-26574-0</a> 45
- 8 **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.
- 7 **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.
- 6 **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.
- **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 systhems vivants*, pp. 138-143.
- Iacobas S, **Iacobas DA.** (1986). Le pathologique synthese des informations sur l'organisme humain. In: M Godeanu (Editor): *Aspects energetiques et informationels dans les systhems vivants*, 127-134.
- 3 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.
- 2 **Iacobas DA**, Sanda Iacobaş. (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.

# D. ARTICLES

- Mathew R, Huang J, Iacobas S, **Iacobas DA** (2020). Pulmonary Hypertension Remodels the Genomic Fabrics of Major Functional Pathways. *Genes* 11(2), 126; https://doi.org/10.3390/genes11020126. **IF: 3.331. Open access.**
- Iacobas S, Amuzescu B, **Iacobas DA** (2019). Up-Down and Left-Right by the Heart Transcriptome. *Genes*. <a href="https://www.preprints.org/manuscript/201911.0243/v1">https://www.preprints.org/manuscript/201911.0243/v1</a>. **Open access.**
- 91 **Iacobas DA.** (2019). Commentary on "The Gene Master Regulators (GMR) Approach Provides Legitimate Targets for Personalized, Time-Sensitive Cancer Gene Therapy". *J Cancer Immun* 1(1):31-33. **Open access.**
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- 3 https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL1862
- 2 <u>https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL1698</u>
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- 6 https://www.ncbi.nlm.nih.gov/protein/P17325.1
- 5 <u>https://www.ncbi.nlm.nih.gov/protein/AIZ73048.1</u>
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- 3 **Iacobas DA**, Spray DC. (2008). Connexin dependent transcriptomic networks. *Scirus Topic Page*. <a href="http://www.scitopics.com/Connexin\_dependent\_transcriptomic\_networks.html">http://www.scitopics.com/Connexin\_dependent\_transcriptomic\_networks.html</a>
- 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 <a href="http://www.abrf.org/ResearchGroups/Microarray/EPosters/MARG\_2002\_Poster.pdf">http://www.abrf.org/ResearchGroups/Microarray/EPosters/MARG\_2002\_Poster.pdf</a>
- + Numerous national and local TV radio talk shows, including 1 h weekly National TV broadcasting of *Universe, Matter, Life*" in 1987

#### II. OTHER PUBLICATIONS

# A. SOCIOLOGY AND POLITICS

1 **Iacobas DA**. (1995) Social pathology and therapy - A systems approach on social and political transition in post-communist Romania (in Romanian), Bucharest: Bucura Mond Ltd. ISBN 973-96889-5-0 (*Ist European PHARE Prize for "Young scientists and politicians in the civil society"*).

#### B. PHILOSOPHICAL NOVELS

- 2 **Iacobas DA**. (2000). "Tucapai". (Romanian: Tucapai) A philosophical novel on a possible quantum theory of cognition) Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-9-9.
- 1 **Iacobas DA**. (1998) "Noul Tetractys". (Romanian: The New Tetractys) A philosophical novel on a possible quantum refinement of Darwin's Theory of Evolution). Constanta: Tilia Press Intl. Ltd. ISBN 973-98470-3-X.

# C. THRILLERS

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 973-98470-7-2.

#### D. DRAMAS/SCRIPTS/MUSICALS:

- 4 Iacobas DA (2004) "Urzici, ciuperci și caltabosi". (Romanian: Stinging nettles, mushrooms and blood puddings) Lumea libera A Worldwide Romanian Weekly, New York, NY
- Iacobas D.A. (2000) "Deseara, nu veni la gară!" (Romanian: Don't come at station tonight. 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". (Romanian: An Atomic Faust) Constanta: Dobrogea Noua. Musical.

## E. MEDIA

- **Iacobas DA**. (1993) Dumnezeu e bun si iarta (Romanian: God is good and forgives Essay about social problems in Romania during the transition from communist dictatorship to democracy), Telegraf.
- numerous talk shows on various political, social and cultural issues at (Romanian) national and local TV and radio stations (1990-2000)
- numerous articles and poems in (Romanian) national and local newspapers and magazines

# INVITED STEM LECTURES AND 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. Videoconference: <a href="https://www.stop-cancer-romania.ro/prezentari/prezentari-2019/">https://www.stop-cancer-romania.ro/prezentari-2019/</a>

"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, U.S.A.

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

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

"Gene Master Regulators in Cancer Gene Therapy", 2<sup>nd</sup> Symposium of Translational Oncology STOP Cancer, Bucharest, **Romania**, 04/13-15/2018. Videoconference: <a href="https://www.stop-cancer-romania.ro/prezentari/prezentari-2018/">https://www.stop-cancer-romania.ro/prezentari-2018/</a>

"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, Athens, **Greece**.

"Coordinated transcriptomics – a new tool to identify functional pathways in the cell", 1<sup>st</sup> 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, U.S.A. 03/9-12/2002.

"Theory of potential life. A new hypothesis on life origin and evolution". 4º Encuentro LatinoAmericano de Ecologia Matematica. University Nacional de Cuyo, Mendoza, **Argentina**. 08/27/1998

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

"Dracula's postulates and biocoenosis stability". 4º Encuentro Latino Americano de Ecologia Matematica. Valparaiso, **Chile**, 08/23/1998.

"Ecosystem stability in the Theory of Many Population Correlations", 8° Congreso Internacional de Biomatematica, Panama, **Panama City**, 08/28/1997

"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. 1<sup>st</sup> Practical International Conference on Sustainable development: environmental pollution and ecological safety. Dnepropetrovsk **Ukraine**, 1995.

"New ideas in thermodynamical ecology. 1<sup>st</sup> Practical International Conference on Sustainable development: environmental pollution and ecological safety. Dnepropetrovsk **Ukraine**, 1995.

"Problems in the dimensional analysis of ecosystems. 3<sup>ro</sup> Encuentro Latinoamericano de Ecologia Matematica, Lujan - Buenos Aires, **Argentina**, 1994.

"Standard versus normal mathematical approach of ecosystems". 3<sup>ro</sup> 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 behavior 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 43<sup>rd</sup> 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 Biomatematica. Universidad del Quindio. Armenia (**Colombia**).

"Stability and evolution in the Theory of Many-Population Correlation Functions". Segunda Jornada Nacional en Biomatematica. Universidad del Quindio. Armenia (**Colombia**).

# C. Local (Abroad)

"Genomics from a biophysicist's perspective", University of Bucharest, Dept. Anatomy, Animal Physiology and Biophysics, Bucharest, **Romania**, 10/18/2019, Host: Dr. D Mihailescu, Chair

"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 Biofisica, Rio de Janeiro, **Brazil**. 9/28/2015. Host: Dr. AC de Carvalho.

"The Theory of Genomic Patholog", 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)

"Applicaciones Clinicas de la Teoria del Patologico". Facultad de Medicina, Universidad Tecnologica de Pereira, **Colombia**. 13/05/1999. (Hosted: Prof. H. Moreno-Rojas, Dean).

"Bioelectrogenesis of the lumbricus terrestris ganglia chain", Dipartimento di Physiologia e Biophysica, Universita di Trieste, **Italy**. 10/10/1998. Host: Dr F Ruzzier, Chair.

"Drug efficiency Estimate with the Theory of Pathologic". Instituto de Farmacologia y Bioquimica, Universidad de Buenos Aires, **Argentina**. 08/14/1998 (Host: Prof. M. Rubio, viceDean)

"Problemas teoreticos y experimentales en los estudios electrofisiologicos". 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. R Howe, Chair Mathematics

"The Theory of Patholog", 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 Gyiorgy, Chair.

"A quantum model of the Cl<sup>-</sup> ionic channel in axolemma", Universite Bretagne Occidentale, Brest, **France**.

06/25/1992. Host: Dr. JP Pennec, Chair of the Department Animal Physiologie et Biophysique.

# D. Local (USA)

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

"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.

"Tumorigenesis: a genomic fabric interplay going bad?", **State University of New York at 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", **State University of New York at 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 Ca<sup>2+</sup>-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, New Mexico State University at 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 patholog", **Rockefeller University** Microarray Facility, Manhattan, NY, 10/12/2001. (Host Dr. G Khitrov, Director).

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

#### E. PVAMU

"Experimental and computational problems in transcriptomic studies. The Genomic Fabric paradigm", PVAMU CRI-RaISE Seminar series, 02/19/2020. Host: Dr. P Saganti -Director

"Brain, Sex, Synapses and Neurological Diseases – A Transcriptomic Story", Center for Computational Systems Biology Seminar series, 10/09/2019

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

"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

"Alteration of Ca<sup>2+</sup>-wave in the diabetic smooth muscle", Dept. Electrical and Computer Engineering, PVAMU RGP College of Engineering, Host Dr. P Obiomon, 02/23/2018

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

# PUBLIC CONFERENCES ON SOCIAL AND POLITICAL PROBLEMS

"Healthy communities for empowering women's health". 12<sup>th</sup> Conference "Environmental epidemiology in Pan America and the World: Building connections." Buffalo, NY, **USA**, 08/21/2000.

"Organizing a public awareness campaign on domestic violence". *American Romanian workshop on domestic violence*. Mamaia, **Romania**, 04/28/2000.

"Survey on domestic violence in Constanța". *American Romanian workshop on domestic violence*. Mamaia, **Romania**, 04/28/2000.

"Experiencia de un científico rumano en Colombia". Velada cultural, organisada de Embajada de Colombia, Ministerio Rumano de las Relaciones Exteriores, y Casa de la America Latina. Bucharest, **Romania**, 08/22/1999.

"Survey on women health in Constanta District", University of Louisville, Louisville, KY, USA, 05/12/1999. Host: Prof. Prasaad Steiner.

"Ecology and politics. A mathematical approach", 8° Congreso Internacional de Biomatematica, Panama, Panama City, **Panama**, 08/29/1997

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

"The problem of ecological reconstruction". The Summer Festival of Peace University, Berlin, **Germany**, 1995.

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

+ numerous talk shows and debates on social and political problems at (Romanian) national and local media (TV, radio, magazines)

# COLLABORATORS AT EXPERIMENTS, GRANTS, PUBLICATIONS AND IN ORGANIZING SCHOOLS AND MEETINGS

Owing to expertize in systems biology, biophysics and biomathematics, I succeeded to ensemble a worldwide network of outstanding scientists and clinicians with whom I have collaborated at research grants (experiments and publications) and in organizing international schools and conferences.

#### I. U.S.A.

CA: D Bota, R Bota, Q Chen, C Fan, O Gavrialov, C Griffin, GG Haddad, L Marcu, D Zhou

CT: T Chachua FL: RS Dronca GA: D Brann IA: K Knudson

KY: RWP Steiner, D Wilson

MA: GD Duda

MD: JE Cohen, RD Fields, PR Lee

**ME:** K Jhonson **MN:** G Gheorghe

NJ: S Bota, E Brand-Schieber, AI Brooks,

NM: G Kyle, T Vulcan

NY: D Axlinte, P Ballabh, AM Beal, M Beelitz, TJ Belbin, BB Bhimavapu, P Brink, KD Brunnemann, AU Carbonell, MJ Caimano, A Corona, M Desruisseaux, A Ding, P Dohare, D Duan, LK Friedman, J Geliebter, Y Hannun, J Huang, S Iacobas, R Iyer, MJ Iatropoulos, K Khitrov, RN Kitsis, T Kobets, DO Kravchick, V Kudur, L Jeliks, B Jordan, EF LaGamma, J Leheste, WE Li, SL Lowery, A Luthra, J Mankuso, A Massimi, R Mathew, B McEwen, A Moscatello, S Mukherjee, NK Pandey, A Patel, D Paul, C Putterman, JD Radolf, JK Rasamny, E Scemes, I Schwartz, P Scherer, DC Spray, SO Suadicani, H Tanowitz, M Thi, R Tiwari, N Tuli, M Urban, A Viale, L Velisek, J Veliskova, G Vinukonda, LR Vose, LM Weiss, P Werner, M Williams, M Wittner, MT Zia

OH: D Matei

PA: JF Jasmin, MM Lisanti, L Xi

TN: C Crisman, G Hallam

**TX:** GA Calin, X Dong, N Ede, M Hada, N Hritonenko, A Ho, T Horton, I Iacobas, C Ivan, A Joy, A Keaton, S Kim, A Kumar, V Mgbena, M Pulikkathara, P Saganti, M Sadiku, H Wang, R Wilkins

UT: MA Cohen VA: Y Bao

WA: G Neal-Perry

II. CANADA: S Dang, V Kardami, M Jeyaraman, J Makazan, BE Nickel, W Srisakuldee, S Tanguy, J Tarbell, G Zoidl

# III. EUROPE

**ARMENIA:** C Goletiani

**BELGIUM:** K Van Roosbroeck

**CZECH R:** P Krcmar, M Machala, V Mornstein, J Neca, K Pencikova, J Prochazkova, P Simeckova, J Slavik, L Umannova, J Vondracek

FRANCE: JF Desaphy, S Morin, JP Pennec

**GEORGIA:** N Nebieridze

GERMANY: R Dermietzel, U Deschl, S Dhein, R Glaser, M Hrdinka, Karpova, Kreutz MR, J Lopez-Rojas,

FV Mohr, A Sturdza, J Trotter, E Vock, G Zoidl

**GREECE:** S Alahiotis, G Lefterakis

**HUNGARY:** S Gyorgyi, P Igaz, L Kerstelyi

ITALY: DC Camerino, A Frigeri, GP Nicchia, F Ruzzier, M Svelto

PORTUGAL: Z Mainen

ROMANIA: C Ailoaie, B Amuzescu, C Ciontu, A Croitoru, A Florescu, M Godeanu, S Iacobas, A Ionescu, G

Mihalas, E Niculescu-Mizil, D Paul, C Spataru, T Spircu, S Tigan, V Vasilescu, D Verman

RUSSIA: TV Serebrovskaya, G Sidyelyeva

**SLOVAK R:** E Kukurova

**SLOVENIA:** M Schuka, S Svetina **SPAIN:** J Uso, Y Vilacampa,

UK: C Brebia, K Lilley, MP Lisanti, NM Thomas

**UKRAINE:** S Chernyshenko

# IV. CENTRAL AND SOUTH AMERICA

ARGENTINA: C Leguizamon, N Rubio, F Saravi

**BRAZIL:** D Adesse, LC Belem, AC Campos de Carvalho, P Costa, HFR Dohman, RR dosSantos, BL Esporcatte, FS Fortes, G Garzoni, RC Goldenberg, H Huang, R Linden, RS Lima, F Montalvo, M deNarateh, S Lachtermacher, RS Lima, N Meirelles Mde, F Nagajyothi, F Neto, A Rabischoffisky, D Rodrigues, SR Rogatto, MB Soares, BSF Souza, L Vairo, R Vasconcellos

**CHILE:** E Gonzales-Olivares, R Jimenez

COLOMBIA: H Morales, H Moreno-Rojas, A Munoz-Loiza

MEXICO: AF Collar, LL Rocha

**PANAMA:** R Howe **VENEZUELA:** JA Leon

V. AUSTRALIA: MJ Benson, K Borges