



University of Puerto Rico  
Medical Sciences Campus  
School of Medicine  
Associate Deanship  
of Biomedical Sciences



**FACULTY** and  
**Their RESEARCH**

**2019**  
**2020**



## ANATOMY AND NEUROBIOLOGY

### **Bruno Marie,**

Adjunct Professor; Ph.D., U Sussex  
UK, 1999.

Molecular mechanisms of  
neuronal synaptic growth  
and plasticity in *Drosophila*  
*melanogaster*, INB Lab 300, 314,  
INB Office 219

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787-721-4149 x238, 239, 278

### **Cristina M. Velázquez,**

Adjunct Professor; Ph.D., U  
Massachusetts Medical Center,  
2008.

*CNS plasticity in response to  
substance abuse*

INB Labs/Office 203-204,

[cristina.velazquez1@upr.edu](mailto:cristina.velazquez1@upr.edu)

787-721-4149 x237

### **Demetrio Sierra-Mercado,**

Assistant Professor; Ph.D., Ponce  
School of Medicine, 2010.

*The effects of traumatic brain injury  
on the formation and expression of  
memories*

MSC Main Bldg. Lab A-515 /  
Office A501A

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787-758-2525 x1521, 1572

### **Gregory J. Quirk,**

Adjunct Professor; Ph.D., SUNY at  
Brooklyn, 1990.

*Interactions at the prefrontal  
amygdala associated with fear  
conditioning*

MSC Main Bldg. Lab/Office A-231

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787-999-3057, 787-758-2525  
x2720, 2420, 2421

### **Jacqueline Flores-Otero,**

Assistant Professor; Ph.D., Rutgers  
University, 2009.

*Role of adhesion G protein-  
coupled receptors in regulation of  
retinoblastoma and prostate cancer  
development and progression.*

MSC Main Bldg. Office A501B,  
INB Lab/Office 315

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8410, MSC 787-758-2525 x1578

### **Jaime Inserni,**

Adjunct Professor; M.D., U Puerto  
Rico School of Medicine, 1983.

*Clinical neurosurgery. Development  
of cadaver neurosurgery laboratory  
for research and education.*

MSC Lab/Office A-546

787-758-2525 x1504

### **Jennifer L. Barreto-Estrada,**

Professor; Ph.D., UPR Río Piedras,  
2001.

*CNS molecular/cellular changes  
linked to reproductive health after  
exposure to androgens during  
puberty.*

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Office A-563B

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787-758-2525 x7013, x2300

### **Juan C. Jorge,**

Professor, Ph.D. Brandeis, 1997.

*Behavioral neuroendocrinology;  
sexual differentiation of behavior,  
urogenital malformations and  
sexual differences in abdominal  
anatomy.*

MSC Main Bldg. Lab/Office A-52

[juan.jorge@upr.edu](mailto:juan.jorge@upr.edu),

787-758-2525 x1506

## **Maria A. Sosa,**

Professor and Chair; Ph.D., U Florida, 1993.

*Neural basis of aggressive behavior and establishment of dominance hierarchies in a crustacean model system; Use of crustacean model systems to assess impact of environmental changes on behavior and neural function.*

MSC Main Bldg. Lab A-570, Office A561, INB Lab 112J

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MSC 787-758-2525 x 1514, 1503, INB 787-721-4149 x 276

## **Mark W. Miller,**

Professor; Ph.D., U Connecticut, 1980.

*Rhythmic activities in the nervous system of invertebrates. Neuroanatomy of Biomphalaria alexandrina and its potential role in impeding propagation of schistosomiasis*

INB Lab 112, INB Office 214, MSC Office A-566

[mark.miller@upr.edu](mailto:mark.miller@upr.edu),

INB 787-721-4149 x222, 225, 227, MSC 787-758-2525 x2269

## **Martine L. Behra,**

Associate Professor; Ph.D., University Louis Pasteur Strasbourg, France, 2002.

*Genetic and genomic approaches to study hair cell regeneration in the zebrafish lateral line.*

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787-758-2525 x1505, x 2120

## **Nivia L. Pérez-Acevedo,**

Professor; Ph.D., UPR Rio Piedras, 2001.

*Behavioral neuroendocrinology: Sex differences in anxiety and emotional memory*

MSC Main Bldg. Lab/Office A-556

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787-758-2525 x1512

## **Robert W. Kensler,**

Professor; Ph.D., SUNY at Stony Brook, 1978.

*Macromolecular structure of muscle thick filaments and associated accessory proteins.*

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787-758-2525 x1507

## **Roberto I. Meléndez,**

Associate Professor; Ph.D., Purdue U, 2002.

*Neural regulation of ethanol intake and ethanol relapse propensity during periods of inhibition in adolescents and adults,*

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## **Rosa E. Blanco,**

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*Visual system nerve regeneration and neuronal plasticity,*

Institute of Neurobiology (INB), Labs 112A/208-210/213/216, INB Office 220, MSC Office A-566

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INB 787-724-1962, MSC 787-758-2525 x 2269

## BIOCHEMISTRY

**Abel J. Baerga Ortiz,**

Associate Professor, Ph.D., U California, San Diego., 2001, *Biosynthesis of natural products; Enzyme structure, function and mechanisms.*

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787-758-2525 ext. 1623, 1640.

**Braulio D. Jiménez,**

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*Molecular and environmental toxicology.*

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787-758-2525 ext. 1235,1250

**Carmen L. Cadilla,**

Professor; Ph.D., Tennessee, Knoxville, 1986.

*Regulation of gene expression; genetic diseases affecting Puerto Ricans.*

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787-758-2525 ext.1638, 1372

**Dipak K. Banerjee,**

Professor; Ph.D., Calcutta, 1976.

*Cell signaling and angiogenesis; dolichol cycle and cell-cycle dynamics; glycoprotein biochemistry; catecholamine homeostasis; glycobiology.*

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787-758-2525 ext. 1624  
Lab. Ext. 1635

**Horacio Serrano Rivera,**

Associate Professor & Adjunct Professor Biochemistry., MS., Ph.D., Univ. Autónoma de Madrid 2008.

*Pharmaco-Proteomics, Toxicoproteomics and Quantitative-Proteomics in Basic Sciences and Clinical Research*

CCC – UPR Lab L-5

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**José R. Rodríguez-Medina,**

Professor and Chairman; Ph.D., Brandeis, 1986.

*Function of myosin II in yeast; cell wall biogenesis.*

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787-758-2525 ext. 2299 Lab.

Ext.1633

**José F. Rodríguez-Orengo,**

Professor; Ph.D., Texas A&M, 1989.

*Biochemical and pharmacological processes of antiretroviral and anticancer drugs.*

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787-758-2525 ext. 1349,1212

**Linette Castillo-Pichardo,**

Ph.D. Adjunct Professor, UPR, MSC, 2013.

*Experimental therapeutics for breast cancer.* (Assistant Professor, Department of Pathology and Laboratory Medicine, UCC

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787-798-3001 ext. 2150

**Marcia Cruz-Correa,**

Professor, MD, Ph.D, Baltimore,  
Maryland 2003.

*Genetic and epigenetics in  
colorectal cancer; hereditary  
cancer syndromes and cancer  
chemoprevention.*

[marcia.cruz1@upr.edu](mailto:marcia.cruz1@upr.edu)

787-772-8300 ext. 1214.

**Pablo E. Vivas Mejias,**

Assistant Professor, Ph.D.,  
Puerto Rico, Rio Piedras 2002.

*Small interference RNA,  
nanomedicine, role of leptin in  
cancer metastasis, mechanisms  
of drug resistance.*

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UPR School of Public Health  
& Coordinator, Biostatistics,  
Epidemiology and Bioinformatics  
Core (BEBiC), UPR/MDACC  
Partnership for Excellence in  
Cancer Research.

*Research interests and expertise:  
Epidemiologic methodology, HIV/  
AIDS and cancer epidemiology,  
social determinants of health,  
secondary data analysis,  
database design using REDCap,  
and STATA programming.*

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**Suranganie Dharmawardhane,**

Professor; Ph.D., Massachusetts,  
1987.

*Signal transduction in breast  
cancer metastasis, Targeted  
therapeutics for breast cancer,  
and Rho GTPase signaling.*

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Ext.1610

**Nataliya Chorna,**

Adjunct Professor; Ph.D. Kyiv,  
Ukraine, 1987.

Director PR-INBRE Metabolomics  
Research Core.

*Neuropsychiatric Disorders and  
Metabolism.*

Lab. A632 Ext. 1640.

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## MICROBIOLOGY AND MEDICAL ZOOLOGY

### **Adelfa E. Serrano,**

Professor; Ph.D., University of Georgia, GA. 1987.  
*Molecular mechanisms of drug resistance in malaria. Glutathione metabolism and development of Plasmodium berghei. Antimalarial drug discovery and pre-clinical testing.*  
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787-58-2525, Ext. 1313 (Office),  
1314, 2209, 2217 (Labs)

### **Ana M. Espino,**

Associate Professor; Ph.D., Institute of Tropical Medicine, Havana, Cuba, 1997.  
*Identification and molecular characterization of Fasciola hepatica antigens with potential for development of anti-inflammatory drugs. Helminth parasite interaction with toll-like receptors of antigen presenting cells.*  
[ana.espino1@upr.edu](mailto:ana.espino1@upr.edu)  
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### **Benjamin Bolaños,**

Associate Professor; Ph.D., Duke University, NC. 1983.  
*Tropical Aerobiology, outdoor and indoor fungal allergens. Director of the AAAA1-NAB San Juan station for the report of outdoor pollen and fungal spores. Outdoor allergens as triggers of asthma and allergies. Purification of tropical allergens from Basidiospores (Ganoderma applanatum) and xerophilic indoor fungi (Aspergillus penicilloides).*  
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787-759 8228,  
787-758-2525 Ext. 1319

### **Edna E. Aquino,**

Professor; Ph.D., Puerto Rico, Medical Sciences Campus, 2000.  
*Mechanisms of antimicrobial resistance in gram-negative bacilli.*  
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787-758-2525 Ext. 7027

### **Filipa Godoy-Vitorino,**

Associate Professor; Ph.D., UPR Rio Piedras, PR 2009.  
*Biology/Microbial Ecology. National Science Foundation Postdoctoral Fellow 2009-2012, Metagenomics (DOE-Joint Genome Institute). Microbiome, Microbial Diversity, Community Ecology, Microbial biomarkers, Host-microbiome symbioses in distinct phenotypes (HPV infections, Cancer, Obesity).*  
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**Guillermo J. Vázquez,** Professor and Chairman; M.D., Jefferson Medical College, PA, 1974.  
*Epidemiology, molecular mechanisms and genetic background of antimicrobial resistance in nosocomial pathogens.*  
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### **Idali Martínez Martínez,**

Professor; Ph.D., Rutgers University, NJ. 1995.  
*Development of dengue DNA vaccine; cross-protection among flaviviruses in the mouse model.*  
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787-758-2525 Ext. 1447, 1354

**Loyda M. Meléndez,**

Professor; Ph.D., Emory University, GA. 1990.  
*Experimental Pathology. Human Immunodeficiency Virus; Role of monocyte/macrophages in HIV neuropathogenesis and comorbidities (drugs); Proteomics of HIV neurological disorders. Role of placental macrophages in mother to child transmission of Zika virus Proteomic analysis of SIV-infected Rhesus Macaques in early infection.*

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787-758-2525, Ext. 2816, 2817

**Miguel A. Otero,**

Assistant Professor, Ph.D., UPR Rio Piedras Campus, 1998.  
*DNA-Vaccines against Smallpox.*  
[miguel.otero2@upr.edu](mailto:miguel.otero2@upr.edu)  
787-758-2525, Ext. 2098

**Raúl Rivera González,**

Assistant Professor, D.PH., School of Public Health, UPR, MSC, 2016.  
*Detection and characterization of Methicillin Resistant Staphylococcus aureus (MRSA) from hospitalized patients and marine beaches in Puerto Rico.*  
[raul.rivera8@upr.edu](mailto:raul.rivera8@upr.edu)  
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## Other faculty members (Joint or Ad-Honorem)

### **Carlos A. Sariol,**

Joint Faculty and Associate Professor, M.S., M.D.,  
University of Medical Sciences, Havana, Cuba.  
1987.

*Dengue pathogenesis and vaccine development  
in animal models (non-human primates) and  
dengue virus-interferon pathway interactions.*

[carlos.sariol1@upr.edu](mailto:carlos.sariol1@upr.edu)

787-758-2525, Ext. 1325, 1328

### **Humberto M. Guiot Martínez,**

Joint Faculty and Associate Professor,  
Department of Internal Medicine, Infectious  
Diseases Section. M.D., UPR, School of  
Medicine, 2001.

*HPV-related anal neoplasia.*

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787-758-2525, Ext. 1806

### **Jorge Muñoz Jordan,**

Ad-Honorem Faculty and Chief of Laboratory,  
CDC-Dengue Branch, San Juan, PR., Ph.D. The  
Rockefeller University. New York, NY. 2001.

*Dengue pathogeny and dengue virus-interferon  
pathway interactions.*

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## PHARMACOLOGY AND TOXICOLOGY

**Abraham Schwartz,**

Ad-honorem Professor, Ph.D.,  
Case Western Reserve University,  
1969.

*Flow Cytometry.*

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787-758-2525, Ext. 1303

**Adriana Báez-Bermejo,**

Professor; Ph.D., Madrid, 1977.

*Molecular genetics, epidemiological  
and clinical characteristics of Head  
and Neck Cancer.*

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787-758-2525 Ext. 1306

**Antonio H. Martins Baccin,**

Assistant Professor; Ph.D.,  
Universidade Federal de São Paulo,  
Escola Paulista de Medicina, 2008.  
*Neuroprotection against stroke and  
organophosphate poisoning.*

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787-758-2525 Ext. 1303

**Diógenes Herreño-Sáenz,**

Associate Professor; Ph.D., U  
Puerto Rico, Medical Sciences  
Campus, 1986.

*Chemical carcinogenesis.*

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787-758-2525 Ext. 1005

**Emma Fernández-Repollet,**

Professor; Ph.D., UPR, MSC, 1979.

*3-D Printing as an Educational  
Biomedical Tool. Biomedical  
Workforce Development.*

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**José G. Ortiz-Roque,**

Professor; Ph.D., Connecticut,  
1982. *Neuroactive properties of  
natural products.*

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**Philip C. Specht,**

Ad-honorem Professor; Ph.D.,  
SUNY Upstate Medical Center,  
1972.

*Computer simulation of  
pharmacokinetics; contagious  
diseases.*

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787-758-2525 Ext. 1304

**Susan C. Corey Best,**

Professor, Acting Chairman; Ph.D.,  
SUNY Upstate Medical Center,  
1971.

*Pharmacogene polymorphisms.*

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**Sylvette Ayala-Peña,**

Associate Professor; Ph.D.,  
University of Texas Medical Branch  
at Galveston, 1998.

*Mitochondrial DNA repair and  
mitochondrial bioenergetics in  
aging and neurodegeneration.*

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787-758-2525 Ext. 1374

**Yamil Gerena-López,**

Associate Professor; Ph.D., UPR,  
MSC, 2008.

*Mechanisms of insulin resistance  
and cognitive impairment in HIV.*

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## PHYSIOLOGY

**Annabell C. Segarra,**

Professor; Ph.D., NYU, 1988.  
*Neuroendocrinology of the reproductive system; estrogen, opioids, and cocaine sensitization.*  
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787-758-2525, x 1965, 1674

**Anita Rivera-Brown,**

Professor, Joint Appointment.  
UPR, MSC, 2004.  
*Exercise Physiology.*  
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787-824-2200, x 256

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Professor; Ph.D., U New Mexico,  
1986.  
*Neurophysiology of addiction.*  
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787-758-2525, x 1676, 1677

**Carlos A. Torres-Ramos,**

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Texas Medical Branch, 1996.  
*Physiological responses to nuclear  
and mitochondrial DNA damage.*  
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787-758-2525, x1393, 1645

**Guido Santacana,**

Professor; Ph.D., U Puerto Rico,  
Medical Sciences Campus, 1982.  
*Airway smooth muscle in  
conditions of low temperature  
and inflammatory airway disease.*  
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787-758-2525, x 1609

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Thames Polytechnic (London), 1982.  
*Physiology of invertebrate ganglia.*  
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7000

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of Medicine, 1996.  
*Axonal regeneration in the adult  
spinal cord.*  
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787-758-2525, Exts. 1631, 1615

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Medical Sciences Campus, 1993.  
*Vascular alterations in  
cardiovascular disease.*  
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787-758-2525, Exts. 5078, 5079

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*Membrane Transport and  
Cardiovascular Physiology.*  
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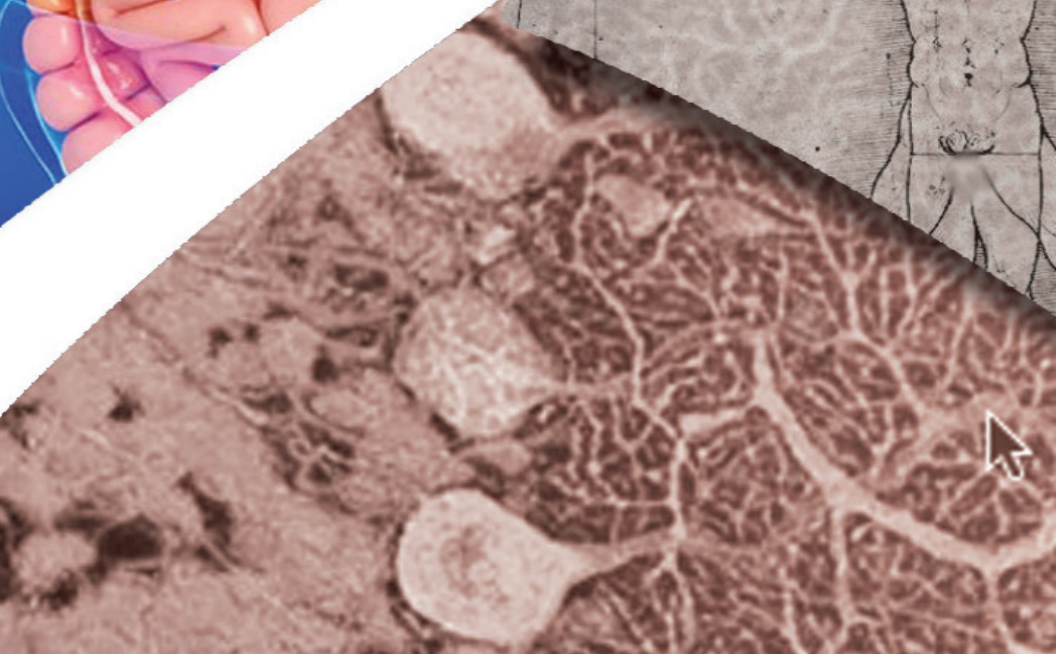
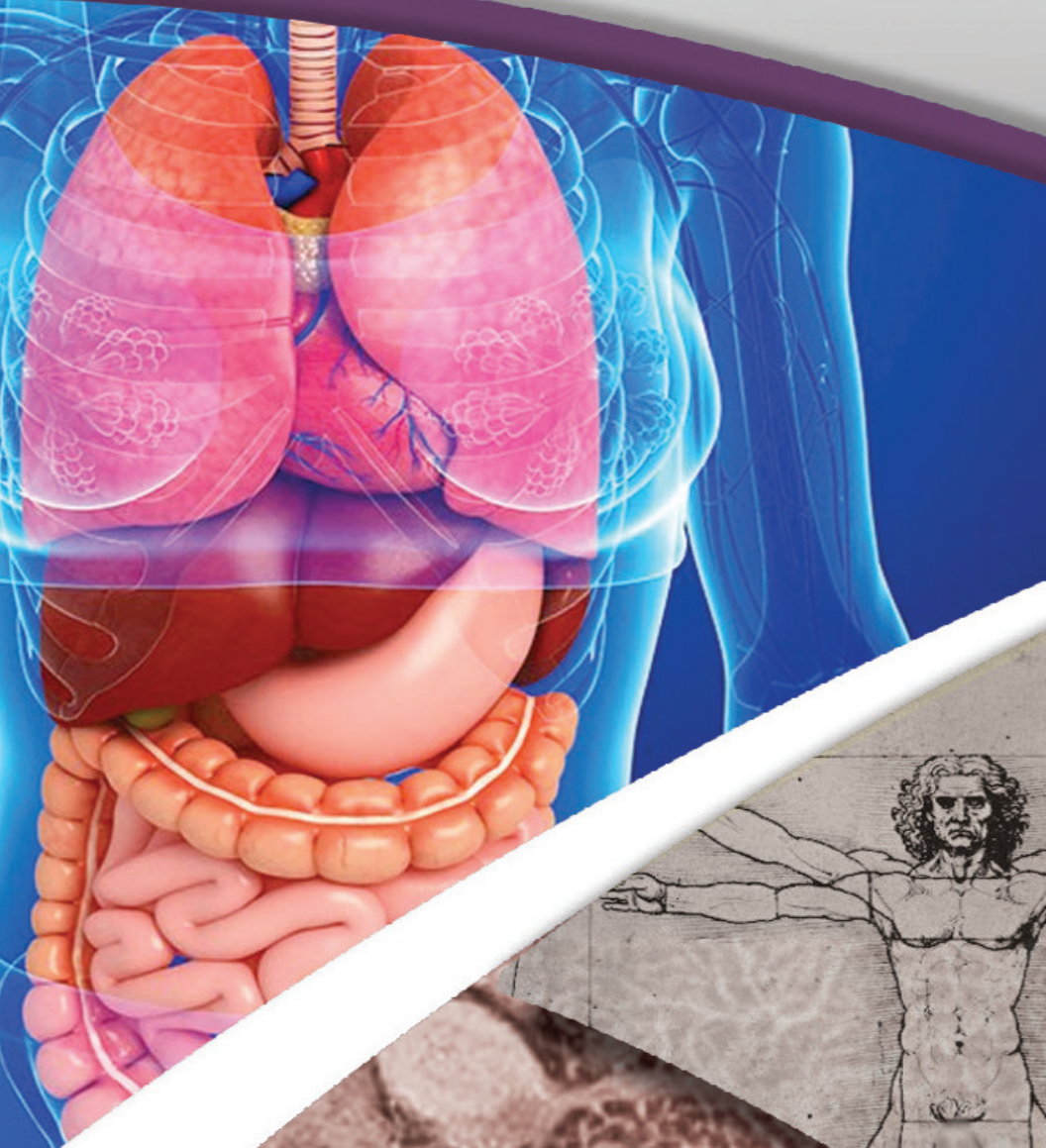
Professor, M.D., Ph.D., USSR  
Academy of Medical Sciences, 1986.  
*Mitochondria-mediated  
mechanisms of cardiac injury and  
cardioprotection.*  
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**Walter R. Frontera,**

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Appointment, UPR MSC, 1979.  
Ph.D., Boston U, 1986.  
*Exercise Physiology.*  
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**Walter I. Silva, Professor,**

Ph.D., NYU, 1986.  
*Caveolae and role of caveolins  
in glial cell model systems.*  
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