DAVID R. JANERO, Ph.D.

NORTHEASTERN UNIVERSITY
Bouvé College of Health Sciences
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SUMMARY OF QUALIFICATIONS

Over 30 years of experience as results-oriented R&D and business leader and educator in drug discovery and development. Innovative scientist with excellent analytical, problem-solving, and communication skills and brand experience in key therapeutic markets. Design and profiling of new chemical entities as small-molecule and protein-based therapeutics by integrating cell/molecular biology, medicinal chemistry, chemical biology, pharmacology, and drug discovery/development. Proven administrative, entrepreneurial, and research-strategy expertise in project and program management within and across varied therapeutic areas as part of "international big pharma," "start-up/emerging biotech," and academia. Success in building R&D teams, contributing to scientific and medical advances in unmet therapeutic areas, and leading multiple discovery campaigns that have brought novel leads to the clinic and therapeutics to market. Strong background in target identification/validation; technology/model development and transfer; competitive intelligence; building and nurturing intra- and extramural multicenter collaborations and strategic research and business alliances; and implementing and critically evaluating technological and product opportunities among diverse constituencies. Established and actively maintained consultancies aimed at reducing translational risk; optimizing predictive preclinical testing and hit-to-lead strategies; improving development-candidate selection/profiling; supporting regulatory compliance and trial progression; leading academia-industry collaborations to leverage innovation output for drug and technology commercialization; and serving as expert witness. Committed to educating and mentoring scientists-in-training to help them reach their full potential and prepare them to earn and advance their place in the professional world.

PROFESSIONAL EXPERIENCE

NORTHEASTERN UNIVERSITY, Boston, MA

Teaching Professor, Department of Pharmaceutical Sciences	2021-
Graduate Program Director, Pharmaceutical Sciences	2019 -
Vice-chair, Department of Pharmaceutical Sciences	2020 -
Visiting Professor, Department of Pharmaceutical Sciences	2019 - 2020
Deputy Director, Center for Drug Discovery	2010 - 2018
Assistant Director, Center for Drug Discovery	2007 - 2009

- Develop, coordinate, and teach state-of-the-art courses allied to the University's experiential learning approaches
- Establish and maintain productive interactions among intramural departments, technology-transfer operations, and research centers of excellence within the institution's entrepreneurial ecosystem
- Mentor students, fellows, and professional staff and promote career development
- Attract funding from private, government, and commercial sources
- Serve as in-house authority on the biotechnology and pharmaceutical industries, entrepreneurship, and drug discovery and commercialization
- Attract and initiate novel R&D projects and University-industry collaborations with good strategic fit for commercialization
- Translate University and Department technology and expertise
- Oversee and expand University intellectual-property interests and intellectual capital, including research publications, patents, and grants
- Represent University and Department activities intramurally and externally

INDEPENDENT BIOPHARMA CONSULTANT 2006 - present

- Evaluate the therapeutic potential and positioning of potential leads and market-attractive commercial avenues
- Formulate and validate predictive R&D approaches with translational utility, including *in silico* tools, chemogenomic strategies, target identification and validation, drug design and optimization, *in vitro* and *in vivo* disease models, biomarker identification, and phenotypic/systems-biology analyses
- Construct and analyze critical-path business and product-development strategies
- Participate in decision-making from quantitative SAR through candidate differentiation and safety and efficacy testing
- Organize and direct efforts to solve formulation and ADMET problems and detect/combat adverse activities and (potential) side-effects at preclinical and development stages
- Help drive candidate selection for human trials and progression through regulatory and clinical-testing processes
- Establish formal R&D agreements, working relationships, and business strategies between academia and industry to facilitate and expedite lead optimization, development candidate profiling, drug repositioning, and clinical testing
- Plan, organize, edit, write, and execute institutional and governmental regulatory and business documents, grants (e.g., SBIRs, STTRs, Center Grants, Research Project Grants, NIH-RAID), R&D agreements (e.g., LOIs, CRADAs), and allied presentations and journal publications
- Serve as expert witness regarding therapeutics, drug design/action, and pharmacology

NITROMED, INC., Lexington, MA 1994 - 2006
Last position held: Founding Senior Director, R&D

- Built and mentored interdisciplinary R&D teams that addressed market needs for sexual dysfunction, cardiovascular disease, hypertension, renal disease, oncology, metabolic syndrome, and inflammation
- Established from start-up and led the Company's *in vitro* and *in vivo* R&D in applied and translational biology to ensure timely compound pipeline progression, lead profiling, and development candidate flow
- Designed and implemented research and business strategies supporting corporate funding and clinical trials that led to a high-profile product launch and IPO
- Set corporate policy as R&D Committee and Scientific Advisory Board member
- Identified, critically evaluated, and championed novel extramural ventures and alliances that enriched corporate scientific and business profiles and expedited the business plan
- Supported clinical, regulatory, and licensing efforts as pharmacology advisor and spearheaded preclinical investigations toward next-generation products
- Key brand experience: BiDil® (heart failure)

NOVARTIS PHARMACEUTICALS, Summit, NJ 1989 - 1994
Last position held: Senior Research Fellow / Manager, R&D

- Implemented and fostered research programs that introduced and advanced drug candidates for hypertension, heart disease, diabetes, and oncology
- Devised and championed cutting-edge research approaches that improved compound targeting, pharmacokinetics, bioavailability, efficacy, and safety
- Managed productive R&D projects and teams that enhanced pipeline flow and broadened the mechanistic, pharmacological, and safety profiling of lead clinical candidates
- Key brand experience: Lescol®, Valsartan®, Losartan® (dyslipidemias/hypertension/heart disease); Femara® (oncology); Starlix® (diabetes)

HOFFMANN-LA ROCHE, INC., Nutley, NJ 1983 - 1989
Last position held: Research Investigator, Pharmacology

- Recruited and supervised productive research teams in applied pharmacology, drug discovery and profiling, and lead optimization
- Established and managed R&D projects that successfully identified and advanced clinical candidates/drugs for bronchopulmonary, obesity, cardiovascular, immunodeficiency, dermatology, and anti-infective indications
- Launched extramural strategic alliances across several therapeutic areas that extended corporate R&D and product portfolios

- Key brand experience: Xenical® (obesity/metabolic syndrome); Accutane® (dermatology); Cardene® (cardiovascular disease/hypertension/heart failure); Rocephin® (anti-infective)

ACADEMIC AFFILIATIONS

NORTHEASTERN UNIVERSITY, Boston, MA — 2007 - present

Professor (Adjunct Faculty), Department of Pharmaceutical Sciences, Bouvé College of Health Sciences — 2007 - 2018

Professor (Adjunct Faculty), Center for Drug Discovery — 2007 - 2018

Visiting Professor, Department of Pharmacutical Sciences — 2019 – 2021

Teaching Professor, Department of Pharmaceutical Sciences — 2020 -

BOSTON UNIVERSITY, School of Medicine, Boston, MA

Research Associate Professor, Biochemistry — 1995 - 2010

Visiting Scientist, Whitaker Cardiovascular Institute and Department of Medicine — 2003 – 2007

INTRAMURAL PROFESSIONAL ACTIVITIES

NORTHEASTERN UNIVERSITY, Boston, MA — 2007 – 2018

Program Director, MS in Medicinal Chemistry

Member, Center for Drug Discovery, Scientific Advisory Board *(ex officio)*

Member, Center for Drug Discovery, Strategic Advisory Board *(ex officio)*

Member, Curriculum Advisory Committee

Member, Strategic Planning Committee

Member, Graduate Education Committee, Pharmaceutical Sciences

Member, Biotechnology Council

Member, Research Advisory Council

Member, Health Sciences Entrepreneurs

Member, Executive Committee and Curriculum and Research Oversight Committee, Pre- and Postdoctoral Training Program in Medications Development (NIH Grant DA-007312), 1/7/07-6/30/13

Scientific Coordinator, Endocannabinoid Sites as Therapeutic Target (NIH Grant P01 DA009158-15), 7/1/14-6/30/19

Co-PI, Chemistry and Pharmacology of Drugs of Abuse Conference Series (NIH Grant R13 DA040423), 7/1/15-6/30/20

NORTHEASTERN UNIVERSITY, Boston, MA 2019 - present

Vice-chair, Department of Pharmaceutical Sciences
Chair, Graduate Education Committee, Pharmaceutical Sciences
Member, Bouvé College of Health Sciences Graduate Curriculum Committee
Member, Health Sciences Entrepreneurs
Member, School of Pharmacy and Pharmaceutical Sciences Executive Committee
Member, Bouvé College of Health Sciences Leadership Team

Current Member, MS Thesis / Ph.D. Examination / Dissertation Committees: Rokhand Arvan, Harvens Beauzile, Shashank Bhangde, Wilder Felix, Christopher Lucaj, Anh Minh Nguyen, Haley Oler, Dhaval Oza, Mega Suresh, Yuchen Yang

M.S. Thesis-committee Mentorships Completed

L. Lindsley (Pharmaceutical Sciences) May, 2010
"Neutral Antagonists as G Protein Coupled Receptor-directed Medicines"

S. Mallipeddi (Pharmaceutical Sciences) May, 2012
"In Vitro Expression of Human Cannabinoid 1 Receptor for Ligand-assisted Binding Site Characterization"

J. Raghav (Pharmaceutical Sciences) July, 2014
"A Soft-drug Approach for Cannabinoids"

K. Raja (Medicinal Chemistry) August, 2017
"Novel Allosteric Modulators of the α7 Nicotinic Acetylcholine Receptor"

Ph.D. Dissertation-committee Mentorships Completed

R. Sharma (Pharmaceutical Sciences) May, 2011
"Cannabinergic Analogs with Controlled Detoxification as Potential Therapeutics"

M. D'Souza (Pharmaceutical Sciences) May, 2012
"Novel Cannabidiol and Anandamide Analogs"

I. Karageorgos (Pharmaceutical Sciences) August, 2012
"The Mechanism of Monoacylglycerol Lipase Inactivation: A Study Using Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry"

R.G. Kini (Pharmaceutical Sciences and Inflammation and Tissue Protection Institute) August, 2012
"Mechanism of A2A Adenosine Receptor-mediated Immunosuppression in Inflamed Tissue Microenvironment"

M. Subramanian (Pharmaceutical Sciences and Inflammation and Tissue Protection Institute) August, 2012

"Mechanism of Adenosinergic Regulation of T-cell Mediated Acute Hepatitis"

S. Tai (Pharmaceutical Sciences) August, 2012
"Behavioral Pharmacology of Cannabinoids: Towards an Animal Model for Studying Cannabinoid Dependence/Withdrawal"

M. Nasr (Pharmaceutical Sciences) May, 2013
"Impact of Conformational Dynamics on the Molecular Enzymology of Human Monoacylglycerol Lipase as Drug Target"

M. Trivedi (Pharmaceutical Sciences) June, 2013
"Redox/Methylation Signaling: A Novel Epigenetic-based Mechanism of Opioid Drug Action"

G. Chopda (Pharmaceutical Sciences) August, 2013
"Cannabinoid-mediated Diuresis in Mice"

D. Deshpande (Pharmaceutical Sciences, Pharmaceutics, Drug Delivery) August, 2013
"Multimodal Omega-3 Fatty Acid Oil-containing Nanoemulsion-based Therapeutic Strategy for the Treatment of Endothelial Dysfunction in Coronary Artery Disease"

A. Jamal-Allial (Pharmaceutical Sciences, Statistics, Epidemiology) August, 2013
"Serum 25(OD)D Concentrations and Cardiovascular Disease Risk Associations Among Older Puerto Ricans"

M. Johnson (Pharmaceutical Sciences) December, 2014
"Analysis of the Structure and Function of Endocannabinoid Hydrolyzing Enzymes Using Biophysical and Nanomedical Techniques"

K. Hu (Pharmaceutical Sciences) August, 2016
"Distribution of Exogenous Radiolabeled Anandamide and Related Compounds in the Mouse Brain"

S. Mallipeddi (Pharmaceutical Sciences) December, 2016
"Biochemical and Biophysical Study of Cannabinoid 1 and Cannabinoid 2 Receptors"

A. Aly (Pharmaceutical Sciences) May, 2017
"An Intranasal GDNF Gene Therapy Approach for Treating Parkinson's Disease"

A. Korde (Pharmaceutical Sciences) May, 2017
"Ligand Binding-site Characterization of Human Cannabinoid Receptors"

M. Silva (Pharmaceutical Sciences and Tissue Protection and Inflammation Institute) June, 2017
"Driving the Germinal Center Reaction toward Subdominant Epitopes: A Potential Vaccination Strategy to Neutralize HIV"

G. Rajarshi (Pharmaceutical Sciences) July, 2017
"Characterization of the Endocannabinoid Enzyme Monoacylglycerol Lipase by Mutagenesis, Kinetics Analyses, and Nuclear Magnetic Resonance Spectroscopy"

B. Garg (Pharmaceutical Sciences) July, 2017
"Investigating the Role of α7 Nicotinic Receptors in Inflammation"

T. Hall (Pharmaceutical Sciences) August, 2017
"Investigation into Fatty Acid Ethyl Esters in Mouse Brain after Ethanol Treatment: Detection, Quantification, and Potential Toxicity"

C. Miyabe-Shields (Pharmaceutical Sciences) January, 2018
"Biochemical Characterization of Human Alpha/Beta-hydrolase Domain Containing 6 as Therapeutic Target"

Q. Ye (Pharmaceutical Sciences) May, 2019
"The Role of Brain Iron Loading in Redox-Epigenetic Regulation of Psychiatric-like Behavior"

J. Gleba (Pharmaceutical Sciences) May, 2019
"A Mechanism-based Forensic Investigation into the Postmortem Redistribution of Morphine"

K. Bugda Gwilt (Pharmaceutical Sciences) May, 2019
"Trace Amnergic Regulation of Gastrointestinal Inflammation: A Novel Strategy for Ulcerative Colitis"

Y. Yang (Pharmaceutical Sciences) August, 2022
Activation of Adenosine A2A Receptors Regulates HIF-1α Accumulation *via* Sumoylation

Ph.D. Qualifying Examination Committees Completed

H. Zhou (Chemistry and Chemical Biology) September, 2011
"Ligand-assisted Protein-structure Characterization: Binding and Functional Motifs of Ligands of the CB2 Cannabinoid Receptor"

B. Garg (Pharmaceutical Sciences) December, 2014
"The Anti-inflammatory Role of α7 Nicotinic Acetylcholine Receptor and its Ligands"

S. Mallipeddi (Pharmaceutical Sciences) December, 2014
"Biochemical and Biophysical Studies of Cannabinoid 1 and 2 Receptors"

A. Korde (Pharmaceutical Sciences) December, 2014
"Ligand Binding-site Studies of the Human Cannabinoid Receptor"

Q. Ye (Pharmaceutical Sciences) August, 2016
"The Role of Brain Iron Loading in Redox-Epigenetic Regulation of Psychiatric-like Behavior"

J. Gleba (Pharmaceutical Sciences) September, 2016
"A Mechanism-based Forensic Investigation into the Postmortem Redistribution of Morphine"

K. Gwilt (Pharmaceutical Sciences) November, 2017
"Trace Amine Associated Receptor 1 as Anti-inflammatory Drug Target"

P. Schaffer (Pharmaceutical Sciences) December, 2017
"Design and Development of Novel Cannabinoid Receptor Allosteric Modulators"

L. Cantwell (Pharmaceutical Sciences) December, 2017
"Development of Novel, Subtype-selective GIRK1/2-channel Activators for Treating Neuropathic Pain"

W. Felix (Pharmaceutical Sciences) December, 2020
"Optimized Bivalent Ligands for Pain"

J. Kamune (Pharmaceutical Sciences) December, 2020
"Regulation of Voltage-Gated Sodium Channel 1.5 by Calmodulin and Phosphatidylinositol-4,5-bisphosphate"

S. Thigale (Pharmaceutical Sciences) December, 2020
"Structure Determination A2aR-D2R Heteromer by Cryo-electron Microscopy"

D. Oza (Pharmaceutical Sciences) December, 2020
"Exploring Peritoneal Macrophage Migration in Acute Tissue Injury and Harnessing Its Potential for Mitigating Acetaminophen-induced Liver Injury Using RNAi Delivery to Macrophages"

A, M. Nguyen (Pharmaceutical Sciences) May, 2022
Gαs/Gαolf-dependent Pharmacological Profile *In Vitro* and *In Vivo* of a Novel Dopamine D1 Receptor Agonist

M. Suresh (Pharmaceutical Sciences) November, 2022
Nanoparticle-mediated MicroRNA Delivery to Modulate Macrophage Plasticity in Idiopathic Pulmonary Fibrosis

Teaching / Lecture Service

"Chemistry and Biology of Drugs of Abuse" (course director, 2007-2017)
"Receptor Pharmacology"
"Drug Design and Development"
"Biophysical Methods in Drug Discovery"
"Medicinal Chemistry-Drug Discovery Journal Club"
"Pharmacology Journal Club"
"Bio-organic and Medicinal Chemistry"
"Entrepreneurship in the Health Sciences"
"Introduction to Pharmaceutical Sciences"
"Pharmacology 2"

SELECT EXTRAMURAL PROFESSIONAL ACTIVITIES

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, MA
Venture Mentoring Service
Member (completed five-year term) 2006 - 2011
Ad-hoc 2012 -

NATIONAL SCIENCE FOUNDATION, Washington, DC
Advisor, Industrial Innovation and Partnerships Programs 2013 -

NEW YORK ACADEMY OF SCIENCES, New York, New York
Advisor, Program for STEM Scientist Professional Development 2017 -

Editorial Board Member, *Free Radical Biology and Medicine* 1992 - 2000
Editorial Board Member, *Expert Opinion on Drug Discovery* 2011- 2013
Editor-in-Chief, *Expert Opinion on Drug Discovery* 2013-
Editorial Board Member, *Biomedicines* 2012 - 2017
Editorial Advisor, Elsevier/Academic Press 2012 -
Member, Federation of American Societies for Experimental Biology 1991 -
Member, American Society for Pharmacology and Experimental Therapeutics 1991 -
Member, New York Academy of Sciences 2010 -
Member, Yale Boston Biomedical Group 2012 -

REVIEWER (ad-hoc) for leading biochemistry, physiology, pharmacology, medicinal chemistry, and clinical journals, international private and government granting institutions, and biomedical publishers

EDUCATION

JOHNS HOPKINS UNIVERSITY, School of Medicine, Baltimore, MD
National Institutes of Health **Postdoctoral Fellow**, Physiological Chemistry

YALE UNIVERSITY, School of Medicine, New Haven, CT
Biomedical Sciences Program
Ph.D., Cell Biology and Molecular Medicine

BOSTON UNIVERSITY, Boston, MA
B.A. *summa cum laude, Phi Beta Kappa*
Biology major, Chemistry minor; *research honors*, Molecular Genetics

BIBLIOGRAPHY

Research Publications

Janero, D.R. and R.J. Barrnett. 1981. Analytical prenyl pigment separation from a total green-plant lipid extract. *Anal. Biochem.* 111:283-290.

Janero, D.R. and R.J. Barrnett. 1981. Analytical separation of green-plant and animal neutral lipids by thin-layer chromatography. *J. Chromatogr.* 216:417-422.

Janero, D.R. and R.J. Barrnett. 1981. Thylakoid membrane biogenesis in *Chlamydomonas reinhardtii* 137^+. Cell cycle variations in the synthesis and assembly of polar glycerolipid. *J. Cell Biol.* 91:126-134.

Janero, D.R. and R.J. Barrnett. 1981. Cellular and thylakoid-membrane glycolipids of *Chlamydomonas reinhardtii* 137^+. *J. Lipid Res.* 22:1119-1125.

Janero, D.R. and R.J. Barrnett. 1981. Cellular and thylakoid-membrane phospholipids of *Chlamydomonas reinhardtii* 137^+. *J. Lipid Res.* 22:1126-1130.

Janero, D.R. and R.J. Barrnett. 1982. Comparative analysis of diacylglyceryl-trimethylhomoserine in *Ochromonas danica* and in *Chlamydomonas reinhardtii*. *Phytochemistry* 21:47-50.

Janero, D.R. and R.J. Barrnett. 1982. Cardiolipin of *Chlamydomonas reinhardtii* 137^+. *Phytochemistry* 21:1151-1153.

Janero, D.R. and R.J. Barrnett. 1982. Isolation and characterization of an ether-linked homoserine lipid from the thylakoid membrane of *Chlamydomonas reinhardtii* 137^+. *J. Lipid Res.* 23:307-316.

Janero, D.R. and R.J. Barrnett. 1982. Sterol synthesis in *Chlamydomonas reinhardtii* 137^+. Cell-cycle variations. *Biochim. Biophys. Acta* 710:242-247.

Janero, D.R. and R.J. Barrnett. 1982. Thylakoid membrane biogenesis in *Chlamydomonas reinhardtii* 137^+. II. Cell-cycle variations in the synthesis and assembly of pigment. *J. Cell Biol.* 93:411-416.

Janero, D.R. and R.J. Barrnett. 1982. Thylakoid membrane biogenesis in *Chlamydomonas reinhardi* 137^+. Cell-cycle variations in the synthesis of phospholipids of non-photosynthetic membranes. *Exp. Cell Res.* 138:451-454.

Jelsema, C.L., A.S. Michaels, ***D.R. Janero*** and R.J. Barrnett. 1982. Membrane lipid metabolism in *Chlamydomonas reinhardtii* 137^+ and y-1. Biochemical localization and characterization of acyltransferase activities. *J. Cell Sci.* 58:469-488.

Siuta-Mangano, P., ***D.R. Janero*** and M.D. Lane. 1982. Association and assembly of triglyceride and phospholipid with glycosylated and unglycosylated apoprotein of very low density lipoprotein in the intact liver cell. *J. Biol. Chem.* 257:11463-11467.

Janero, D.R. and M.D. Lane. 1983. Sequential assembly of very low density lipoprotein apolipoproteins, triacylglycerol, and phosphoglycerides by the intact liver cell. *J. Biol. Chem.* 258:14496-14504.

Janero, D.R. and B. Burghardt. 1988. Protection of rat myocardial phospholipid against peroxidative injury through superoxide (xanthine oxidase)-dependent, iron-promoted Fenton chemistry by the male contraceptive gossypol. *Biochem. Pharmacol.* 37:3335-3342.

Janero, D.R. and B. Burghardt. 1988. Analysis of cardiac membrane phospholipid peroxidation kinetics as malondialdehyde: non-specificity of thiobarbituric acid-reactivity. *Lipids* 23:452-458.

Janero, D.R., B. Burghardt and C. Burghardt. 1988. Specific binding of 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine (platelet-activating factor) to the intact canine platelet. *Thrombosis Res.* 50:789-802.

Janero, D.R., C. Burghardt and D. Feldman. 1988. Amphiphile-induced heart muscle-cell (myocyte) injury: effects of intracellular fatty acid overload. *J. Cell. Physiol.* 137:1-13.

Janero, D.R., B. Burghardt and C. Burghardt. 1988. Radioligand competitive binding methodology for the estimation of platelet-activating factor (PAF) and the evaluation of PAF-receptor antagonism using intact canine platelets. *J. Pharmacol. Meth.* 20:237-253.

Janero, D.R., B. Burghardt and R. Lopez. 1988. Protection of cardiac membrane phospholipid against oxidative injury by calcium antagonists. *Biochem. Pharmacol.* 37:4197-4203.

Janero, D.R. and B. Burghardt. 1988. Myocardial membrane vitamin E (alpha-tocopherol) contents of spontaneously hypertensive and Wistar-Kyoto normotensive rats. *Int. J. Vit. Nutr. Res.* 58:292-294.

Janero, D.R. and B. Burghardt. 1989. Cardiac membrane malondialdehyde and vitamin E levels in normotensive and spontaneously hypertensive rats. *Lipids* 24:33-38.

Janero, D.R. and B. Burghardt. 1989. Thiobarbituric acid-reactive malondialdehyde formation during superoxide-dependent, iron-catalyzed lipid peroxidation: influence of peroxidation conditions. *Lipids* 24:125-131.

Janero, D.R., R. Lopez, J. Pittman and B. Burghardt. 1989. Propranolol as xanthine oxidase inhibitor: implications for antioxidant activity. *Life Sci.* 44:1579-1588.

Janero, D.R. and B. Burghardt. 1989. Prevention of oxidative injury to cardiac phospholipid by membrane-active stabilizing agents. *Res. Commun. Chem. Pathol. Pharmacol.* 63:163-173.

Janero, D.R. and C. Burghardt. 1989. Non-esterified fatty acid accumulation and release during heart muscle-cell (myocyte) injury: modulation by extracellular "acceptor." *J. Cell. Physiol.* 140:150-160.

Janero, D.R. and B. Burghardt. 1989. Antiperoxidant effects of dihydropyridine calcium antagonists. *Biochem. Pharmacol.* 38:4344-4348.

Janero, D.R., B. Burghardt, R. Lopez and M. Cardell. 1989. Influence of cardioprotective cyclooxygenase and lipoxygenase inhibitors on peroxidative injury to myocardial membrane phospholipid. *Biochem. Pharmacol.* 38:4381-4387.

Janero, D.R. and B. Burghardt. 1989. Oxidative injury to myocardial membrane: direct modulation by endogenous alpha-tocopherol. *J. Mol. Cell. Cardiol.* 21:1111-1124.

Janero, D.R., N. Cohen, B. Burghardt and B. Schaer. 1990. Novel 6-hydroxychroman-2-carbonitrile inhibitors of membrane peroxidative injury. *Biochem. Pharmacol.* 40:551-558.

Janero, D.R. and C. Burghardt. 1990. Solid-phase extraction on silica cartridges as an aid to platelet-activating factor enrichment and analysis. *J. Chromatogr.* 526:11-24.

Janero, D.R., C. Burghardt and B. Burghardt. 1990. Production and release of platelet-activating factor by the injured heart-muscle cell (myocyte). *Res. Commun. Chem. Pathol. Pharmacol.* 67:201-218.

Ooiwa, H., ***D.R. Janero***, A.W.H. Stanely and J.M. Downey. 1991. Examination of two small-molecule antiperoxidative agents in a rabbit model of post-ischemic myocardial infarction. *J. Cardiovasc. Pharmacol.* 17:761-767.

Crowley, H.J., B. Yaremko, W.M. Selig, ***D.R. Janero***, C. Burghardt, A.F. Welton and M. O'Donnell. 1991. Pharmacology of a novel platelet-activating factor (PAF) antagonist: Ro 24-4736. *J. Pharmacol. Exp. Ther.* 259:78-85.

Janero, D.R., D. Hreniuk and H.M. Sharif. 1991. Hydrogen peroxide-induced oxidative stress to the mammalian heart-muscle cell (cardiomyocyte): lethal peroxidative membrane injury. *J. Cell. Physiol.* 149:347-364.

Janero, D.R., C. Yarwood and J.K. Thakkar. 1992. Application of solid-phase extraction on anion-exchange cartridges to quantify 5'-nucleotidase activity. *J. Chromatogr.* 573:207-218.

Thakkar, J.K., ***D.R. Janero***, C. Yarwood, H. Sharif and D. Hreniuk. 1993. Isolation and characterization of AMP deaminase from mammalian (rabbit) myocardium. *Biochem. J.* 290:335-341.

Thakkar, J.K., ***D.R. Janero***, C. Yarwood and H. Sharif. 1993. Modulation of mammalian cardiac AMP deaminase by protein kinase C-mediated phosphorylation. *Biochem. J.* 291:523-527.

Ross, J., ***D.R. Janero*** and D. Hreniuk. 1993. Identification and molecular characterization of a high-affinity cardiomyocyte transforming growth factor-β2 receptor. *FEBS Lett.* 320:229-234.

Janero, D.R., D. Hreniuk and H. Sharif. 1993. Hydrogen peroxide-induced oxidative stress to the mammalian heart-muscle cell (cardiomyocyte): nonperoxidative purine and pyrimidine nucleotide depletion. *J. Cell. Physiol.* 155:494-504.

Ross, J., ***D.R. Janero***, D. Hreniuk and L. Wennogle. 1993. Radioiodination of transforming growth factor-β (TGF-β) in a modified Bolton-Hunter reaction system. *J. Biochem. Biophys. Methods* 26:343-350.

Janero, D.R., D. Hreniuk, H.M. Sharif and K.C. Prout. 1993. Hydroperoxide-induced oxidative stress alters pyridine nucleotide metabolism in the neonatal heart-muscle cell. *Am. J. Physiol.* 264:C1401-C1410.

Ross, J., ***D.R. Janero*** and D. Hreniuk. 1993. Identification and biochemical characterization of a heart-muscle cell transforming growth factor-β1 receptor. *Biochem. Pharmacol.* 46:511-516.

Sandhu, G.S., A.C. Burrier and ***D.R. Janero***. 1993. Adenosine deaminase inhibitors attenuate ischemic injury and preserve energy balance in isolated guinea-pig heart. *Am. J. Physiol.* 265:H1249-H1256.

Janero, D.R., D. Hreniuk and H.M. Sharif. 1994. Hydroperoxide-induced oxidative stress impairs heart muscle-cell carbohydrate metabolism. *Am. J. Physiol.* 266:C179-C188.

Thakkar, J.K., ***D.R. Janero***, H.M. Sharif, D. Hreniuk and C. Yarwood. 1994. Cardiac adenylate deaminase: molecular, kinetic, and regulatory properties under phosphate-free conditions. *Biochem. J.* 300:359-363.

Janero, D.R. and C. Yarwood. 1995. Oxidative modulation and inactivation of mammalian (rabbit) cardiac adenylate deaminase. *Biochem. J.* 306:421-427.

Thakkar, J.K., ***D.R. Janero***, H.M. Sharif and C. Yarwood. 1995. Mammalian-heart adenylate deaminase: cross-species immunoanalysis of tissue distribution with a cardiac-directed antibody. *Mol. Cell. Biochem.* 145:177-183.

Ewing, J.F. and ***D.R. Janero***. 1995. Microplate superoxide dismutase assay employing a nonenzymatic superoxide generator. *Anal. Biochem.* 232:243-248.

Janero, D.R. and D. Hreniuk. 1996. Suppression of TCA cycle activity in the cardiac muscle cell by hydroperoxide-induced oxidant stress. *Am. J. Physiol.* 270:C1735-C1742.

Ewing, J.F., ***D.R. Janero***, T.A. Grinnell, J.D. Schroeder and D.S. Garvey. 1997. Reactivity of nitrogen monoxide species with NADH: implications for nitric oxide-dependent post-translational protein modification. *Arch. Biochem. Biophys.* 343:131-139.

Ewing, J.F., D.V. Young, ***D.R. Janero***, D.S. Garvey and T.A. Grinnell. 1997. Nitrosylated bovine serum albumin derivatives as pharmacologically active nitric oxide congeners. *J. Pharmacol. Exp. Ther.* 283:947-954.

Ewing, J.F. and ***D.R. Janero***. 1998. Specific *S*-nitrosothiol quantification as solution nitrite after vanadium(III) reduction and ozone-chemiluminescent detection. *Free Radical Biol. Med.* 25:621-628.

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