

ПРИМЉЕНО:			
		15. 06. 2022	
Орг. јед.	Број	Година	Број редности
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УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ  
ФАКУЛТЕТ МЕДИЦИНСКИХ НАУКА  
НАСТАВНО-НАУЧНОМ ВЕЋУ

Поштоване колеге,

обраћамо Вам се молбом испред катедри за основну и последипломску наставу из Физиологије са предлогом за избор у гостујућег (визитинг) професора нашег Факултета проф. др **Лорија Киршенбаума (Lorrie Kirshenbaum)**. Др Киршенбаум је директор Института за кардиоваскуларне науке St. Boniface Hospital Albrechtsen Research Centre, Манитоба, Канада, директор Центра за развој истраживања и шеф катедре за Физиологију и патофизиологију Max Rady College of Medicine, Rady Faculty of Health Sciences, Манитоба, Канада. У погледу сциентометријских података, између осталог треба поменути и то да је проф. Киршенбаум је аутор десетина књига и поглавља, рецензент више десетина престижних светских часописа, аутор преко 160 радова на SCI/СС листи, ментор великог броја докторских дисертација, аутор два патента и позивни предавач на преко 100 симпозијума.

Будући да је проф. Киршенбаум глобално један од најеминентнијих истраживача из области кардиоваскуларне физиологије, избор у гостујућег професора би учинио реалним могућности успостављања наставно-научних пројеката, који би, имајући у виду светски познати реноме проф. Киршенбаума, немерљиво значио Факултету медицинских наука и Универзитету у Крагујевцу.

У прилогу Вам достављамо биографију и библиографију проф. др Лорија Киршенбаума.

С поштовањем,

ШЕФ КАТЕДРЕ ЗА ОСНОВНУ НАСТАВУ  
ИЗ ФИЗИОЛОГИЈЕ

Проф. др Гвозден Росић



ШЕФ КАТЕДРЕ ЗА ПОСЛЕДИПЛОМСКУ  
НАСТАВУ ИЗ ФИЗИОЛОГИЈЕ

Проф. др Владимир Живковић



## CURRICULUM VITAE

**Name:** **LORRIE ALLAN KIRSHENBAUM**

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Fax: (204) 233-6723  
E-mail: lkirshenbaum@sbrc.ca

**Citizenship:** Canadian

### **Academic Qualifications and Employment:**

Director	Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre (2017 – present)
Head	Division of Cardiovascular Science and Disease, Department of Physiology and Pathophysiology Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba (2017 – present)
Director	Research Development, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba (2008 – present)
Professor	Department of Physiology and Pathophysiology, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba (2004 – present)
Professor	Department of Pharmacology and Therapeutics, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba (2004 – present)
Director (Acting)	Basic Medical Research, St. Boniface Hospital Research Centre (02/2005 – 09/2005)

Associate Professor	Department of Physiology and Pathophysiology, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba (1998 –2004)
Assistant Professor	Department of Physiology and Pathophysiology, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba (1995 – 1998)
Post-Doctoral Research Fellow	Department of Medicine, Section of Cardiology, Baylor College of Medicine, Houston, Texas (1992 – 1995)
Ph.D.	Department of Physiology, Faculty of Medicine University of Manitoba (1992)
M.Sc.	Department of Pharmacology and Therapeutics, Faculty of Medicine, University of Manitoba (1988)
B.Sc. (Hons.)	Department of Microbiology, Faculty of Science, University of Manitoba (1986)

**Academic Honours and Awards**

1988	Canadian Society for Clinical Investigation Student Research Award by the Royal College of Physicians and Surgeons of Canada, Ottawa, Canada
1990	Medical Research Council of Canada Research Student Fellowship
1992	Heart and Stroke Foundation of Canada, Post-Doctoral Research Fellowship
1992	Heart and Stroke Foundation of Canada, Top Ranked Applicant Award
1993	St. Boniface General Hospital Research Foundation Inc. Award, in Cardiovascular Biology, Winnipeg, Canada
1993	American Heart Association Young Investigator Trainee Award, Pacific Grove, USA
1993	American Federation for Clinical Research Trainee Investigator Award, Washington, USA
1995	American Heart Association Young Investigator Trainee Award, New Orleans, USA
1995	Baylor College of Medicine, Outstanding Basic Sciences Research Award, Houston, USA
1992	Medical Research Council of Canada Post-Doctoral Research Fellowship Award
1995	Up John Pharmaceutical Company Young Investigator Award, For Excellence in Cardiovascular Research Presented by the International Society for Heart Research, Orange Beach, USA
1995	Manitoba Health Research Council Scholarship
1996	Heart and Stroke Foundation of Canada Scholarship Award

- 1997 Canadian Cardiovascular Society Young Investigator Award, For Excellence in Cardiovascular Research
- 1998 University of Manitoba Merit Award for Outstanding Achievement in Research and Teaching, University of Manitoba, Winnipeg, Canada
- 2000 Canadian Society for Clinical Investigation, Joe Doupe Young Investigator Award, Ottawa, Canada
- 2000 Canadian Cardiovascular Society, Dr. R.E. Beamish Award for Excellence in Cardiovascular Research
- 2002 Ken Hughes Young Investigator Distinguished Medical Research Award, Faculty of Medicine, University of Manitoba, Winnipeg, Canada
- 2003 Rh Institute Foundation Award for Excellence in Health Research - Clinical
- 2001 Canada Research Chair Tier II in Molecular Cardiology
- 2003 Heart and Stroke Foundation of Manitoba, Dr. R.E. Beamish Memorial Award for Highest Ranked Operating Grant
- 2006 Canada Research Chair Tier II in Molecular Cardiology
- 2008 Distinguished Chemist Award, Chemical Institute of Canada
- 2009 University of Manitoba Merit Award for Research Excellence, Faculty of Medicine, Winnipeg, Canada
- 2009 Fellow of American Heart Association
- 2010 Fellow of the International Society for Heart Research, Kyoto, Japan
- 2010 Heart and Stroke Foundation, Dr. R.E. Beamish Memorial Award for Highest Ranked Operating Grant
- 2010 Fellow of International Academy of Cardiovascular Sciences
- 2011 Canada Research Chair Tier I in Molecular Cardiology
- 2011 Aab Cardiovascular Research Award, University of Rochester Medical Center, Rochester, New York
- 2011 Fellow of Functional Genomics and Translational Biology, American Heart Association
- 2012 Fellowship of Canadian Academy of Health Sciences, Ottawa, Canada
- 2012 Dr. R.E. Beamish Memorial Award, Heart and Stroke Foundation of Manitoba, Winnipeg, Canada
- 2013 Senator Ronald Duhamel Innovation Award St. Boniface Hospital, Winnipeg, Canada
- 2016 Distinguished Lectureship Award University of Guelph, Guelph, Canada
- 2018 Canada Research Chair Tier I in Molecular Cardiology
- 2018 Howard Morgan Award for Distinguished Achievements in Cardiovascular Research, International Academy of Cardiovascular Sciences, Smolenice, Slovak Republic
- 2018 Norman Alpert Award for Established Investigators in Cardiovascular Sciences, International Academy of Cardiovascular Sciences, Havana, Cuba
- 2018 Lifetime Achievement Award in Cardiovascular Sciences, Cuban Society of Cardiology, International Academy of Cardiovascular Sciences, Havana, Cuba
- 2018 Distinguished Alumni Professional Achievement Award University of Manitoba, Winnipeg, Canada
- 2019 James T. Willerson Distinguished Lectureship Texas Heart Institute, Houston, USA

2019	Bohuslav Ostadal Award for Excellence in Cardiovascular Sciences, International Academy of Cardiovascular Sciences, Belgrade, Serbia
2020	Suresh K. Gupta Oration Lectureship Award, International Conference of Cardiovascular Sciences, New Delhi, India
2020	Canadian Cardiovascular Society, Research Achievement Award, Ottawa, Canada
2021	Naranjan Dhalla Honorary Lectureship Award, International Academy of Cardiovascular Sciences (Banja Luka, Bosnia and Herzegovina)

<b><u>TOTAL RESEARCH FUNDING TO DATE</u></b>	<b><u>\$20,472,863</u></b>
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<b><u>Current Funding and External Grant Support</u></b>	<b><u>Per Annum</u></b>
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1.	Canada Research Chair I in Molecular Cardiology 04/2018 – 03/2025	\$200,000
2.	Canadian Institutes for Health Research <i>Regulation of Programmed Cell Death in the Heart</i> 07/2016 – 06/2023 (Foundation Grant)	\$469,474
3.	Corporate and other funding 2021	\$45,000

<b><u>Previous Funding and External Grant Support</u></b>	<b><u>Total Amount Awarded</u></b>
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1.	Corporate and other funding 2020	\$60,000
2.	University of Manitoba Graduate Fellowship (UMGF) Faculty of Graduate Studies, University of Manitoba Metabolic Signaling and Cell Death Regulation in the Heart 09/2020 – 08/2021 (MSc – M. Love)	\$14,000
3.	Canadian Institute of Health Research COVID <i>Integrated multi-omic delineation of SARS-CoV-2- dysregulated cellular processes</i> 06/2020 – 05/2021 (Operating Co-Applicant, Principal Investigator Dr. Kevin Coombs)	\$51,087
4.	Graduate Enhancement of Tri-Council Stipends (GETS) Faculty of Graduate Studies, University of Manitoba Metabolic Signaling and Cell Death Regulation in the Heart 09/2019 – 08/2020 (MSc – M. Love)	\$17,850
5.	Corporate, St. Boniface Hospital Foundation and other funding (2019)	\$150,000
6.	Corporate, St. Boniface Hospital Foundation and other funding (2018)	\$45,000
7.	Heart and Stroke Foundation of Canada <i>Mechanisms of P53 Mediated Cell Death in the Heart</i> 07/2017 - 06/2020 (Operating)	\$300,000

8.	Graduate Enhancement of Tri-Council Stipends (GETS) Faculty of Graduate Studies, University of Manitoba <i>Mechanisms of P53 Mediated Cell Death in the Heart</i> 09/2018 – 08/2019 ( <i>MSc – Z. Roveimiab</i> )	\$17,850
9.	Corporate, St. Boniface Hospital Foundation and other funding (2017)	\$190,000
10.	Canadian Institute of Health Research Targeting Cell Death Signaling Pathways in the heart 04/2017 – 04/2021 (Fellowship, I. Rabinovich-Nikitin)	\$180,000
11.	Graduate Enhancement of Tri-Council Stipends (GETS) Faculty of Graduate Studies, University of Manitoba 09/2016 – 08/2018 ( <i>MSc – M. Guberman</i> )	\$17,850
12.	Corporate and other funding (2016)	\$40,000
13.	Canadian Institutes for Health Research <i>Targeting Cell Death Signaling Pathways in the Heart</i> 07/2015 – 06/2020 ( <i>Operating</i> )	\$569,850
14.	Corporate and other funding (2015)	\$60,000
15.	Heart and Stroke Foundation of Canada <i>Mechanisms of P53 Mediated Cell Death in the Heart</i> 07/2014 – 06/2017 ( <i>Operating</i> )	\$189,225
16.	Corporate and other funding (2014)	\$40,000
17.	Canadian Institutes for Health Research <i>Molecular Determinants of Cell Death in the Heart</i> 10/2013 – 09/2018 ( <i>Operating</i> )	\$711,050
18.	Corporate and other funding (2012)	\$28,228
19.	Institute of Cardiovascular Sciences Studentship 06/2013 – 03/2014 ( <i>Y. Wang</i> )	\$10,000
20.	Manitoba Health Research Council 07/2012 – 06/2015 ( <i>MHRC Fellowship – A. Biala</i> )	\$73,500
21.	IMPACT/CIHR 07/2012 – 06/2015 ( <i>IMPACT Fellowship – A. Biala</i> )	\$30,000
22.	Heart and Stroke Foundation of Canada 07/2012 – 06/2014 ( <i>Operating</i> )	\$100,000
23.	Heart and Stroke Foundation of Canada 07/2012 – 06/2013 ( <i>Beamish Award</i> )	\$10,000
24.	Pharmaceutical and other agency's educational grant (2011)	\$22,108
25.	Canada Research Chair I in Molecular Cardiology 04/2011– 03/2018	\$1,400,000

26.	Canadian Institutes for Health Research <i>Molecular Regulation of E2F-1 Dependent Gene Transcription and Cell Death Signaling</i> 10/2011 – 09/2016 ( <i>Operating</i> )	\$931,550
27.	Manitoba Health Research Council 10/2011 – 07/2012 ( <i>CIHR-RPP Fellowship – J. Gordon</i> )	\$45,000
28.	IMPACT/CIHR 10/2011 – 07/2012 ( <i>IMPACT Fellowship – J. Gordon</i> )	\$15,000
29.	Canada Foundation for Innovation 10/2011 ( <i>Infrastructure Equipment Grant</i> )	\$316,000
30.	Heart and Stroke Foundation of Canada 07/2011 – 06/2013 ( <i>Operating</i> )	\$150,000
31.	Pharmaceutical and other agencies – Education and Research (2010)	\$20,000
32.	Canada Summer Jobs (CSJ) – ( <i>N. Garcia</i> ) (2010)	\$1,380
33.	Canadian Institutes for Health Research Cytoprotective role of nuclear factor kappa beta in heart 04/2010 – 06/2015 ( <i>Operating</i> )	\$747,500
34.	Heart and Stroke Foundation of Canada 07/2010 – 06/2012 ( <i>Operating</i> )	\$100,000
35.	Heart and Stroke Foundation of Canada 07/2010 – 06/2011 ( <i>Beamish Award</i> )	\$10,000
36.	Manitoba Health Research Council 07/2010 – 06/2012 ( <i>MHRC Studentship – W. Mughal</i> )	\$35,700
37.	Integrated and Mentored Pulmonary and Cardiovascular Training/CIHR 01/2010 – 10/2011 ( <i>IMPACT Fellowship – J. Gordon</i> )	\$35,000
38.	Manitoba Health Research Council 07/2009 – 06/2011 ( <i>MHRC Fellowship – R. Dhingra</i> )	\$76,500
39.	Corporate and other funding (2008)	\$25,000
40.	Canadian Institutes for Health Research 10/2008 – 09/2013 ( <i>Operating</i> )	\$726,330
41.	Heart and Stroke Foundation of Canada 07/2008 – 06/2011 ( <i>Operating</i> )	\$129,000
42.	Corporate and other funding (2007)	\$69,000
43.	Canadian Institutes for Health Research 10/2006 – 09/2011 ( <i>Operating</i> )	\$582,280
44.	Canada Research Chair II in Molecular Cardiology 04/2006 – 03/2011	\$500,000
45.	Canadian Institutes for Health Research 04/2005 – 03/2010 ( <i>Operating</i> )	\$548,865

46.	Canadian Institutes for Health Research Heart Failure Network 2005 – 2010 ( <i>Operating</i> )	\$100,000
47.	Integrated and Mentored Pulmonary and Cardiovascular Training/CIHR 06/2004 – 06/2009 ( <i>IMPACT Fellowship – A. Kalik</i> )	\$90,000
48.	Integrated and Mentored Pulmonary and Cardiovascular Training/CIHR 06/2004 – 06/2007 ( <i>IMPACT Fellowship – D. Baetz</i> )	\$120,000
49.	Heart and Stroke Foundation of Canada 07/2003 – 06/2004 ( <i>Beamish Award</i> )	\$10,000
50.	Canadian Institutes of Health Research- Genes and the Environment Platform II 03/2003 – 06/2007 ( <i>Core grant</i> )	\$105,992
51.	Heart and Stroke Foundation of Canada 07/2001 – 06/2004 ( <i>Operating</i> )	\$270,000
52.	Canada Research Chair II in Molecular Cardiology 04/2001 – 10/2006	\$500,000
53.	Canada Foundation for Innovation 04/2001– 04/2002 ( <i>Infrastructure Equipment Grant</i> )	\$306,882
54.	Thorlakson Foundation Inc. Award 2000 – 2001 ( <i>Operating</i> )	\$15,000
55.	Canadian Institutes for Health Research 10/2000 – 06/2003 ( <i>Operating</i> )	\$603,000
56.	Canadian Institutes for Health Research 10/1999 – 06/2004 ( <i>Operating</i> )	\$1,600,000
57.	St. Boniface Hospital Research Foundation Inc. 04/1999 – 05/2000	\$20,000
58.	Canadian Institutes for Health Research (Core Grant) 10/1999 – 06/2004 ( <i>Group in Experimental Cardiology</i> ) 06/1998– 05/1999 ( <i>Operating</i> )	\$138,000
59.	Heart and Stroke Foundation of Canada 07/1998 – 06/2001 ( <i>Operating</i> )	\$342,000
60.	Canada Foundation for Innovation 04/1998 – 09/1999 ( <i>Infrastructure Equipment Grant</i> )	\$316,000
61.	Heart and Stroke Foundation of Canada 1998 – 2001 ( <i>Operating</i> )	\$330,000
62.	Canadian Institutes for Health Research 00/1997– 00/2004 ( <i>CIHR Studentship- K. Regula</i> )	\$140,000
63.	Heart and Stroke Foundation of Canada 1996 – 2001 ( <i>Scholarship Award</i> )	\$250,000
64.	Heart and Stroke Foundation of Canada 1996 – 1998 ( <i>Operating</i> )	\$158,000



65.	Manitoba Health Research Council 1996 – 1998 ( <i>Operating</i> )	\$168,000
66.	Medical Research Council of Canada 04/1995 – 05/1999 ( <i>Operating</i> )	\$803,968
67.	Manitoba Health Research Council 1995 – 1997 ( <i>Operating</i> )	\$196,000
68.	Manitoba Health Research Council 1995 – 1996 ( <i>Scholarship Award</i> )	\$44,000
69.	Manitoba Health Research Council 1995 – 1996 ( <i>Establishment Grant</i> )	\$20,000
70.	Manitoba Medical Services Foundation 1995 – 1997 ( <i>Operating</i> )	\$90,000

### **Inventions and Patents**

- The NIP3 Family of Proteins PCT/USC01/21403 Patent Issued 2008
- BNIP3 Isoforms and Methods of Use PCT/IB2011/001662 Patent Issued 2012

### **Invited Scientific Lecture Presentations**

- 1988 **Award Lectureship** – Canadian Society for Clinical Investigation Meeting, Ottawa, Canada
- 1989 Canadian Federation of Biological Sciences Meeting, Calgary, Canada
- 1991 International Society for Pathophysiology Meeting, Moscow, Russia
- 1992 International Society for Heart Research World Meeting, Kobe, Japan
- 1994 67<sup>th</sup> Annual Meeting, American Heart Association, Dallas, USA
- 1995 XVII International Society for Heart Research American Section, Orange Beach, USA
- 1995 IV World Congress of International Society For Adaptive Medicine, Chandigarh, India
- 1997 70<sup>th</sup> Annual Meeting, American Heart Association, Dallas, USA
- 1996 American Heart Association 69<sup>th</sup> Annual Meeting, New Orleans, USA
- 1996 VI World Congress of Cardiology, Forum Scientifico, Belo Horizonte, Brazil
- 1997 Department of Pharmacology, University of Laval, Ste-Foy, Canada
- 1997 5<sup>th</sup> World Congress of ISAM, Framingham, USA
- 1997 XVIII European Section of International Society for Heart Research (ISHR), Satellite Meeting, Stara Lesna, Slovak Republic
- 1998 6<sup>th</sup> World Congress on Heart Failure-Mechanisms and Mgmt, Geneva, Switzerland
- 1998 Department of Physiology and Biophysics, College of Medicine, University of Vermont, Burlington, USA
- 1998 Department of Medicine Section of Cardiology, University of Alberta, Edmonton, Canada
- 1998 Department of Medicine, Alberta Heritage Medical Research Foundation Visiting Scientist, University of Alberta, Edmonton, Canada

- 1999 XXI International Society for Heart Research American Section, San Diego, USA
- 1999 Department of Pharmacology, University of California at San Diego, San Diego, USA
- 1999 **Keynote Lecture** – 63rd Japanese Circulation Society Meeting, Tokyo, Japan
- 1999 52<sup>nd</sup> Canadian Cardiovascular Society Meeting, Québec City, Canada
- 1999 72<sup>nd</sup> American Heart Association Meeting, Atlanta, USA
- 1999 Department of Medicine, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
- 1999 XVIII Brazilian Physiological Society of Rio Grande do Sul, Porto Alegre, Brazil
- 1999 XI World Congress of Cardiology, Forum Scientifico, Belo Horizonte, Brazil
- 2000 International Symposium on the Developing Heart, Prague, Czech Republic
- 2000 Oxidative Stress Consortium, CIHR Meeting, Hamilton, Canada
- 2000 7<sup>th</sup> World Congress on Heart Failure, Vancouver, Canada
- 2000 IV World Congress on Adaptive Medicine, Lyon, France
- 2001 Department of Medicine, Division of Cardiology, University of Calgary, Calgary, Canada
- 2001 Guy-Bernier Centre de Recherche, University of Montreal, Montreal, Canada
- 2001 Oxidative Stress Consortium, CIHR Meeting, London, Canada
- 2001 **Keynote Speaker** – British Society for Cardiovascular Research, Guy's Hospital London, London, England
- 2001 Gordon Research Conference on Cell Death, Oxford, England
- 2002 Department of Neurosciences, University of Ottawa, Ottawa, Canada
- 2002 Hospital for Sick Children, University of Toronto, Toronto, Canada
- 2002 American Association for Cancer Research, Waikoloa, USA
- 2002 8th World Congress on Heart Failure, Washington, USA
- 2002 **Special Invited Speaker** – Gordon Research Conference on Angiotensin, IL Ciocco, Pisa
- 2002 Canadian Cardiovascular Society Meeting, Edmonton, Canada
- 2002 75<sup>th</sup> American Heart Association Meeting, Chicago, USA
- 2003 5<sup>th</sup> Workshop on Cardiac Development, Ascona, Switzerland
- 2003 Department of Pharmacology, University of Western Ontario, London, Canada
- 2003 University of Montreal IRCM, Montreal, Canada
- 2003 Hotel Dieu CHUM, Clinical Research Institute, Montreal, Canada
- 2003 Symposium, Genes and Heart, Brno, Czech Republic
- 2003 Canadian Cardiovascular Society Annual Meeting, Toronto, Canada
- 2003 1<sup>st</sup> Annual American Heart Association, Basic Council Meeting, Snow Bird, USA
- 2004 Department of Physiology, University of Western Ontario, London, Canada
- 2004 **Invited Teaching Seminar Speaker** – Department of Pharmacology, University of Western, London, Canada
- 2004 Department of Physiology, Loyola University, Chicago, USA

- 2004 Department of Biochemistry, University of Laval, Québec City, Canada
- 2004 International Cell Death Society, Maynooth, Ireland
- 2004 International Society for Heart Research (ISHR), World Congress, Brisbane, Australia
- 2005 Department of Medicine, University of Minnesota, Minneapolis, USA
- 2005 Department of Medicine, University of Louisville, Louisville, USA
- 2005 Department of Physiology, Queen's University, Kingston, Canada
- 2005 American Heart Association, Scientific Sessions Conference, Dallas, USA
- 2005 Department of Cardiology, University of Ottawa Heart Institute, Ottawa, Canada
- 2005 Department of Medicine, University of California at San Diego, San Diego, USA
- 2005 Department of Biological Sciences, San Diego State University, San Diego, USA
- 2005 **Special Seminar Speaker** – Novartis Institutes for Biomedical Research, Boston, USA
- 2005 Department of Pharmacology, University of California at San Diego, San Diego, USA
- 2005 International Society for Heart Research (ISHR), Japanese Section, Osaka, Japan
- 2006 Department of Biochemistry, University of Alberta, Edmonton, Canada
- 2006 Department of Medicine, WILF Albert Einstein School of Medicine, Yeshiva University, New York, USA
- 2006 Department of Medicine, Lady Davis Institute, Jewish General, Montreal, Canada
- 2006 American Heart Association, Scientific Sessions Meeting, Chicago, USA
- 2006 International Academy of Cardiovascular Sciences, Sapporo, Japan
- 2006 International Society for Heart Research (ISHR), American Section, Toronto, Canada
- 2006 Heart and Stroke/Richard Lewar Centre of Excellence Distinguished Professor, University of Toronto, Toronto, Canada
- 2007 International Society for Heart Research (ISHR) World Congress, Bologna, Italy
- 2007 Department of Cardiology, The Rayne Institute, St. Thomas Hospital, London, England
- 2007 American Heart Association, Cardiovascular Repair & Regeneration, Keystone, USA
- 2007 World Congress of Cardiology, Forum Scientifico, Belo Horizonte, Brazil
- 2007 Speaker Department of Biology, York University, Toronto, Canada
- 2007 Department of Nephrology, University of Ottawa, Ontario Health Research Network, Ottawa, Canada
- 2008 **Invited Guest Lectureship** – Canadian Cardiovascular Society Meeting, Toronto, Canada
- 2008 Keystone, NF-kB Bench to Bedside Symposia, Banff, Canada
- 2008 Department of Biochemistry, University of Alberta, Edmonton, Canada
- 2008 International Society for Heart Research (ISHR), American Section, Cincinnati, USA
- 2008 American Heart Association Meeting, New Orleans, USA
- 2008 8<sup>th</sup> Workshop on Calreticulin, Viña Del Mar, Chile
- 2008 2<sup>nd</sup> Annual Mendel Symposium, Genes and Heart, Prague, Czech Republic

- 2009 **Distinguished Scientist Lectureship** – Department of Medicine, Lillehei Heart Institute, University of Minnesota, Minneapolis, USA
- 2009 Sudden Cardiac Death Symposium, Panum Institute, Copenhagen, Denmark
- 2009 American Heart Association, Basic Cardiovascular Sciences Scientific Sessions, Las Vegas, USA
- 2009 9<sup>th</sup> World Congress of International Society for Adaptive Medicine, Taipei, Taiwan
- 2009 7<sup>th</sup> Meeting Society of Heart and Vascular Metabolism, Padova, Italy
- 2009 **Distinguished Lectureship** – University of Medicine and Dentistry of New Jersey, Newark, USA
- 2009 Boston University School of Medicine, Whitaker Cardiovascular Institute, Boston, USA
- 2009 **Keynote** – Lakehead University, Northern Ontario School of Medicine, Thunder Bay, Canada
- 2009 American Heart Association, Scientific Sessions – Orlando, USA
- 2009 Accueil Université Nice Sophia Antipolis (présidence), Lyon, France
- 2010 Heart Institute, San Diego State University, on Cell Death, San Diego, USA
- 2010 1<sup>st</sup> Conference of the European Research Institute, Institute Pasteur, Paris, France
- 2010 University of Alberta, Faculty of Medicine and Dentistry, Edmonton, Canada
- 2010 XX World Congress, International Society for Heart Research, Kyoto, Japan
- 2010 15<sup>th</sup> World Congress International Academy of Cardiology, Vancouver, Canada
- 2010 Slovenska Akademia Vied International Symposium, Bratislava, Slovakia
- 2010 American Heart Association, Basic Cardiovascular Sciences Scientific Sessions, Rancho Mirage, USA
- 2010 Riley Heart Center Symposium on Cardiac Development, Indianapolis, USA
- 2010 Brigham and Woman's Hospital, Harvard Medical School, Boston, USA
- 2010 American Heart Association, Scientific Sessions, Washington, USA
- 2010 XX Scientific Forum, International Congress of Cardiovascular Sciences, Sao Paula, Brazil
- 2010 American Heart Association Scientific Sessions, Chicago, USA
- 2011 2<sup>nd</sup> Cuba-Canada International Heart Symposium, Holguin, Cuba
- 2011 Beth Israel Deaconess Medical Center, Seminar Series, Boston, USA
- 2011 Keystone, Molecular and Cellular Biology (X3) Symposium, Keystone, USA
- 2011 13<sup>th</sup> La Jolla-International Cardiovascular Research Conference, San Diego, USA
- 2011 **Keynote Lecture** – Abb Distinguished Cardiovascular Research Institute, University Rochester Medical Center, Rochester, USA
- 2011 International Society for Heart Research (ISHR) European Section, Haifa, Israel
- 2011 Faculty of Medicine, University of Ottawa, Ottawa, Canada
- 2011 International Academy of Cardiology, 16<sup>th</sup> World Congress, Vancouver, Canada
- 2011 **Keynote Lecture** – The British Society for Cardiovascular Research Autumn Meeting, London, United Kingdom

- 2011 **Special Seminar Speaker** – The Hatter Cardiovascular Institute, University College London, London, United Kingdom
- 2011 Sanford School of Medicine, Research Center, Vermillion, USA
- 2011 Mitochondrial Dynamics, Sardinia, Italy
- 2011 American Heart Association, Scientific Sessions, Orlando, USA
- 2011 University of Texas Southwestern Medical Center, Dallas, USA
- 2011 San Diego State University, San Diego, USA
- 2012 Northwestern University School of Medicine, Chicago, USA
- 2012 University of Louisville Health Sciences Center, Louisville, USA
- 2012 London Health Sciences Centre University Hospital, London, Canada
- 2012 Albert Einstein College of Medicine Cardiovascular, New York, USA
- 2012 University of Washington, Medicine at South Lake Union, Mitochondria and Metabolism Center, Seattle, USA
- 2012 **Keynote Lecture** – Université de Montréal (GEPROM), Montreal, Canada
- 2012 Department of Biomedical and Molecular Seminar Series, Queen’s University, Kingston, Canada
- 2012 International Society for Heart Research (ISHR) North America Section, Banff, Canada
- 2012 Society for Heart and Vascular Metabolism, Oxford, United Kingdom
- 2012 17<sup>th</sup> World Congress on Heart Disease International Academy of Cardiology, Toronto, Canada
- 2012 **Keynote Lecture** – University of California, Los Angeles Medical School, Los Angeles, USA
- 2012 1<sup>st</sup> Symposium of the UAB Comprehensive Cardiovascular Center, Birmingham, USA
- 2012 American Heart Association Scientific Sessions, Los Angeles, USA
- 2012 **Keynote Lecture** – Canadian Hypertension Society, Toronto, Canada
- 2012 XXII-International Congress of Cardiovascular Sciences, Belo Horizonte, Brazil
- 2012 San Diego State University, San Diego, USA
- 2013 10<sup>th</sup> Calreticulin Workshop, Banff, Canada
- 2013 New Jersey Medical School, Newark, USA
- 2013 **Keynote Lecture** – University of Toronto, Toronto, Canada
- 2013 International Cell Death Society, Fuengirola, Malaga, Spain
- 2013 International Society for Heart Research (ISHR) ISHR XXI World Congress North America Section, San Diego, USA
- 2013 American Heart Association, Basic Cardiovascular Sciences, Las Vegas, USA
- 2013 **Keynote Invited Seminar** – The Cardiovascular Forum, Louisville, USA
- 2013 10<sup>th</sup> International Congress on Coronary Artery Disease, Florence, Italy
- 2013 **State of the Art Lecture** – Canadian Hypertension Congress, Montreal, Canada

- 2013 American Heart Association, Scientific Sessions, Dallas, USA
- 2014 San Diego State University, San Diego, USA
- 2014 New Frontiers in Basic Cardiovascular Research, Bratislava, Slovak
- 2014 Cardiac Growth and Regeneration Conference, Viterbo, Italy
- 2014 **Distinguished Lectureship** – Department of Biomedical Sciences, University of Padova, Padova, Italy
- 2014 **Keynote Lecture** – 2<sup>nd</sup> Cardiovascular Forum for Promoting Centers of Excellence and Young Investigators, Winnipeg, Canada
- 2014 Centre de Recherche du CHU Sainte Justine, University of Montreal, Montreal, Canada
- 2014 XXIV Scientific Forum, International Congress of Cardiovascular Sciences, Alagoas, Brazil
- 2014 **Special Invited Lectureship** – The Rayne Institute, St. Thomas' Hospital Campus, London, England
- 2015 Ottawa Hospital Research Institute, Ottawa, Canada
- 2015 Keystone, Mitochondria, Metabolism and Heart Failure Symposium, Santa Fe, USA
- 2015 John A. Burns School of Medicine, University of Hawaii, Honolulu, USA
- 2015 Department of Pharmacology, Temple University School of Medicine, Philadelphia, USA
- 2015 Department of Medicine, Columbia University, New York City, USA
- 2015 11<sup>th</sup> International Calreticulin Workshop, New York City, USA
- 2015 11<sup>th</sup> World Congress of the International Society for Adaptive Medicine, Yonago, Japan
- 2015 International Society for Heart Research (ISHR) North America Section, Seattle, USA
- 2015 **Visiting Professorship** – Rutgers New Jersey Medical School, Newark, USA
- 2015 20<sup>th</sup> World Congress on Heart Disease, Vancouver, Canada
- 2015 11<sup>th</sup> International Congress on Coronary Artery Disease, From Prevention to Intervention, Florence, Italy
- 2016 New Frontiers in Cell Death Signaling and Heart Failure Conference, Honolulu, USA
- 2016 World Congress of the International Society for Heart Research, Buenos Aires, Argentina
- 2016 American Heart Association, Basic Cardiovascular Sciences, Phoenix, USA
- 2016 **Keynote Lectureship** – Inaugural Cardiovascular Research Centre Conference, University of Guelph, Guelph, Canada
- 2016 American Heart Association, Scientific Sessions, New Orleans, USA
- 2016 Department of Cell Biology and Molecular Medicine, Cardiovascular Research Institute, Rutgers New Jersey Medical School, Newark, USA
- 2017 **Invited Special Program Seminar Speaker** – Ben Gurion University, Beer-Sheva, Israel
- 2017 Keystone Mitochondria, Metabolism and Heart Conference, Santa Fe, USA

- 2017 International Cell Death Society, Cell Death in Development and Disease Conference, Rehovot, Israel
- 2017 European Society of Cardiology Congress, Barcelona, Spain
- 2017 12<sup>th</sup> International Congress on Coronary Artery Disease – From Prevention to Intervention Conference, Venice, Italy
- 2018 2<sup>nd</sup> New Frontiers in Cell Death Signaling and Heart Failure Conference, Honolulu, USA
- 2018 Faculty of Medicine, University of Ottawa, Ottawa, Canada
- 2018 1<sup>st</sup> Olympiad in Cardiovascular Medicine, International Symposium on Experimental and Clinical Cardiology, Athens, Greece
- 2018 37<sup>th</sup> Annual Meeting International Society for Heart Research (ISHR), Halifax, Canada
- 2018 International Academy of Cardiovascular Sciences (IACS), European Section Meeting, Smolenice, Slovakia Republic
- 2018 International Society for Heart Research - North American Section Meeting, Cuban Society of Cardiology, Havana, Cuba
- 2018 International Society for Heart Research - North American Section Meeting, Cuban Society of Cardiology, Havana, Cuba
- 2018 **Invited Lectureship** – 35<sup>th</sup> International Society for Heart Research European Section, Amsterdam, Netherlands
- 2018 American Heart Association, Basic Cardiovascular Sciences, Scientific Sessions, San Antonio, USA
- 2018 European Cooperation in Science and Technology (COST) 3rd European Cardioprotection COST Action WG Meeting, Kamari, Santorini, Greece
- 2018 **Keynote Lecture** – Department of Medicine, Rutgers New Jersey Medical School, Newark, USA
- 2019 3<sup>rd</sup> Annual International Hawaii Cardiovascular Symposium (IHCVS), Honolulu, USA
- 2019 **Featured Lectureship** – University of South Carolina, Regenerative Medicine & Cell Biology Seminar Series, Charleston, USA
- 2019 4<sup>th</sup> Annual Conference of the Canadian Society for Chronobiology, McGill University, Montreal, Canada
- 2019 25<sup>th</sup> Annual Cell Death Through the Ages, International Cell Death Society Conference, New York, USA
- 2019 25<sup>th</sup> Annual Cell Death Through the Ages, International Cell Death Society Conference, New York, USA
- 2019 **Keynote Lecture** – Department of Medicine, Rutgers New Jersey Medical School, Newark, USA
- 2019 European Biological Rhythms Society Conference, Lyon, France

- 2019 **Invited Award Lectureship** – 6th Meeting of European Section and 7<sup>th</sup> Meeting of North American Section of the International Academy of Cardiovascular Sciences (IACS) Vrnjacka Banja, Serbia
- 2019 James T. Willerson Distinguished, Visiting Professor Lectureship, Texas Heart Institute, Houston, USA
- 2019 American Heart Association, Scientific Sessions Conference, Philadelphia, USA
- 2019 University of California, Los Angeles, Cardiovascular Theme: Distinguished Seminar Series and iDISCOVER Lecture Series, Los Angeles, USA
- 2020 4<sup>th</sup> Annual International Hawaii Cardiovascular Symposium (IHCVS), Honolulu, USA
- 2020 International Academy of Cardiovascular Sciences (IACS) India Section, New Delhi, India
- 2020 International Society of Heart Research (ISHR) New Delhi, India
- 2020 Alumni Learning for Life Program, University of Manitoba, Winnipeg, Canada
- 2021 Rutgers New Jersey Medical School Seminar Series, Newark, New Jersey, USA
- 2021 Experimental Biology 2021(Virtual Conference due to COVID-19)
- 2021 Canadian Space Agency, Cardiovascular Health in Space Symposium
- 2022 5<sup>th</sup> Annual International Hawaii Cardiovascular Symposium (IHCVS), Honolulu, USA

### **Invited Scientific Sessions Chaired**

- 1995 IV World Congress of International Society For Adaptive Medicine, Chandigarh, India
- 1996 VI World Congress on Cardiology Forum Scientifico, Bello Horizonte, Brazil
- 1997 European Section of International Society for Heart Research (ISHR), Satellite Meeting, Stara Lesna, Slovak Republic
- 1998 XVI World Congress of International Society for Heart Research (ISHR), Richard Bing Award Competition Judge, Rhodes, Ixia Greece
- 1998 XVI World Congress of International Society for Heart Research (ISHR), Rhodes, Palace, Ixia Greece
- 1998 6<sup>th</sup> World Congress on Heart Failure–Mechanisms and Management, Geneva, Switzerland
- 1999 63<sup>rd</sup> Annual Japanese Circulation Society Meeting, Tokyo, Japan
- 1999 52<sup>nd</sup> Canadian Cardiovascular Society Meeting, Québec City, Canada
- 2000 Oxidative Stress Consortium, CIHR Meeting, Hamilton, Canada
- 2000 7<sup>th</sup> World Congress on Heart Failure, Vancouver, Canada
- 2000 IV World Congress on Adaptive Medicine, Lyon, France
- 2000 American Heart Association Meeting, New Orleans, USA
- 2002 Canadian Cardiovascular Society Meeting, Edmonton, Canada
- 2002 75<sup>th</sup> American Heart Association Meeting, Chicago, USA
- 2003 Canadian Cardiovascular Society, Toronto, Canada
- 2005 Heart Failure Society of America, Boca Raton, USA
- 2006 Canadian Cardiovascular Society, Vancouver, Canada
- 2006 American Heart Association Meeting, Chicago, USA



- 2006 American Heart Association Meeting, Chicago, USA
- 2007 American Heart Association Meeting, Orlando, USA
- 2009 IX World Congress of ISAM, Taipei, Taiwan
- 2009 American Heart Association Meeting, Orlando, USA
- 2010 XX World Congress of International Society for Heart Research (ISHR), Kyoto, Japan
- 2010 American Heart Association Meeting, Chicago, USA
- 2011 Basic Cardiovascular Sciences Annual Conference, New Orleans, USA
- 2012 Keystone Symposia, Keystone, USA (2011 American Heart Association Meeting, Orlando, USA)
- 2012 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada
- 2013 Keystone Symposium Conference, Keystone, Colorado
- 2013 Basic Cardiovascular Sciences 2013 Scientific Sessions, Las Vegas, Nevada
- 2013 Canadian Hypertension Congress, Montreal, Canada
- 2013 American Heart Association, Scientific Sessions, Dallas, USA
- 2014 International Society for Heart Research North America Section, Miami Beach, USA
- 2014 American Heart Association, Basic Cardiovascular Sciences Scientific Sessions, Las Vegas, USA
- 2015 American Heart Association Scientific Sessions, New Orleans, USA
- 2016 American Heart Association, Basic Cardiovascular Sciences, Phoenix, USA
- 2016 American Heart Association, Scientific Sessions, New Orleans, USA
- 2017 International Society for Heart Research (ISHR) – North American Section Conference, New Orleans, USA
- 2017 American Heart Association Scientific Sessions, Anaheim, USA
- 2018 International Academy of Cardiovascular Sciences North American Conference, Havana, Cuba
- 2018 American Heart Association, Scientific Sessions, Chicago, USA
- 2019 6<sup>th</sup> Meeting of European Section and 7<sup>th</sup> Meeting of North American Section of the International Academy of Cardiovascular Sciences (IACS), Vrnjacka Banja, Serbia
- 2019 American Heart Association, Scientific Sessions Conference, Philadelphia, USA

### **Media Appearances (As of 2022)**

Radio Interview, CJOB - Tri-Hospital Lottery media blitz (June 2, 2022)

### **National Grant Committees**

- 1997- present Swiss National Sciences Foundation Committee Member
- 1996-2006 Canadian Institutes for Health Research Scientific External Reviewer
- 1996-2011 Heart and Stroke Foundation of Canada External Reviewer
- 1998-2001 Heart and Stroke Foundation of Canada, Junior Personnel Awards Committee
- 1999-2001 Canadian Institutes for Health Research, Scientific Committee Cardiovascular A, Committee Member
- 1999-2002 Alberta Heritage Foundation for Medical Research

2002-2005	Canadian Institutes of Health Research, Cardiovascular A Committee, Scientific Officer
2008	Saskatchewan Health Research Foundation Member
2004-2008	American Heart Association, Scientific Sessions, Program Committee Member
2005-2008	Canadian Institutes of Health Research, Cardiovascular A Committee, Chair
2005-2010	Canadian Institutes of Health Research, IMPACT Fellowship Program, Committee Member
2006-2009	CancerCare Manitoba Scientific Advisory, Committee Member
2014	Ontario Research Fund – Research Excellence
2014-2017	Canada Foundation for Innovation, Major Infrastructure, Chair
2006-2010	Canadian Institutes of Health Research/Heart and Stroke Foundation, TACTICS Program, Committee Member
2010-2014	Heart and Stroke Foundation of Canada, Committee V, Chair
2013-present	Canadian Institutes of Health Research, Cardiovascular System, A, Committee Member
2017-present	American Heart Association, Collaborative Science Award, Committee Member
2018- present	Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery Grant
2018- present	Banting and Beat Award, University of Manitoba
2018-present	Canadian Institutes of Health Research, Cardiovascular System, A, Scientific Officer

**International Reviewer of Grant Applications**

- National Institutes of Health (NIH) Center for Scientific Review, Special Emphasis Panel, Committee Member (2019)
- Israel Science Foundation (2015 – present)
- National Space Agency/Canadian Space Agency Consultant (2014 – present)
- Wellcome Trust, Boroughs Foundation UK England, Committee Member (2008 – present)
- Italian Lottery Foundation, Committee Member (2012)
- National Institutes of Health (NIH) Center for Scientific Review Study Section, Myocardial Ischemia and Metabolism, Chair (2010 – 2012)
- American Heart Association, Basic Cardiovascular Sciences Scientific Sessions, Marcus Award Review, Committee Member (2009)
- National Institutes of Health (NIH) Center for Scientific Review, Myocardial Ischemia and Metabolism, Study Section, Committee Member (2004 – 2010)
- American Heart Association, Operating Grants Committee Member (2002 – 2003)

**Abstract Grader**

- Canadian Cardiovascular Society (2006 – present)

- American Heart Association, Basic Cardiovascular Sciences (2004 – present)
- American Heart Association, Scientific Sessions (2002 – present)
- International Academy of Cardiology (2002 – present)

**Journal Editorial Boards**

- Canadian Journal of Physiology and Pharmacology, **Co-Editor-in-Chief** (2022 – present)
- Molecular and Cellular Biochemistry, **Consulting Editor** (2021 – present)
- The Journal of Cardiovascular Aging, **Consulting Editor** (2021 – present)
- Scientific Reports, **Associate Editor** (2018 – present)
- American Journal of Physiology, Heart and Circulatory Physiology, **Series Editor** (2018)
- Biochemistry and Cell Biology Journal (2017 – present)
- Trends in Cardiovascular Research (2016 – present)
- Autophagy, **Associate Editor** (2015 – 2018)
- Circulation: Heart Failure, **Associate Editor** (2013 – 2018)
- American Journal of Physiology, Heart and Circulatory Physiology (2010 – present)
- Hypertension (2010 – 2015)
- Journal of Cardiovascular Translational Research, **Associate Editor** (2010 – 2016)
- Journal of Cardiovascular Translational Research (2008 – 2010)
- Circulation Research (2005 – present)
- Canadian Journal of Cardiology (2007 – present)
- Cardiovascular Research (2002 – present)
- Molecular and Cellular Biochemistry (1997 – present)
- Journal of Molecular Cellular Cardiology (2003 – 2008)

**Elected Council Positions and Advisory Boards**

2003-2009	International Society for Heart Research American Section, Council Member
2003-2008	Canadian Cardiovascular Society Council Member
2005-2010	University of Manitoba Senate
2006-2009	Canadian Cardiovascular Society, Scientific Program Committee
2006-2009	International Society for Heart Research American Section, Council Member
2007-2013	International Society for Heart Research World Section, Council Member
2008-2009	American Heart Association Melvin Marcus Award Judge
2009-2012	American Heart Association Basic Cardiovascular Sciences Program and Membership Committee
2009-2011	American Heart Association Leadership Committee
2010-2013	American Heart Association, Council of Basic Cardiovascular Sciences Leadership and Program Committee, Committee Member
2012-2015	International Society for Heart Research, North American Section, Steering Committee
2014-2016	Membership and Communications Committee, American Heart Association,

- Basic Cardiovascular Sciences, Vice Chair
- 2015-2017 American Heart Association, Basic Cardiovascular Sciences Awards, Committee Member
- 2010-present International Academy of Cardiovascular Sciences, Fellowship Awards Committee
- 2011-present International Academy of Cardiovascular Sciences, Scientific Executive Committee
- 2017-present Membership and Communications Committee, American Heart Association,  
Basic Cardiovascular Sciences, Chair
- 2017-present International Society for Heart Research North American Section, Council Member
- 2017-present International Society for Heart Research World Section, Council Member

**Journal Reviewer**

- American Journal of Physiology – Cell Physiology
- American Journal of Physiology – Heart and Circulatory Physiology
- Autophagy
- BBA Molecular Basis of Disease
- Biochemistry and Cell Biology Journal
- British Journal of Pharmacology
- Canadian Journal of Cardiology
- Cardiovascular Research
- Cell and Tissue Research
- Cell Death and Differentiation
- Circulation
- Circulation Research
- Comparative Biochemistry and Physiology
- European Heart Journal
- Expert Opinion Series on Investigational Drugs, Informa Healthcare
- Heart Failure
- Hypertension Research
- International Journal of Biochemistry
- Journal American College of Cardiology
- Journal of Biological Chemistry
- Journal of Cardiovascular Translational Research
- Journal of Clinical Investigation
- Journal of Molecular and Cellular Cardiology
- Journal of Molecular Pharmacology
- Journal of Pharmacology and Experimental Therapeutics
- Molecular and Cellular Biochemistry
- Molecular Pharmacology
- Nature Communications
- Nature Medicine

- Proceedings of the National Academy of Science
- Scientific Reports
- Science

### **University and Academic Committees**

- Division of Cardiovascular Science and Disease, Department of Physiology and Pathophysiology (2017 – present)
- Canada Research Chairs, Equity, Diversity and Inclusions Review Panel, University of Manitoba (2020 – present)
- Chair, Institute of Cardiovascular Sciences, Naranjan Dhalla Cardiovascular Awards Day (2017 – present)
- University of Manitoba Alumni Association Selection Committee (2019 – present)
- Chair, Pawan K. Singal Graduate Student Scholarship Committee, Institute of Cardiovascular Sciences (2017 – Present)
- Innovation Plaza Selection Committee Meeting, University of Manitoba, Committee Member (2019 – Present)
- Chair, Responsible Conduct of Research Policy Committee, University of Manitoba (2017-present)
- Director, Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre
- Rh Awards Selection Committee, University of Manitoba (2010 – Present)
- Graduate Studies, University of Manitoba, Faculty Council Member (1996 – Present)
- Pawan K. Singal Graduate Student Scholarship Committee, Institute of Cardiovascular Sciences, Committee Member (2010 – 2017)
- Secretariat, Institute of Cardiovascular Sciences, Naranjan Dhalla Cardiovascular Awards Day, (2007-2017)
- St. Boniface Hospital Research Centre, Educational Program Director (2006 – 2015)
- B.Sc. Med. Department of Physiology, University of Manitoba, Program Coordinator (1995 – 2000)
- University of Manitoba, Faculty of Medicine, Senator (2005 – 2011)
- Coordinator, Scientific Seminar Program, Seminar Series Program, Institute of Cardiovascular Sciences, Coordinator (1998 – 2017)
- Chair, Accreditation Review Committee Academic, Max Rady College of Medicine, University of Manitoba, Chair (2003)
- Max Rady College of Medicine, Executive Policy Committee Member, University of Manitoba (1996 – 2001)
- Animal Ethics Protocol Committee, University of Manitoba (1998 – 2002)

### **Academic Course Responsibilities**

- Medical Physiology Lecture (2017 – Present)

- Cardiovascular Pathophysiology PHGY 7350 – Lecture (1996 – Present)
- Cardiac Gene Therapy PHGY 7390 – Course Director (1996 – Present)
- Medical Physiology – Cardiovascular Section Coordinator PHGY 7254 (2001 – 2016)
- Molecular Cardiology 90:737 (2001 – 2010)
- Cellular and Molecular Biology of the Vasculature 90:740 (2001 – 2005)
- Trends in Cardiovascular Sciences – Course Director PHGY 7360 (1998 – 2017)
- Cardiovascular Section Coordinator, School of Medical Rehabilitation 68:148 (1995 – 2001)

### **Participation in Team Taught University Courses**

- PHGY 7350 - Cardiovascular Pathophysiology (1995 – present)
- Medicine I, Block I, Faculty of Medicine Cardiovascular Section (1996 – 2000)
- Medicine I, Block III, Faculty of Medicine Cardiovascular Section (1996 – 2000)
- Fundamentals of Physiology, Faculty of Pharmacy (1995 – 2000)
- Physician Assistant Program, Faculty of Medicine (2011 – 2014)

### **Teaching Administrative Duties**

- PHGY 7390 - Cardiac Gene Therapy, Course Coordinator (1995 – present)
- Trends in Cardiovascular Sciences, Course Coordinator, (1998 – 2017)
- Medical Rehabilitation Cardiovascular, Section Coordinator, (1995 – 2000)
- Medical Physiology Cardiovascular, Section Coordinator (1996 – 2015)

### **Committees and Other Administrative Duties at the University of Manitoba**

- Animal Protocol and Management Review Committee Member (2000 – 2005)
- Faculty of Medicine Executive Policy Committee Member (2000 – present)
- Graduate Studies Faculty Council Member (1995 – present)
- Coordinator, Invited Seminar Series Program, Institute of Cardiovascular Sciences (1996-2017)
- Faculty of Medicine, Student Research Day Organizing Committee (1996 – 1998)
- Coordinator, B.Sc. Med., Department of Physiology (1995 – 2002)

### **Symposiums and Meetings Organized**

- 4<sup>th</sup> International Hawaii Cardiovascular Symposium (IHCVS), Honolulu, Hawaii (2020)
- 3<sup>rd</sup> International Hawaii Cardiovascular Symposium (IHCVS), Honolulu, Hawaii (2019)
- 2<sup>nd</sup> New Frontiers in Cell Death Signaling and Heart Failure Conference, Honolulu, Hawaii (2018)
- ICCAD 12<sup>th</sup> International Congress on Coronary Artery Disease, Venice, Italy (2017)
- New Frontiers in Cell Death Signaling and Heart Failure – Honolulu, Hawaii (2016)
- International Academy of Cardiovascular Sciences – Woman’s Public Health Forum on heart disease and prevention Winnipeg, Canada (2016)
- ICCAD 11<sup>th</sup> International Congress on Coronary Artery Disease, Florence, Italy (2015)
- Gordon Research Conference “Apoptosis and Angiotension II” Session IL Ciocco, Italy (2002)

- Canadian Student Health Research Forum “Programmed Cell Death in Medicine”, Faculty of Health Sciences, University of Manitoba, Co-Chair late Dr. Arnold Greenberg (1997)
- Canadian Student Health Research Forum “Gene Therapy” Student Research Day, Faculty of Health Sciences, University of Manitoba (1996)

### **Professional Society and Memberships**

- American Society for Biochemistry and Molecular Biology
- American Physiological Society
- American Heart Association
- American Society for Clinical Investigation
- Canadian Cardiovascular Society
- Canadian Academy Health Sciences
- Federation of American Societies for Experimental Biology
- International Society for Heart Research (American Section)
- International Academy of Cardiovascular Sciences
- International Cell Death Society
- Society for Research on Biological Rhythms

### **Postdoctoral Fellows and Visiting Scientists Trained**

1. C. Senerveratne, Postdoctoral Fellow University of Sri Lanka, Colombo, Sri Lanka (2002)
2. M. Zou, Postdoctoral Fellow University of Western Ontario, London, Canada (2003)
3. S. Zieroth, Medical Resident Cardiology, University of Manitoba, Winnipeg, Canada (2003-2004)
4. G. Li, Visiting Scientist, University of Toronto, Toronto, Canada (2004)
5. D. Baetz, Postdoctoral Fellow, INSRM, Paris, France (2005)
6. S. Javadov, Postdoctoral Fellow University of Western, Ontario, Canada (2005)
7. B. Li, Postdoctoral Fellow, University of Western, Ontario Canada (2007)
  - a. A. Kalik, Postdoctoral Fellow, University of Western, Ontario, Canada (2007)
8. Y. Aviv, Postdoctoral Fellow, University of Manitoba, Winnipeg, Canada (2008 – 2011)
9. R. Dhingra, Postdoctoral Fellow, University of Manitoba, Winnipeg, Canada (2009 – 2012)
10. J. Gordon, Postdoctoral Fellow, University of Manitoba, Winnipeg, Canada (2010 – 2012)
11. A. Biala, Postdoctoral Fellow, University of Manitoba, Winnipeg, Canada (2012 – 2015)
12. S. Carnicka, Visiting Scientist, Slovak Academy of Sciences, Bratislava, Slovakia (2013)
13. F. Sassone, Visiting Scientist, University of Milan, Milan, Italy (2014)
14. Z. Matúšková, Slovak Academy of Sciences, Bratislava, Slovakia (2014)
15. D. Amgalan, Visiting Scientist, Albert Einstein College of Medicine, New York, USA (2015)
16. R. Shi, Postdoctoral Fellow, University of Manitoba, Winnipeg, Canada (2016 – 2018)
17. I. Rabinovich-Nikitin, Postdoctoral Fellow, University of Manitoba, Winnipeg, Canada (2016-present)

**Trainees and Graduate Students Supervised****PhD Graduate Students**

1. Kelly Regula (2000 – 2004)
2. Jamie Shaw (2004 – 2009)
3. Junjun Lin (2013 – 2016)
4. Niketa Sareen (2014 – 2020)
5. Leena Saleth (2020-present)

**MSc Graduate Students**

1. Amara Garcia, BSc Co-op Student, Red River Community College (1995 –1996)
2. Shareef Mustapha (1996 – 1999)
3. Kelly Regula (1997 – 2000)
4. Rhonna Gurevich (1998 – 2000)
5. Karen Ens (2001 – 2003)
6. Marek Rzeszutek (2004 – 2005)
7. Wajihah Mughal (2009 – 2012)
8. Yan Wang (2010 – 2013)
9. Devin Hasanally (2012 – 2014)
10. Zeinab Roveimiab (2017 – 2019)
11. Matthew Guberman (2015 – 2020)
12. Matthew Love (2019 – 2021)
13. Margaux Melka (2020 – present)
14. Molly Crandall (2022 – Present)
15. Darya Nematisouldaragh (2022 – Present)

**Advisory Committee Member for MSc and PhD Students Trained**

2007 – 2009	F. Farahmand, PhD (supervisor P.K. Singal, University of Manitoba)
2007 – 2009	T. Goyal, PhD (supervisor N. Dhalla, University of Manitoba)
2007 – 2009	K. Kaur, PhD (supervisor P.K. Singal, University of Manitoba)
2007 – 2009	F. Mendoza, PhD (supervisor S. Gibson, University of Manitoba)
2007 – 2009	N. Prairie, MSc (supervisor Tappia, University of Manitoba)
2008 – 2010	I. Danielson, PhD (supervisor P.K. Singal, University of Manitoba)
2008 – 2010	M. Zettler, MSc (supervisor G.N. Pierce, University of Manitoba)
2008 – 2010	J. Fotheringham, PhD (supervisor J.D. Geiger, University of Manitoba)
2008 – 2010	L. Herman, PhD (supervisor K. Coombs, University of Manitoba)
2008 – 2010	S. Kothari, PhD (supervisor S. Gibson, University of Manitoba)
2008 – 2010	A. Lehenbauer-Ludke, PhD (supervisor P.K. Singal, University of Manitoba)
2008 – 2010	M. Dent, PhD (supervisor N. Dhalla, University of Manitoba)



2010 – 2012	L. Espira, PhD (supervisor M. Czubryt, University of Manitoba)
2010 – 2012	A. Thuy Tran, PhD (supervisor K. Coombs, University of Manitoba)
2010 – 2012	D. Khan, PhD (supervisor J. Davie, University of Manitoba)
2011 – 2015	R. Bagchi, PhD (supervisor M. Czubryt, University of Manitoba)
2011 – 2013	A. Al–Rahman Al–Shudiefat, PhD (supervisor P. Singal, University of Manitoba)
2012 – 2014	A. Blant, MSc (supervisor M. Czubryt, University of Manitoba)
2012 – 2014	D. Hasanally, PhD (supervisor A. Ravandi, University of Manitoba)
2013 – 2020	N. Koleini, PhD (supervisor E Kardami, University of Manitoba)
2013 – 2017	G. Akolkar, PhD (supervisor P.K. Singal, University of Manitoba)
2014 – 2016	M. Zeglinski, PhD (supervisor I.M. Dixon, University of Manitoba)
2014 – 2020	E. Abu-El-Rub, PhD (supervisor S. Dhingra, University of Manitoba)
2014 – 2020	N. Sareen, PhD (supervisor S. Dhingra, Co-supervisor L.A. Kirshenbaum, University of Manitoba)
2016 – 2020	A. Stamenkovic, PhD (supervisor G.N. Pierce, University of Manitoba)
2018 – 2019	A. Zahedi–Amiri, MSc (supervisor K. Coombs, University of Manitoba)
2014 – 2021	G. Sequiera, PhD (supervisor S. Dhingra, University of Manitoba)
2018 – present	K. Glover, PhD (supervisor K. Coombs, University of Manitoba)
2019 – present	P. Hassan–Tash MSc (supervisor A. Shah, University of Manitoba)
2019 – present	K. Narayan Alagarsamy PhD (supervisor S. Dhingra, University of Manitoba)
2020 – present	L. Saleth, PhD (supervisor S. Dhingra, Co-supervisor L.A. Kirshenbaum, University of Manitoba)

### **External Examiner for Graduate Student's Thesis Defense**

2008	R. Shamloul, (supervisor Dr. Rui Wang, University of Saskatchewan)
2008	G. Slaughter, PhD (supervisor T. Parker, University of Toronto)
2008	A. Davidoff, PhD (supervisor, H. Ter Keurs, University of Calgary)
2011	T. Ryan-Porter, PhD (supervisor Dr. I Skerjan, University of Ottawa)
2011	G. de Coute, PhD (supervisor Dr. P. Liu, University of Toronto)
2012	W. Maharsy, PhD (supervisor Dr. K. Pasumarthi, Dalhousie University)
2012	K.M. Wafa, PhD (supervisor Dr. K. Pasumarthi, Dalhousie University)
2013	J. Salma, PhD (Supervisor, Dr. J. McDermott, York University)
2014	D. Amgalan, Visiting Scientist, Albert Einstein College of Medicine, New York, USA
2015	J.M. Pflieger, PhD (supervisor Dr. M. Abdellatif, Rutgers New Jersey Medical School)
2016	F. Alibhai, PhD (supervisor Dr. T. Martino, University of Guelph)
2017	S. McLean PhD (supervisor Dr. G. Lopaschuk, University of Alberta)
2017	S. Hashemi, PhD (supervisor Dr. J. McDermott, University of Toronto)
2017	A. Zakariyah, Ph.D. (supervisor Dr. P. Burgon, University of Ottawa)
2017	S. Rane, PhD (supervisor Dr. M. Abdellatif, New Jersey Medical School)
2017	B. Putinski, PhD (supervisor Dr. L. Megeney, Ottawa Hospital Research Institute)
2018	G. Kanaan, PhD (supervisor Dr. M.E. Harper, University of Ottawa)

- 2018 J. Byun, PhD (supervisor Dr. J. Sadoshima, Rutgers New Jersey Medical School)  
2020 Q. Wang PhD (supervisor M. Michalak, University of Alberta)  
2021 M. Tong (Supervisor J. Sadoshima, Rutgers New Jersey Medical School)  
2022 Yu Zhang (Supervisor J. Sadoshima, Rutgers New Jersey Medical School)

### **Bachelor of Science in Medicine Students Trained**

1. Alla Kirshner (1995 – 1997)
  - *B.Sc. Med. Award Winner, Manitoba Medical Services Foundation*
  - *Best Cardiovascular Sciences Project*
2. Jonathan Prychitko (1997 – 1999)
  - *B.Sc. Med. Award Winner, Merck Sharpe & Dome Research Award*
  - *Best Basic Medical Sciences Project*
3. Carolyn Cuthbert, BSc Co-op Student (2002 – 2003)
4. Shelly Zubert (2001 – 2003)
5. Apoorva Balakrishnan (2008 – 2009)
6. Al-Naji Noor (2008 – 2009)
7. Daniel Bellan (2011 – 2013)
  - *B.Sc. Med Award Winner, Manitoba Medical Services Foundation*
  - *Best Cardiovascular Sciences Project*
  - *Best B.Sc. Med Project, Basic and Clinical Sciences*
8. Pegah Afsharihezhad (2014 – 2016)
  - *B.Sc. Med. Award Winner, Manitoba Medical Services Foundation*
  - *The Merck Sharp and Dhome Award for Best Basic Medical Sciences Project*
  - *Dr. Charles Schom Memorial Bursary Travel Award*
9. Jonathon Gerstein 2018 – 2019
  - *B.Sc. (Med) Student Joe Doupe Presenter Honour Award*
  - *Dr. Charles Schom Memorial Travel Bursary*
10. Shay Iskijaev (2020 – Present)

### **Research Assistants and Summer Students**

1. Pryan Thomas (1995 – 1996)
2. Steven Harrington (1995 – 1996)
3. Hui Zheng (1997 – 2001)
4. Mona Singal (1998 – 2000)
5. Christine Robinson (1999 – 2001)
6. Randy Mascharenus (2000 – 2001)
7. Joseph Bednarczyk (2001 – 2004)

8. Lauren Kravetsky (2002 – 2003)
9. Loren Barkley (2002 – 2004)
10. Irwin Edelynant (2002 – 2005)
11. Jennifer Nychyk (2004 – 2006)
12. Oskana Melnyk (2004 – 2008)
13. Ravi Jayas (2004 – 2009)
14. Allana Rosenfield (2005 – 2006)
15. Eytan Peral (2005 – 2006)
16. Brian Flynn (2005 – 2006)
17. Alexandra Cooper (2005 – 2008)
18. Danielle Weidman (2006 – 2008)
19. Steven Zamick (2008 – 2009)
20. Lindsey McDonald (2008 – 2009)
21. Chandni Singal (2009)
22. Josh Magnusson (2009)
23. Laura Zelzer (2009)
24. Matthew Katz (2009)
25. Vicky Margulets (2009)
26. Wenyang Li (2009)
27. Aaron MicFlikier (2009 – 2011)
28. Alexandra Rasnitsyn (2010)
29. Nicole Garcia (2010 – 2012)
30. Rahul Jayas (2010 – 2016)
31. Karan Singal (2010)
32. Melina Zylberman (2010)
33. Akash Sharma (2011)
34. Simon Wong (2011)
35. Jaclyn Rutherford (2011)
36. Matthew Guberman (2012)
37. Jonathon Gerstein (2012 – 2016)
38. Ambrosia Brunetta (2012)
39. Jordan Nelson (2013)
40. Alana Poon (2013)
41. Cynthia Khaper (2013)
42. Jill Ryplanski (2013)
43. Abhinav Dhingra (2011 – Present)
44. Ryan Cantor (2014)
45. Alexis Nemeth (2014 – 2018)
46. Pegah Afsharihezhad (2014)
47. Rahul Jayas (2014 – 2016)

48. Matthew Love (2015)
49. Jenny Myskiw (2015)
50. Hillary Nepon (2014 – 2017)
51. Juliana Loewen (2015)
52. Leah Bernhardt (2016)
53. Sarah London (2016 – 2017)
54. Justin Lieberman (2016 – 2018)
55. Sam Singer (2016 – 2019)
56. Shay Iskijaev (2016 – 2020)
57. Sam Wolfram (2017)
58. Irit Margulets (2017 – 2018)
59. Zeinab Roveimiab (2017)
60. Raya Margulets (2017 – 2020)
61. Camila Aprosoff (2017)
62. Kartik Vinayak (2017)
63. Illana Minuk (2017– 2019)
64. Lital Leitman (2017)
65. Graham Maddaford (2016 – 2017)
66. Brooke Lieberman (2017 – 2019)
67. Sydney Chochinov (2018 – 2019)
68. Maxine Jacobsohn (2018 – 2019)
69. Nicolas Madden (2018 – 2019)
70. Paige Morris (2017 – 2019)
71. Madyson Shauman (2018 – 2019)
72. Rachel Cogen (2020 – present)
73. Sonny Rothman (2021 – present)
74. Molly Crandall Red River Co-op Student (2021 – present)
75. Jenna Cross (2021 – present)
76. Amit Suharenko (2021 – present)
77. Bhavya Arora (2021– present)

### **School and University Student Science Project Supervision**

Abhinav Dhingra (April 2013)

**Project Title:** *Ellagic Acid Selectively Inhibits Cardiotoxic Effects of Chemotherapy Drug Doxorubicin*

- Best Overall Individual – Intermediate and Gold Medal, Manitoba Schools Science Symposium (MSSS)
- Special Award from Functional Foods, Richardson Centre, University of Manitoba
- Silver Medal Winner, Canada-Wide Science Fair (CWSF) (May 2013)

Rahul Jayas (September 2013)

**Project Title:** *Hypoxia Induces Mitochondrial Defects and Death of Cardiomyocytes*

- Best Health Sciences Project, Undergraduate Research Award program, University of Manitoba

**RESEARCH PUBLICATIONS**

1. **Kirshenbaum LA**, Sitar DS, Mathews SC and Tenenbein M. Whole-bowel irrigation versus activated charcoal in sorbitol for the ingestion of modified-release pharmaceuticals. *Clin Pharmacol Ther* 46:264-271; 1989.
2. **Kirshenbaum LA**, Gupta M, Thomas T and Singal PK. Antioxidant protection against adrenaline-induced arrhythmias in rats with chronic heart hypertrophy. *Can J Cardiol* 6: 71-74; 1990.
3. Singal PK and **Kirshenbaum LA**. A relative deficit in antioxidant reserve may contribute in cardiac failure. *Can J Cardiol* 6:47-49; 1990.
4. **Kirshenbaum LA**, Sitar DS, Mathews SC and Tenenbein M. Does multiple dose charcoal therapy enhance salicylate excretion? *Arch Intern Med* 150:1281-1283; 1990.
5. **Kirshenbaum LA**, Sitar DS and Tenenbein M. Interaction between whole bowel irrigation solution and activated charcoal: Implications for treatment of toxic ingestions. *Ann Emerg Med* 19:1129-1132; 1990.
6. Dhaliwal H, **Kirshenbaum LA**, Randhawa AK and Singal PK. Correlation between antioxidant changes during hypoxia and recovery on reoxygenation. *Am J Physiol* 261:H632-H638; 1991.
7. Chakravarti RN, **Kirshenbaum LA** and Singal PK, Atherosclerosis: Its pathophysiology with special reference to lipid peroxidation. *J Appl Cardiol* 6:91-112; 1991.
8. **Kirshenbaum LA**, Thomas TP, Randhawa AK and Singal PK, Time-course of cardiac myocyte injury due to oxidative stress. *Mol Cell Biochem* 111:25-31; 1992.
9. **Kirshenbaum LA** and Singal PK. Antioxidant changes in heart hypertrophy: Significance during hypoxia-reoxygenation injury. *Can J Physiol Pharmacol* 70:1330-1335; 1992.
10. **Kirshenbaum LA** and Singal PK. Changes in antioxidant enzymes in isolated cardiac myocytes subjected to hypoxia-reoxygenation. *Lab Invest* 67:796-803; 1992.
11. **Kirshenbaum LA** and Singal PK. Increase in endogenous antioxidant enzymes protects hearts against reperfusion injury. *Am J Physiol* 265:H484-H493; 1993.
12. **Kirshenbaum LA**, MacLellan WR, Mazur W, French BA and Schneider MD. Highly efficient gene transfer into adult ventricular myocytes by recombinant adenovirus. *J Clin Invest* 92:381-387; 1993.
13. Schneider MD, MacLellan WR, **Kirshenbaum LA** and Brand T. Molecular approaches to cardiac development and hypertrophy. *Tex Heart Inst J* 21:2-5; 1994.
14. Schneider MD, **Kirshenbaum LA**, Brand T and MacLellan WR. Control of cardiac gene transcription by fibroblast growth factors. *Mol Reprod Dev* 39:112-117; 1994.
15. **Kirshenbaum LA**, Angelides KA and Schneider MD. Images in cardiovascular medicine. Detection of exogenous gene expression in live adult ventricular myocytes following

- adenoviral gene transfer. *Circulation* 90:2124-2125; 1994.
16. Schneider MD, Abdellatif M, **Kirshenbaum LA**, MacLellan WR and Brand T. Regulatory circuits for myocardial hypertrophy. *Heart Failure* Aug/Sept: 166-176; 1994.
  17. **Kirshenbaum LA**, Hill M, and Singal PK. Endogenous antioxidants in isolated hypertrophied cardiac myocytes and hypoxia-reoxygenation injury. *J Mol Cell Cardiol* 27:263-272; 1995.
  18. **Kirshenbaum LA** and Schneider MD. Adenovirus E1A represses cardiac gene transcription and reactivates DNA synthesis in ventricular myocytes, via alternative pocket protein- and p300-binding domains. *J Biol Chem* 270:7791-7794; 1995.
  19. **Kirshenbaum LA** and Schneider MD. The cardiac cell cycle, pocket proteins, and p300. *Trends Cardiovasc Med* 5:230-235; 1995.
  20. Singal PK, Hill MF, Ganguly NK, Khaper N, **Kirshenbaum LA** and Pichardo J. Role of oxidative stress in heart failure subsequent to myocardial infarction. *L'information Cardiologique* 20:343-362; 1996.
  21. **Kirshenbaum LA**, Abdellatif M, Chakraborty S and Schneider MD. Human E2F-1 reactivates cell cycle progression in ventricular myocytes and represses cardiac gene transcription. *Dev Biol* 179:402-411; 1996.
  22. **Kirshenbaum LA**. Adenovirus mediated-gene transfer into cardiomyocytes. *Mol Cell Biochem* 172:13-21; 1997.
  23. **Kirshenbaum LA** and de Moissac D. Regulators of cardiac cell growth, differentiation and apoptosis. *Heart Failure Reviews* 2:117-124; 1997.
  24. **Kirshenbaum LA**, Agah R, Abdellatif M, Truong LD, Chakraborty S, Michael LH and Schneider MD. Adenoviral delivery of E2F-1 directs cell cycle re-entry and p53-independent apoptosis in postmitotic adult myocardium in vivo. *J Clin Invest* 100:2722-2728; 1997.
  25. **Kirshenbaum LA** and de Moissac D. The bcl-2 gene product prevents programmed cell death of ventricular myocytes. *Circulation* 96:1580-1585; 1997.
  26. **Kirshenbaum LA**. Regulators of apoptosis in the heart: A matter of life and death. *Can J Cardiol* 14:457-460; 1998.
  27. de Moissac D, Mustapha S, Greenberg AH and **Kirshenbaum LA**. Bcl-2 activates the transcription factor NF $\kappa$ B through the degradation of the cytoplasmic inhibitor I $\kappa$ B $\alpha$ . *J Biol Chem* 273:23946-23951; 1998.
  28. Kumar D, **Kirshenbaum LA**, Li T, Danelison I and Singal PK. Apoptosis in isolated adult cardiomyocytes exposed to adriamycin. *Ann N Y Acad Sci* 874:156-168; 1999.
  29. Regula K and **Kirshenbaum LA**. Apoptosis in ventricular myocytes: the role of tumor suppressor proteins. *Apoptosis* 4:227-232; 1999.
  30. Gurevich RM, Mustapha S and **Kirshenbaum LA**. Molecular mechanisms of apoptosis in heart failure. *Heart Failure Reviews* 4:157-163; 1999.
  31. de Moissac D, Zheng H and **Kirshenbaum LA**. Linkage of the BH4 domain of Bcl-2 and the nuclear factor  $\kappa$ B signaling pathway for suppression of apoptosis. *J Biol Chem* 274:29505-29509; 1999.

32. de Moissac D, Gurevich RM, Zheng H, Singal PK and **Kirshenbaum LA**. Caspase activation and mitochondrial cytochrome c release during hypoxia-mediated apoptosis of adult ventricular myocytes. *J Mol Cell Cardiol* 32:53-63; 2000.
33. Mustapha S, Kirshner A, de Moissac D and **Kirshenbaum LA**. A direct requirement of nuclear factor- $\kappa$ B for suppression of apoptosis in ventricular myocytes. *Am J Physiol* 279; H939-H945; 2000.
34. **Kirshenbaum LA**. Bcl-2 intersects the NF $\kappa$ B signaling pathway and suppresses apoptosis in ventricular myocytes. *Clin Invest Med* 23:322-330; 2000.
35. Kumar D, **Kirshenbaum LA**, Li T, Danelisen I and Singal PK. Apoptosis in adriamycin cardiomyopathy and its modulation by probucol. *Antioxid Redox Signal* 3:135-145; 2001.
36. Sun G, Doble BW, Sun J-M, Fandrich RR, Florkiewicz R, **Kirshenbaum LA**, Davie JR, Cattini PA and Kardami E. CUG-initiated FGF-2 induces chromatin compaction in cultured cardiac myocytes and *in vitro*. *J Cell Physiol* 186:457-467; 2001.
37. Cahill SA, **Kirshenbaum LA** and Gross GJ. Transient outward current inhibition by propafenone and 5-hydroxypropafenone in cultured neonatal rat ventricular myocytes. *J Cardiovasc Pharmacol* 38:460-467; 2001.
38. Regula KM and **Kirshenbaum LA**. p53 activates the mitochondrial death pathway and apoptosis of ventricular myocytes independent of *de novo* gene transcription. *J Mol Cell Cardiol* 33:1435-1445; 2001.
39. Elmadhoun BM, Wang GQ, **Kirshenbaum LA** and Burczynski FJ. Palmitate uptake by neonatal rat myocytes and hepatocytes: Role of extracellular protein. *Eur J of Biochem* 268:3145-3153; 2001.
40. Gurevich RM, Regula KM and **Kirshenbaum LA**. Serpin protein CrmA suppresses hypoxia-mediated apoptosis of ventricular myocytes. *Circulation* 103:1984-1991; 2001.
41. **Kirshenbaum LA**. Death-defying pathways linking cell cycle and apoptosis. *Circ Res* 88:978-980; 2001.
42. Suhara T, Kim H-S, **Kirshenbaum LA** and Walsh K. Suppression of Akt Signaling induces Fas ligand expression: Involvement of caspase and Jun kinase activation in Akt-mediated Fas ligand regulation. *Mol Cell Biol* 22:680-691; 2002.
43. Regula KM, Ens K and **Kirshenbaum LA**. Inducible expression of BNIP3 provokes mitochondrial defects and hypoxia-mediated cell death of ventricular myocytes. *Circ. Res* 91:226-231; 2002.
44. Regula KM, Ens K and **Kirshenbaum LA**. IKK $\beta$  is required for Bcl-2-mediated NF $\kappa$ B activation in ventricular myocytes. *J. Biol. Chem.* 277:38676-38682; 2002.
45. Regula KM and **Kirshenbaum LA**. "A one two punch" for mitochondrial cytochrome c release. *Mitochondrion* 2:223-224; 2003.
46. Regula KM and **Kirshenbaum LA**. A novel role for the mitochondrial death proteins Nix and BNIP3 in cardiac cell death and heart failure. *Chemtracts-Biochem Mol Biol* 16:361-364; 2003.
47. Regula KM, Ens K and **Kirshenbaum LA**. Mitochondria-assisted cell suicide: "a license to kill". *J Mol Cell Cardiol* 35:559-567; 2003.

48. Kothari S, Cizeau J, McMillan-Ward E, Israels SJ, Bailes M, Ens K, **Kirshenbaum LA** and Gibson SB. BNIP3 plays a role in hypoxic cell death in human epithelial cells that is inhibited by growth factors EGF and IGF. *Oncogene* 22:4734-4744; 2003.
49. **Kirshenbaum LA**. Stresses of a failing heart. *J Mol Cell Cardiol* 35:1017-1019; 2003.
50. Rajapurohitam V, Gan XT, **Kirshenbaum LA** and Karmazyn M. The obesity-associated peptide leptin induces hypertrophy in neonatal rat ventricular myocytes. *Circ Res* 93:277-279; 2003.
51. Regula KM and **Kirshenbaum LA**. Breaking down cell-cycle barriers in the adult heart. *Circ Res* 94:1524-1526; 2004.
52. Alcendor RR, **Kirshenbaum LA**, Imai SI, Vatner SF and Sadoshima J. Silent information regulator 2 $\alpha$ , a longevity factor and class III histone deacetylase, is an essential endogenous apoptosis inhibitor in cardiac myocytes. *Circ Res* 95:971-980; 2004.
53. Sun M, Dawood F, W-H, Chen M, **Kirshenbaum LA** and Liu P. Excessive tumor necrosis factor activation post-infarction contributes to susceptibility to myocardial rupture and left ventricular dysfunction. *Circulation* 110:3221-3228; 2004.
54. Regula KM, Rzeszutek M, Baetz D, Seneviratne C and **Kirshenbaum LA**. Therapeutic opportunities for cell-cycle re-entry and cardiac regeneration. *Cardiovasc Res* 64:395-401; 2004.
55. Regula KM, Baetz D and **Kirshenbaum LA**. NF- $\kappa$ B represses hypoxia-induced mitochondrial defects and cell death of ventricular myocytes. *Circulation* 110:3795-3802; 2004.
56. Javadov S, Huang C, **Kirshenbaum LA** and Karmazyn M. NHE-1 inhibition improves impaired mitochondrial permeability transition and respiratory function during post infarction remodeling in the rat. *J Mol Cell Cardiol* 38:135-143; 2005.
57. Regula, KM and **Kirshenbaum LA**. Apoptosis of ventricular myocytes: A means to an end. *J Mol Cell Cardiol* 38:3-13; 2005.
58. Baetz D, Shaw J and **Kirshenbaum LA**. Nuclear factor- $\kappa$ B decoys suppresses endotoxin-induced lung injury. *Mol Pharm* 67:977-979; 2005.
59. Saini H, Xu Y-J, Zhang M, Liu P, **Kirshenbaum LA** and Dhalla NS. Role of tumour necrosis factor-alpha and other cytokines in ischemia-reperfusion-induced injury in the heart. *Exp Cardiol* 10:213-222; 2005.
60. Baetz D, Regula KM, Ens, K, Shaw J, Kolthari S, Yurkova N and **Kirshenbaum LA**. NF- $\kappa$ B mediated cell survival involves transcriptional silencing of the mitochondrial death gene BNip3 in ventricular myocytes. *Circulation* 112:3777-3785; 2005.
61. Zebrowski DC, Alcendor RR, **Kirshenbaum LA** and Sadoshima J. Caspase-3 mediated cleavage of MEKK1 promotes p53 transcriptional activity. *J Mol Cell Cardiol* 40:605-618, 2006.
62. Galvez AS, Brunskill EW, Marreez Y, Benner BJ, Regula KM, **Kirshenbaum LA** and Dorn DW 2nd. Distinct pathways regulate proapoptotic Nix and BNip3 in cardiac stress. *J. Biol. Chem.* 281:1442-1448; 2006.



63. Shaw J and **Kirshenbaum LA**. Prime time for JNK mediated Akt reactivation in hypoxia-reoxygenation. *Circ. Res* 98:7-9; 2006.
64. Zou M-X, Roy AA, Zhao Q, **Kirshenbaum LA**, Karmazyn M and Chidiac P. RGS2 is up regulated by and attenuates the hypertrophic effect of  $\alpha$ 1 adrenergic activation in cultured ventricular myocytes. *Cell Signaling* 10:1655-1663; 2006.
65. Javadov S, Baetz D, Rajapurohitam V, Zeidan A, **Kirshenbaum LA** and Karmazyn M. Antihypertrophic effect of NHE-1 inhibition is mediated by reduced MAPK activation secondary to improved mitochondrial integrity and decreased generation of mitochondrial-derived reactive oxygen species. *J Pharmacol Exp Ther* 317:1036-1043; 2006.
66. Rajapurohitam V, Javadov S, Purdham DM, **Kirshenbaum LA** and Karmazyn, M. An autocrine role for leptin in mediating the cardiomyocyte hypertrophic effects of angiotensin II and endothelin-1. *J Mol Cell Cardiol* 41: 265-274; 2006.
67. Shaw J and **Kirshenbaum LA**. Hax-1 represses post-mitochondrial caspase 9 activation and cell death during hypoxia-reoxygenation. *Circ. Res* 99:336-338; 2006.
68. Roy AA, Nunn C, Ming H, Zou M-X, Penninger J, **Kirshenbaum LA**, Dixon SJ and Chidiac P. Up-regulation of endogenous RGS2 mediates cross desensitization between Gs and Gq signaling in osteoblasts. *J Biol Chem* 281:32684-32693; 2006.
69. Shaw J, Zhang T, Rzeszutek M, Yurkova N, Baetz D, Davie JR and **Kirshenbaum LA**. Transcriptional silencing of the death gene Bnip3 by cooperative action of NF- $\kappa$ B and histone deacetylase 1 in ventricular myocytes. *Circ Res* 99:1347-1354; 2006.
70. Hamacher-Brady A, Brady NR, Logue SE, Sayen MR, Jinno M, **Kirshenbaum LA**, Gottlieb RA and Gustafsson ÅB. Response to myocardial ischemia/reperfusion injury involves Bnip3 and autophagy. *Cell Death Differ* 14:146-157; 2007.
71. Sun M, Chen M, Dawood F, Zurawska U, Li J, Parker T, Kassiri Z, **Kirshenbaum LA**, Arnold M, Khokha R and Liu P. Tumor necrosis factor- $\alpha$  mediates cardiac remodeling and ventricular dysfunction following pressure overload state. *Circulation* 20; 115: 1398-407; 2007.
72. Shaw J, Eydelnant IA and **Kirshenbaum LA**. Transgenic expression of A20 prevents cardiac cell death and myocardial dysfunction post-myocardial infarction. *Circulation*. 115:1827-1829; 2007.
73. Ma X, Dang X, Claus P, Hirst C, Fandrich RR, Jin Y, Grothe C, **Kirshenbaum LA**, Cattini PA, Kardami E. Chromatin compaction and cell death by high molecular weight FGF-2 depend on its nuclear localization, intracrine ERK activation, and engagement of mitochondria. *J Cell Physiol*. 213: 690-698; 2007.
74. Guo J, Massaelli H, Li W, Xu J, Luo T, Shaw J, **Kirshenbaum LA**, Zhang S. Identification of IKr and its trafficking disruption induced by probucol in cultured neonatal rat cardiomyocytes. *J Pharmacol Exp Ther*. 321: 911-920; 2007.
75. Diwan A, Krenz K, Syed F, Wansapura J, Ren X, Koesters AG, **Kirshenbaum LA**, Robbins J, Jones KW, and Dorn II GW. Inhibition of ischemic cardiomyocyte apoptosis through targeted ablation of Bnip3 restrains post-infarction remodeling. *J. Clin. Invest*. 117: 2825-2833; 2007.

76. Yurkova N, Shaw J, Blackie K, Weidman D, Jayas R, Flynn B and **Kirshenbaum LA**. The cell cycle factor E2F-1 activates Bnip3 and the intrinsic death pathway in ventricular myocytes. *Circ Res* 102(4):472-479; 2008.
77. Weidman D, Shaw J, Bednarczyk J, Regula KM, Yurkova N, Zhang T, Aguilar F and **Kirshenbaum LA**. Dissecting apoptosis and intrinsic death pathways in the heart. *Methods Enzymol* 446:277-285; 2008.
78. Stanbouly S, **Kirshenbaum LA**, Jones DL, and Karmazyn M. Sodium hydrogen exchange 1 (NHE-1) regulates connexin 43 expression in cardiomyocytes via reverse mode sodium calcium exchange and c-Jun Terminal kinase pathways. *J. Pharmacol. Exp. Ther.* 327:(1) 105-113; 2008
79. Shaw J and **Kirshenbaum LA**. Molecular regulation of autophagy and apoptosis during ischemic and non-ischemic cardiomyopathy. *Autophagy* 4(4):427-434; 2008.
80. Shaw J, Yurkova N, Zhang T, Gang H, Aguilar F, Weidman D, Scramstad C, Weisman H and **Kirshenbaum LA**. Antagonism of E2F-1 regulated Bnip3 transcription by NF- $\kappa$ B is essential for basal cell survival. *Proc. Natl. Acad. Sci.* 105(52); 20734-20739; 2008.
81. Dorn GW II and **Kirshenbaum LA**. Cardiac reanimation: targeting cardiomyocyte death by BNIP3 and NIX/BNIP3L. *Oncogene* 27(S1):158-167; 2008.
82. Li GH, Shi Y, Chen Y, Sun M, Sader S, Maekawa Y, Arab S, Dawood F, Chen M, De Couto G, Liu Y, Fukuoka M, Yang S, Da Shi M, **Kirshenbaum LA**, McCulloch CA, and Liu P. Gelsolin. Regulates Cardiac Remodeling After Myocardial Infarction Through DNase I-Mediated Apoptosis. *Circ Res* 104(7):896-904; 2009.
83. Choudhury S, Bae S, Kumar SR, Ke Q, Yalamarti B, Choi JH, **Kirshenbaum LA** and Kang PM. Role of AIF in cardiac apoptosis in hypertrophic cardiomyocytes from Dahl salt sensitive rats. *Cardiovasc Res* 85(1):28-37; 2010.
84. Margulets V, Dhingra R and **Kirshenbaum LA**. Stem Cells: New Opportunities for Mending a Broken Heart. *The Health Report, Lifestyles 55 Plus*: 6, Mar, 2010.
85. Nunn C, Zou MX, Sobiesiak AJ, Roy AA, **Kirshenbaum LA** and Chidiac P. RGS2 inhibits  $\beta$ -adrenergic receptor-induced cardiomyocyte hypertrophy. *Cell Signal.* 22(8):1231-9; 2010.
86. Dhingra R, Shaw J, Aviv Y and **Kirshenbaum LA**. Dichotomous Actions of NF- $\kappa$ B Signaling Pathways in Heart. *J. Cardiovasc. Transl. Res.* 3 (4):344-54; 2010.
87. Dhingra R and **Kirshenbaum LA**. Negative Inotropy by Angiotensin II is Mediated via PI3K $\alpha$ -PKC-Coupled Signaling Pathway. *Hypertension.* 56 (3)349-50; 2010.
88. Aviv Y and **Kirshenbaum LA**. Novel Phosphatase PHLPP-1 Regulates Mitochondrial Akt Activity and Cardiac Cell Survival. *Circ. Res.* 107(4):448-450; 2010.
89. Aviv Y, Shaw J, Gang H and **Kirshenbaum LA**. Regulation of Autophagy in the Heart: "You Only Live Twice". *Antioxid Redox Signal.* 14(11):2245-50; 2011.
90. Gang H, Dhingra R, Wang Y, Mughal W, Gordon JW, and **Kirshenbaum LA**. Epigenetic Regulation of E2F-1 Dependent Bnip3 Transcription and Cell Death by NF- $\kappa$ B and HDAC1. *Pediatr. Cardiol.* 32:(3)263-266; 2011.

91. Panama BK, Latour-Villamil D, Farman GP, Zhao D, Bolz SS, **Kirshenbaum LA** and Backx PH. NF- $\kappa$ B Downregulates the Transient Outward Potassium Current I<sub>(to,f)</sub> Through Control of KChIP2 Expression. *Circ. Res.* 108(5):537-43; 2011.
92. Gordon JW, Shaw JA and **Kirshenbaum LA**. Multiple Facets of NF- $\kappa$ B in the Heart: To Be or Not to NF- $\kappa$ B. *Circ. Res.* 108(9):1122-1132; 2011.
93. Gang H, Hai Y, Dhingra R, Gordon JW, Yurkova N, Aviv Y, Li H, Aguilar F, Marshall A, Leygue E and **Kirshenbaum LA**. A Novel Hypoxia-inducible spliced variant of Mitochondrial death gene Bnip3 promotes survival of ventricular myocytes. *Circ Res.* 108(9):1084-1092; 2011.
94. Jurasz P, Yurkova N, **Kirshenbaum LA** and Stewart DJ. VEGF Masks BNIP3-mediated Apoptosis of Hypoxic Endothelial Cells. *Angiogenesis.* 14(2):199–207; 2011.
95. Mughal W and **Kirshenbaum LA**. Cell Death Signaling Mechanisms in Heart Failure. *Exp. Clin. Cardiol.* 16(4):102-108; 2011.
96. Wang EY, Biala AK, Gordon JW, and **Kirshenbaum LA**. Autophagy in the Heart: Too much of a good thing? *J. Cardiovasc. Pharmacol.* 60(2):110-7; 2012
97. Mughal W, Dhingra R, **Kirshenbaum LA**. Striking a Balance: Autophagy, Apoptosis, and Necrosis in a Normal and Failing Heart, *Curr. Hypertens. Rep.* 14(6):540-7; 2012
98. **Kirshenbaum LA**. Regulation of Autophagy in the Heart in Health and Disease. *J. Cardiovasc. Pharmacol.*; 60(2):109, 2012
99. Klionsky DJ, Abdalla FC, Abeliovich H, Abraham RT, Acevedo-Arozena A, **Kirshenbaum LA**, et al. Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*, 8(4):445-544; 2012
100. Blaxall BC, Baudino TA, **Kirshenbaum LA**. Cardiac Fibroblasts and Cellular Cross Talk in Heart Failure, *J. Cardiovasc. Transl. Res.* 5(6):737-8; 2012
101. Dhingra R, Gang H, Wang Y, Biala A, Aviv Y, Margulets V, Tee A, and **Kirshenbaum, LA**. Bi-Directional Regulation of NF- $\kappa$ B and mTOR Signaling Functionally Links Bnip3 Gene Repression and Cell Survival of Ventricular Myocytes. *Circ Heart Fail.* 6(2):335-43; 2013.
102. Gang, H, Shaw J and **Kirshenbaum LA**. Epigenetic Regulation of Canonical TNF $\alpha$  Pathway by HDAC1 Determines Survival of Cardiac Myocytes. *Am J Physiol Heart Circ Physiol.* 304(12):H1662-9; 2013.
103. Wang EY, Gang H, Aviv Y, Dhingra R, Margulets V and **Kirshenbaum LA**. p53 Mediates Autophagy and Cell Death by a Mechanism Contingent on Bnip3. *Hypertension*; 62(1):70-7; 2013.
104. Dhingra R and **Kirshenbaum LA**. Mst-1 Switches between Cardiac Cell Life and Death, *Nat Med.* (11):1367-8; 2013.
105. Dhingra R and **Kirshenbaum LA**. Regulation of Mitochondrial Dynamics and Cell Fate, *Circulation*; 78(4):803-810; 2014.
106. Biala AK and **Kirshenbaum LA**. The Interplay between Cell Death Signaling Pathways in the Heart. *Trends Cardiovasc Med.* 24(8):325-331; 2014.

107. Lin J and **Kirshenbaum LA**. Wnt-1 Dishevelled Signaling Functionally Links CAMKII and Cardiac Dysfunction. *Hypertension*. 65(2):287-8; 2014.
108. Dhingra R, Margulets V, Chowdhury SR, Thliveris J, Jassal D, Fernyhough P, Dorn II G and **Kirshenbaum LA**. Bnip3 Mediates Doxorubicin-induced Cardiac Myocyte Necrosis and Mortality Through Changes in Mitochondrial Signaling. *Proc Natl Acad Sci*. 111(51):5537-44; 2014.
109. Li Y, Müller A, Ngo MA, Sran K, Bellan D, Arora RC, **Kirshenbaum LA** and Freed DH. Statins Impair Survival of Primary Human Mesenchymal Progenitor Cells via Mevalonate Depletion, NF- $\kappa$ B Signaling, and Bnip3. *J Cardiovasc Transl Res*. 8(2):96-105; 2015.
110. Barbato E, Lara-Pezzi E, Stolen C, Taylor A, Barton PJ, Bartunek J, Iazzo DP, Judge DP, **Kirshenbaum LA**, Blaxall BC, Terzic A and Hall JL. Advances in Induced Pluripotent Stem Cells, Genomics, Biomarkers, and Antiplatelet Therapy Highlights of the Year in JCTR 2013. *Journal of Cardiovascular Translational Research*. 7(5): 518-525. 2015
111. Biala AK, Dhingra R and **Kirshenbaum LA**. Mitochondrial Dynamics: Orchestrating the Journey to Advanced Age. *J Mol Cell Cardiol*. 83:37-43; 2015.
112. Dhingra R, Lin J and **Kirshenbaum LA**. Disruption of RIP1-FADD Complexes by MicroRNA-103/107 Provokes Necrotic Cardiac Cell Death. *Circ Res*. 117(4):314-6; 2015.
113. Sassone F, Margulets V, Maraschi A, Rodighiero S, Silani V, Ciammola A, Sassone J and **Kirshenbaum LA**. Bcl-2/adenovirus E1B 19-kDa interacting protein (BNip3) has a key role in the mitochondrial dysfunction induced by mutant Huntington. *Hum Mol Genet*. 24(22):6530-9; 2015.
114. Gang H , Dhingra R , Lin J , Hai Y , Aviv Y , Margulets V , Hamedani M , Thanasupawat T, Leygue E, Klonsch T, Davie JR and **Kirshenbaum LA**. PDK2-Mediated Alternative Splicing Switches Bnip3 From Cell Death to Cell Survival. *J Cell Biol*. 210(7):1101-15; 2015.
115. Dhingra R and **Kirshenbaum LA**. Succinate Dehydrogenase/Complex II Activity Obligatorily Links Mitochondrial Reserve Respiratory Capacity to Cell Survival in Cardiac Myocytes. *Cell Death Dis.*, 6:e1956; 2015.
116. Panama BK, Korogyi A, Aschar-Sobbi R, Oh Y, Gray CBB, Gang H, Heller-Brown J and **Kirshenbaum LA** and Backx P. Reductions in the Cardiac Transient Outward K<sup>+</sup> Current I<sub>to</sub> Caused by Chronic  $\beta$ -Adrenergic Receptor Stimulation Are Partly Rescued by Inhibition of Nuclear Factor  $\kappa$ B. *J Biol Chem*. 291(8):4156-65; 2016.
117. Klionsky DJ, Abdelmohsen K, Abe A, Abedin MJ, Abeliovich H, Acevedo Arozena A, **Kirshenbaum LA** et al; Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy* 12(1):1-222; 2016
118. Mistry P, Duong A, **Kirshenbaum LA** and Martino TA. Cardiac Clocks and Preclinical Translation. *Chronobiology and Cardiovascular Diseases* 13(4) 657-672; 2017
119. Dhingra A, Jayas R, Afshar P, Guberman M, Maddaford G, Gerstein J, Lieberman B, Nepon H, Margulets V, Dhingra R, **Kirshenbaum LA**. Ellagic acid antagonizes Bnip3-mediated mitochondrial injury and necrotic cell death of cardiac myocytes. *Free Radic Biol Med*. 112:411-422; 2017

120. Koleini N, Nickel BE, Wang J, Roveimiab Z, Fandrich RR, **Kirshenbaum LA** Cattini PA and Kardami E. Fibroblast growth factor-2- mediated protection of cardiomyocytes from the toxic effects of doxorubicin requires the mTOR/Nrf-2/HO-1 pathway. *Oncotarget.*; 8(50): 87415-87430 2017.
121. Dhingra R, Ravandi A, **Kirshenbaum LA**. Ferroptosis: Beating on Death's Door. *Am J Physiol Heart Circ Physiol.* 314(4):H772-H775; 2018
122. Shi R, Guberman M, **Kirshenbaum LA**. Mitochondrial Quality Control: The Role of Mitophagy in Aging. *Trends Cardiovasc Med.* 28(4):246-260; 2018
123. Minuk I, Rabinovich-Nikitin I, **Kirshenbaum LA** Historic Odyssey: The Institute of Cardiovascular Sciences Past, Present, and Future. *Circ Res.*122(10):1338-1340; 2018
124. Rabinovich-Nikitin I, Dhingra R, **Kirshenbaum LA**. Epigenetic regulation of cardiac cell cycle Re-entry and proliferation. *J Mol Cell Cardiol.* 121:297-299; 2018
125. Rabinovich-Nikitin I and **Kirshenbaum LA**. Exercise-Induced Myonectin Protects Against Ischemia-Reperfusion Injury. *Circ Res.* 123(12):1264-1266; 2018
126. Koleini N, Santiago JJ, Nickel BE, Sequiera GL, Wang J, Fandrich RR, Jassal DS, Dhingra S, **Kirshenbaum LA**, Cattini PA, Kardami E. Elimination or neutralization of endogenous high-molecular-weight FGF2 mitigates doxorubicin-induced cardiotoxicity. *Am J Physiol Heart Circ Physiol.* 316(2):H279-H288; 2019
127. Dhingra R, Lieberman B, **Kirshenbaum LA**. Cyclophilin D phosphorylation is critical for mitochondrial calcium uniporter regulated permeability transition pore sensitivity. *Cardiovasc Res.* 115(2):261-263; 2019
128. Yeang C, Hasanally D, Que X, Hung MY, Stemankovic A, Chan D, Chaudhary R, Margulets V, Edel AL, Hoshijima M, Gu Y, Bradford W, Dalton N, Miu P, Cheung DY, Jassal DS, Pierce GN, Peterson KL, **Kirshenbaum LA**, Witztum JL, Tsimikas S, Ravandi A. Reduction of Myocardial Ischemia-Reperfusion Injury by Inactivating Oxidized Phospholipids. *Cardiovasc Res.* 115(1)179-189; 2019
129. Rabinovich-Nikitin I and **Kirshenbaum LA** Dichotomous actions of the E3-ligase Ring TRIMmers in cardiac myocytes. *Trends Cardiovasc Med.* 29(1):9-11; 2019
130. Dhingra R, Rabinovich-Nikitin I and **Kirshenbaum LA**. Ulk1/Rab9-mediated alternative mitophagy confers cardioprotection during energy stress. *J Clin Invest.* 129(2):509-512; 2019
131. Rabinovich-Nikitin I, Lieberman B, Martino TA and **Kirshenbaum LA**. Circadian Regulated Cell Death in Cardiovascular Diseases. *Circulation* 139(7):965-980; 2019
132. Rabinovich-Nikitin I, **Kirshenbaum LA**. Hypoxia-Inducible Factor 1 (HIF-1) regulates SERCA2 in the heart by modulating miR-29c levels. *Am J Physiol Heart Circ Physiol.* 316(5)H1211-H1213; 2019.
133. Rabinovich-Nikitin I, Dhingra R, and **Kirshenbaum LA**. Activation of Mitophagy In High Fat Diet-Induced Diabetic Cardiomyopathy. *Circ Res.* 24(9):1288-1290; 2019.
134. Yan W, Abu-El-Rub E, Saravanan S, **Kirshenbaum LA**, Arora RC, Dhingra S. Inflammation in myocardial injury: mesenchymal stem cells as potential immunomodulators. *Am J Physiol Heart Circ Physiol.* 317(2):H213-H225 2019.

135. Dhingra R, Guberman M, Rabinovich-Nikitin I, Gerstein J, Margulets V, Gang H, Madden N, Thliveris J and **Kirshenbaum LA**. Impaired NF- $\kappa$ B signalling underlies cyclophilin D-mediated mitochondrial permeability transition pore opening in doxorubicin cardiomyopathy. *Cardiovasc Res.*; 116(6):1161-1174; 2020.
136. Olgar Y, Tuncay E, Degirmenci S, Billur D, Dhingra R, Turan B and **Kirshenbaum LA**. Ageing-associated increase in SGLT2 disrupts mitochondrial/sarcoplasmic reticulum Ca<sup>2+</sup> homeostasis and promotes cardiac dysfunction. *J Mol Cell Cardiol* 24(15):8567-8578; 2020.
137. Sareen N, Abu-El-Rub E, Ammar HI, Yan W, Lester Sequiera G, ShamsEldeen AM, Moudgil M, Dhingra R, Shokry HS, Rashed LA, **Kirshenbaum LA**, Dhingra S. Hypoxia-induced downregulation of cyclooxygenase 2 leads to the loss of immunoprivilege of allogeneic mesenchymal stem cells. *FASEB J.* 34(11):15236-15251; 2020
138. Aziz I, McMahon A, Friedman D, Rabinovich-Nikitin I, **Kirshenbaum LA**, Martino TA. Circadian Influence on Inflammatory Response During Cardiovascular Disease. *Curr Opin Pharmacol.* 57:60-70. 2020.
139. Amgalan D, Garner TP, Pekson P, Yanamandala M, Paulino V, Corbalan JJ, Lee J, Scarlata M, Liang H, Narayanagari SW, Mitchell K, Lopez A, Margulets V, Asnani A, Peterson R, Hazan RB, Steidl UG, **Kirshenbaum LA**, Gavathiotis E, and Kitsis RN. A small-molecule allosteric inhibitor of BAX protects against doxorubicin-induced cardiomyopathy. *Nat Cancer* 1, 315 – 328; 2020.
140. Rabinovich-Nikitin I, Love M, **Kirshenbaum LA**. Inhibition of MMP prevents doxorubicin-induced cardiotoxicity by attenuating cardiac intracellular and extracellular matrix remodelling. *Cardiovasc Res*; 117(1):11-12; 2021
141. Klionsky DJ, Amal Kamal Abdel-Aziz, Abel S, Agnello M, Agostinis P, Auberger P, **Kirshenbaum LA** et al; Guidelines for the Use and Interpretation of Assays for Monitoring Autophagy (4th edition). *Autophagy* 17(1):1-382; 2021
142. Stamenkovic A, O'Hara KA, Nelson DC, Maddaford TG, Edel AL, Maddaford G, Dibrov E, Aghanoori M, **Kirshenbaum LA**, Fernyhough P, Aliani M, Pierce GN, Ravandi A. Oxidized phosphatidylcholines trigger ferroptosis in cardiomyocytes during ischemia-reperfusion injury. *Am J Physiol Heart Circ Physiol* 320(3):H1170-H1184. 2021
143. Rabinovich-Nikitin I, **Kirshenbaum LA**. YAP/TFEB pathway promotes autophagic cell death and hypertrophic cardiomyopathy in lysosomal storage diseases. *J Clin Invest*; 131(5):e146821. 2021
144. Rabinovich-Nikitin I, Rasouli M, Reitz CJ, Posen I, Margulets V, Dhingra R, Khatua TN, Thliveris JA, Martino TA, **Kirshenbaum LA**. Mitochondrial Autophagy and Cell Survival is Regulated by the Circadian Clock Gene in Cardiac Myocytes during Ischemic Stress. (11):3794-3812 *Autophagy*; 2021
145. Rabinovich-Nikitin I, **Kirshenbaum LA**. GSK-3 $\beta$  Mediates Cardiac Senescence through Inhibition of Ulk1 Directed Autophagy. *J Cardiovasc Aging.* 1:14. 2021
146. Aghanoori MR, Margulets V, Smith DR, **Kirshenbaum LA**, Gitler D, and Fernyhough P. Sensory neurons derived from diabetic rats exhibit deficits in functional glycolysis and ATP that are ameliorated by IGF-1. *Mol Metab.* 49:101191. doi: 10.1016; 2021

147. Marian AJ, Asatryan B, Bolli R, Cheedipudi SM, Dhalla NS, Finkel T, Frangogiannis NG, Gurha P, Belmonte JCI, Hare JM, Hong K, **Kirshenbaum LA**, Lee RT, Leeser MA, Libby P, Madonna R, Nagueh SF, Roberts R, Rosenzweig A, Rouhi L, Sadoshima J, Sussman MA, Taffet GE, Tanaka H, Torella D, Wang Y, Wang DW. Editors' Preamble to The Journal of Cardiovascular Aging; J Cardiovasc Aging. doi: 10.20517/jca.2021.01. Epub 2021
148. Rabinovich-Nikitin I, Cogan R and **Kirshenbaum LA**. Attenuation of obesity- cardiomyopathy by Ulk1/Rab9 mediated -alternative mitophagy. *Circ Res*; 29(12): 1122-1124 2022
149. Rabinovich-Nikitin I and **Kirshenbaum LA**. Rev-erb-Mediated Regulation of Cardiac Metabolism in the Obesity Paradox. 145(6):465-468 *Circulation* 2022
150. Rabinovich-Nikitin I, **Kirshenbaum LA**. Mef2 Regulated Cardiac Hypertrophy and Heart Failure in Hypertension. *Trends Cardiovasc. Med.* S1050-1738(22)00011-1 2022
151. Rabinovich-Nikitin I and **Kirshenbaum LA**. Intersection of Circadian Rhythms and Mitochondrial Quality Control Regulation in the Heart. *Biochim Biophys Acta Mol Basis Dis.* 1868(4):166354. 2022.
152. Rabinovich-Nikitin I, **Kirshenbaum LA**. Circadian Regulation of Ischemia-Reperfusion Injury in the Heart. *Circ Res* (Submitted) 2022
153. Guberman M, Gang H and **Kirshenbaum LA**. IKK $\beta$  Regulates Mitochondrial Dynamics protein in Doxorubicin Cardiomyopathy. *Circ Res* (Submitted) 2022
154. Gang H and **Kirshenbaum LA**. Bnip3 protein alterative splice variant NIPLET Regulates MFN2 and mitochondrial dynamics in cardiac myocytes. (Submitted) *Mol. Cell.* 2022
155. Dhingra R, Rabinovich-Nikitin R, Guberman M, Gang H, Margulets V, Jassal S, Alagarsamy KN, Dhingra S, Valenzuela Ripoll C, Billia F, Diwan A, Javaheri A and **Kirshenbaum LA**. Proteasomal Degradation of TRAF2 Mediates Mitochondrial Dysfunction in Doxorubicin-Cardiomyopathy. *Circulation* (Under revision) 2022
156. Zacharioudakis, E Agianian, B Nikos, Garner T, Rabinovich-Nikitin, I, Tomie Ouchida, A, Margulets V, Riley J, Dolgalev I, Chen Y, Wittig A, Pekson R, Tsirigos A, **Kirshenbaum, LA** Kitsis, RN Gavathiotis E. Modulating mitofusins to control mitochondrial function and signaling. *Nat. Commun.* (In Press) 2022
157. Rabinovich-Nikitin I, Reitz CJ, Martino TA, **Kirshenbaum LA**. Shiftwork Before Myocardial Infarction Adversely Affects Long-Term Cardiac Structure and Function in Mice. *Circulation* (Submitted) 2022
158. Dhingra, R and **Kirshenbaum LA**. ULK1 Mediated Mitophagy Prevents Pathological Cardiac Remodeling and Heart Failure. *Cardiovasc. Res.* (In Press) 2022

**FOCUSED ISSUES EDITED IN PEER REVIEWED JOURNALS**

1. **Kirshenbaum LA**, Regeneration and Cell Death in Heart Failure, *J Cardiovasc Transl Res.* 3(4):344-54; 2010
2. **Kirshenbaum LA**, Cardiovascular System, Thematic Series NF- $\kappa$ B Signaling in the Cardiovascular System. *Circ Res.* 108(9):1122-1132, 2011

3. **Kirshenbaum LA**, Autophagy J. Cardiovasc Pharmacology 2011
4. Matsui T, Sadoshima J and **Kirshenbaum LA**. New Avenues in Cell Death Signaling Pathways, Am J Physiol Heart Circ Physiol 2018
5. Blaxall BC, Baudino TA, **Kirshenbaum LA**. Cardiac Fibroblasts and Cellular Cross Talk in Heart Failure, J Cardiovasc Transl Res. 5(6):737-8; 2012

### **PUBLICATIONS IN BOOKS AND CHAPTERS**

1. Singal PK, **Kirshenbaum, LA**, Gupta M and Randhawa AK. Cardiac contractile failure due to oxygen radicals in an *in vitro* system. In: Subcellular Basis of Contractile Failure, Eds. B Korecky and NS Dhalla, Kluwer Academic Publishers, Boston p. 305-321, 1990
2. Schneider MD, Abdellatif M, **Kirshenbaum LA**, MacLellan WR and Brand TA. Mutational dissection of growth factor signaling events in cardiac muscle cells. In: Cardiac Development and Gene Regulation, Ed. Y Yazaki, Excerpta Medica Ltd, Tokyo, p. 99-110, 1995
3. **Kirshenbaum LA**. Reactivation of DNA synthesis and cell cycle progression in ventricular myocytes by adenovirus early region 1 proteins. In: The Developing Heart, Eds. B Ostadal, M Nagano and NS Dhalla, Lippincott-Raven Publishers, New York, p. 39-50, 1997
4. **Kirshenbaum LA**. Modification of terminally differentiated ventricular myocytes with adenovirus mediated-gene transfer. In: Adaptation Biology and Medicine: Volume 1, Eds. BK Sharma, N Takeda, NK Ganguly and PK Singal, Narosa Publishing House, New Delhi, p.122-130, 1997.
5. **Kirshenbaum LA**. Mustapha S, Regula K, de Moissac D and Zheng H. Apoptosis of ventricular myocytes can be prevented by the anti-apoptotic factor Bcl-2. In: Adaptation Biology and Medicine: Volume 2, Eds. K Pandolf, N Takeda and PK Singal, Narosa Publishing House, New Delhi, p. 43-51, 1999
6. Dhingra R, Shaw J and **Kirshenbaum LA.**, Molecular Regulation of Apoptosis Signaling Pathways in Heart. In: Apoptosis, Ed. VR. Preedy, Science Publishers, Enfield p. 373-387, 2010
7. Delcuve G, Kran D, Liyanage V, Jahan S, Rastegar M, **Kirshenbaum LA**, Davie J. Epigenetics: Chromatin Organization and Function. Cardiac and Vascular Biology, Epigenetics in Cardiac Disease; p. 1-35. V1 2016
8. Dhingra R, Margulets V, and **Kirshenbaum LA**. Molecular Mechanisms Underlying Anthracycline Cardiotoxicity: Challenges in Cardio-Oncology. Cardio-Oncology: Principles, Prevention and Management. 25-34 2017.
9. Dhingra, R., Jayas, R., Dhingra, A. and **Kirshenbaum, LA**. Doxorubicin induces cell death of ventricular myocytes by a mechanism involving Bnip3. Adaptation Biology and Medicine: Current Trends. Eds. Y. Kawai, A.R. Hargens and P.K. Singal Narosa Publishing House, New Delhi, Vol. 8, 141-148, 2017
10. Rabinovich-Nikitin I, Gerstein J, Dhingra R, Guberman M, **Kirshenbaum LA**. Regulation of Cell Death Signaling Pathways in Cardiac Myocytes by Mitochondrial Bnip3. *Biochemistry of*



*Cell Death Apoptosis and Autophagy*. Lorrie A Kirshenbaum. Springer Nature Scientific publishing group; Vol 18:239-251. 2022.

11. Love M, Rabinovich-Nikitin I, and **Kirshenbaum LA**. Circadian Regulation of Autophagy in the Heart Via the mTOR Pathway. *Biochemistry of Cell Death Apoptosis and Autophagy*. Lorrie A Kirshenbaum. Springer Nature Scientific publishing group; Vol 18:49-166. 2022.

### **BOOKS EDITED AND PUBLISHED**

1. Singal PK, Dixon IM, **Kirshenbaum LA** and Dhalla NS. Cardiac Remodeling and Failure. Kluwer Academic Publishers, Boston, 2003
2. **Kirshenbaum LA**, Dixon IMC and Singal PK. Biochemistry of Hypertrophy and Heart Failure. Kluwer Academic Publishers, Boston, 2003
3. **Kirshenbaum LA**, Biochemistry of Cell Death Apoptosis and Autophagy, Springer Nature Scientific, volume 18 2022

### **ABSTRACTS**

1. Belluk B, Gupta M, **Kirshenbaum LA** and Singal PK. Calcium paradox can occur independent of lipid peroxidation (International Symposium in Free Radicals in Health and Disease, Winnipeg, Canada; 1987).
2. **Kirshenbaum LA**, Sitar DS, Mathews SC and Tenenbein M. Efficacy of gastrointestinal decontamination procedures on the kinetic disposition of enteric-coated salicylate. Clin Invest Med 11:4; 1988.
3. Tenenbein M, **Kirshenbaum LA**, Mathews SC and Sitar DS. Whole bowel irrigation vs. activated charcoal/sorbitol for ingestion of delayed release pharmaceuticals (Australia). Vet Hum Toxicol 30:4, Australia; 1988.
4. Tenenbein M, **Kirshenbaum LA** and Sitar DS. Multiple-dose charcoal therapy for salicylate poisoning. Ann Emerg Med 18:444; 1989.
5. Tenenbein M, Sitar DS and **Kirshenbaum LA**. Does multiple dose charcoal therapy enhance salicylate excretion? Vet Human Toxicol 31:335; 1989.
6. **Kirshenbaum LA** and Singal PK. Vitamin E protects against epinephrine induced arrhythmias in rats with chronic heart hypertrophy (Calgary). CFBS Proceedings 32:69; 1989.
7. **Kirshenbaum LA** and Singal PK. Hypoxia-reoxygenation induced antioxidant changes in isolated rat cardiocytes (Washington). FASEB 4A:1220; 1990.
8. Singal PK, Dhaliwal H, Randhawa AK and **Kirshenbaum LA**. Antioxidant changes due to hypoxia at different temperatures and correlations with recovery (Halifax). CFBS Proceedings 33; 1990.
9. **Kirshenbaum LA** and Singal PK. Significance of antioxidant changes during heart hypertrophy. CFBS Proceedings 34; 1991.

10. **Kirshenbaum LA** and Singal PK. Significance of elevated endogenous antioxidants against myocardial reperfusion injury. International Meeting of the International Society for Pathophysiology, Moscow; 1991.
11. **Kirshenbaum LA** and Singal PK. A specific antioxidant deficit may be important in myocardial hypoxia-reoxygenation injury. *J. Mol. Cell Cardiol.* 24 (Suppl I):S70; 1992.
12. Singal PK and **Kirshenbaum LA**. Antioxidant reserve and cardiac injury. *J of Beijing Medical University* 24(2):45; 1992.
13. **Kirshenbaum LA** and Singal PK. Increased endogenous antioxidants protect against ischemia-reperfusion injury in the hypertrophied heart. XIV International Society for Heart Research (ISHR) Meeting, Burlington, Vermont 24(Suppl.III):40; 1992.
14. **Kirshenbaum LA**, MacLellan WR, French BA and Schneider MD. Highly efficient gene transfer into adult ventricular myocytes by recombinant adenovirus (Keystone Symposia on Molecular and Cellular Biology of Cardiac Development, Taos, New Mexico). *J Cell Biochem* 17D (Suppl):98; 1993.
15. **Kirshenbaum LA**, MacLellan WR, French BA and Schneider MD. Highly efficient gene transfer into adult ventricular myocytes by recombinant adenovirus (The Clinical Research Meeting, Washington, DC). *Clin Res* 41(2):146; 1993.
16. **Kirshenbaum LA**, MacLellan WR, Mazur W, French BA and Schneider MD. Recombinant adenovirus can mediate uniform gene transfer into ventricular muscle cells. Asilomar American Heart Association Meeting, Anaheim, CA; 1993.
17. **Kirshenbaum LA**, Schneider MD. Repression of cardiac gene expression and reactivation of cardiac growth by adenovirus E1A. *Circulation* 90(4):1195; 1994.
18. Schneider MD, Abdellatiff M, **Kirshenbaum LA** and Brand T. Positive and negative regulators of ventricular growth (International Symposium on Cell Growth and its Regulation XI<sup>th</sup> Scientific Session of International Society for Heart Research (ISHR) Sapporo, Japan;1994.
19. **Kirshenbaum LA** and Schneider MD. Dual pocket protein- and p300-dependent pathways mediate control of the cardiac cell cycle and transcription by adenovirus E1A. American Heart Association Scientific Conference New Orleans, USA; 1995.
20. **Kirshenbaum LA**. Dual role for pocket-protein and p300 pathways dependent pathways in cardiac myocytes. IV World Congress of International Society for Adaptive Medicine, Chandigarh, India; 1995.
21. **Kirshenbaum LA**, Chackorborty S and Schneider, MD. Human E2F-1 reactivates cell-cycle progression in ventricular myocytes and represses cardiac gene transcription. *Developmental Biology*. Keystone Symposia, Keystone, USA; 1996.
22. **Kirshenbaum LA**, Chackorborty S and Schneider, MD. Human E2F-1 reactivates cell-cycle progression in ventricular myocytes and represses cardiac gene transcription. 69<sup>th</sup> Annual American Heart Association Meeting, New Orleans, USA; 1996.
23. **Kirshenbaum LA** and de Moissac D. The tumor suppressor protein p53 mediates programmed cell death of ventricular myocyte. *J Mol Cell Cardiol* 28(6):A173; 1996.

24. **Kirshenbaum LA.** Programmed cell death in cardiac myocytes: Role of tumor suppressor protein. *Advances in Respiratory and Cardiovascular Physiology*, Rio de Janeiro, Brazil; 1996.
25. **Kirshenbaum LA** and de Moissac D. Human E2F-1 reactivates DNA synthesis and triggers programmed cell death in terminally differentiated adult ventricular myocytes. *J Mol Cell Cardiol* 29(5):A73; 1997.
26. **Kirshenbaum LA.** Gene expression and apoptosis in ventricular myocytes. 5<sup>th</sup> World Congress of International Society for Adaptive Medicine, Framingham, USA; 1997.
27. de Moissac D, Mustapha S, Regula K, Greenberg AH and **Kirshenbaum LA.** Bcl-2 prevents p53-dependent transcription of Bax and apoptosis of ventricular myocytes. *Molecular Mechanisms of Apoptosis*, AACR Meeting, Palm Springs, USA; 1998.
28. Kumar D, **Kirshenbaum LA**, Li T, Palace V and Singal PK. Apoptotic and necrotic cell death in adriamycin cardiomyopathy. *J Mol Cell Cardiol* 30:A103; 1998.
29. **Kirshenbaum LA**, de Moissac D, Mustapha S, Regula K, Zheng H and Garcia A. Apoptosis and caspase activation in cardiac myocytes during hypoxia. *J Mol Cell Cardiol* 30:A144; 1998.
30. **Kirshenbaum LA.** Molecular mechanism of apoptosis in cardiac cell death. *J Heart Failure* 5(1):004; 1998.
31. **Kirshenbaum LA**, de Moissac D, Mustapha S, Regula K and Zheng H. Bak induces cytochrome c release and apoptosis of ventricular myocytes. *J Mol Cell Cardiol* 30:A144; 1998.
32. **Kirshenbaum LA.** de Moissac D and Zheng H. Bak induces cytochrome c release and apoptosis of ventricular myocytes. 51<sup>st</sup> Canadian Cardiovascular Society Annual Meeting, Ottawa, Canada; 1998.
33. **Kirshenbaum LA.** Greenberg AH and de Moissac D. Bcl-2 regulates the transcription factor NF $\kappa$ B through inhibition of the cytoplasmic inhibitor I $\kappa$ B $\alpha$  in ventricular myocytes. *Circulation* 98:1742; 1998.
34. Regula K, Gurevich RM, de Moissac D, Zheng H and **Kirshenbaum LA.** Bcl-2 targets the degradation of the NF $\kappa$ B inhibitor protein I $\kappa$ B $\alpha$  in ventricular myocytes. *J Mol Cell Cardiol* 31:A3; 1999.
35. **Kirshenbaum LA.** Molecular regulators of apoptosis in ventricular myocytes. 63<sup>rd</sup> Annual Meeting of the Japanese Circulation Society; 1999.
36. **Kirshenbaum LA.** Bcl-2 targets the degradation of the NF $\kappa$ B inhibitor protein I $\kappa$ B $\alpha$  in ventricular myocytes. Gordon Research Conference, New London, USA; 1999.
37. Gurevich RM and **Kirshenbaum LA.** Caspase activation and mitochondrial cytochrome c release during hypoxia-mediated apoptosis of adult ventricular myocytes. *Can J Cardiol*; 1999.
38. Regula K, de Moissac D, Zheng H and **Kirshenbaum LA.** Linkage of the BH4 domain of Bcl-2 and the NF $\kappa$ B signaling pathway for the suppression of apoptosis in ventricular myocytes. *Circ.* 100:I-774; 1999.

39. Regula KM, Mustapha S, Ziouzina O and **Kirshenbaum LA**. Role of TNF $\alpha$  and NF $\kappa$ B expression in apoptosis of neonatal ventricular myocytes. *Exp Clin Cardiol* 5:46; 2000.
40. Mustapha S, Kirshner A, de Moissac D and **Kirshenbaum LA**. A direct requirement of NF $\kappa$ B for suppression of apoptosis in ventricular myocytes. *J Mol Cell Cardiol*; 2000.
41. Mustapha S, Ziouzina O, de Moissac D and **Kirshenbaum LA**. Molecular mechanisms of apoptosis in heart. *J Heart Failure* 6:2; 2000.
42. **Kirshenbaum LA**. Apoptosis and myocardial adaptations VI World Congress of the International Society for Adaptive Medicine, Lyon, France; 2000.
43. **Kirshenbaum LA**. Role of the NF $\kappa$ B signaling pathway in apoptosis in heart British Society for Cardiovascular Research London, England; 2001.
44. **Kirshenbaum LA**. Regula RM Signal transduction pathways and apoptosis in heart failure *J Heart Disease* 2(1):1; 2001.
45. Regula KM and **Kirshenbaum LA**. P53 activates the mitochondrial death pathway and apoptosis independent of *de novo* gene transcription Canadian Cardiovascular Society; 2001.
46. **Kirshenbaum LA**, Regula RM, Li T and de Moissac D. The  $\alpha$ -helical BH4 domain of Bcl-2 is required to activate the NF $\kappa$ B signaling pathway and suppress apoptosis of ventricular myocytes. Gordon Research Conference; Cell Death, Oxford, England; 2001.
47. Regula KM, Gurevich RM and **Kirshenbaum LA**. The serpin protein CrmA suppresses hypoxia mediated apoptosis of ventricular myocytes. *Circulation* 104:203, 2001.
48. Regula KM and **Kirshenbaum LA**. The mitochondrial death pathway is activated by p53 independent of *de novo* gene transcription in ventricular myocyte. *J Mol Cell Cardiol*; 2002.
49. **Kirshenbaum LA** and Regula KM. Signal transduction pathways and apoptosis in heart failure. 9<sup>th</sup> World Congress on Heart Failure; 2002.
50. Regula KM, Ens K and **Kirshenbaum LA**. Inducible expression of BNIP3 provokes mitochondrial defects and hypoxia-mediated cell death of ventricular myocytes. *Circ.* 106:236; 2002.
51. Regula KM, Ens K, Roth J, Robinson C and **Kirshenbaum LA**. Bcl-2 mediated NF $\kappa$ B activation involves Raf-1/MEKK-1 regulated -IKK $\beta$  dependent phosphorylation of I $\kappa$ B $\alpha$ . *Circ.* 108:IV-81; 2003.
52. **Kirshenbaum LA**. The BH3 only protein BNIP3 provokes apoptosis of ventricular myocytes during hypoxic injury. Cell Death Society Meeting, Maynooth, Ireland; 2004.
53. Regula KM and **Kirshenbaum LA**. Molecular determinants of apoptosis in the heart: A new role for the tumor suppressor protein p53. International Society for Heart Research (ISHR) Satellite Meeting, South Africa; 2004.
54. Regula KM and **Kirshenbaum LA**. Molecular regulators of cardiac cell growth and cell death. International Society for Heart Research (ISHR) Meeting, Brisbane, Australia; 2004.

55. Baetz D, Regula KM, Zhang T and **Kirshenbaum LA**. NF- $\kappa$ B suppresses mitochondrial permeability transition pore opening and apoptosis of ventricular myocytes during hypoxic injury. American Heart Association Meeting, New Orleans, USA; 2004.
56. Shaw J, Baetz D, Regula KM, Zhrebetskaya E and **Kirshenbaum LA**. NF- $\kappa$ B suppresses mitochondrial permeability transition pore opening and apoptosis of ventricular myocytes during hypoxic injury. International Society for Heart Research (ISHR) Japanese Section, Osaka, Japan; 2005.
57. Zieroth S, Baetz S, Aguilar F, Oliver-Landry E, Tam JW, Dixon IMC and **Kirshenbaum LA**. Diastolic loading promotes cell death of ventricular myocytes through a novel paracrine-autocrine loop and Angiotensin II. Canadian Cardiovascular Society; 2005.
58. Shaw J, Baetz D, Rzeszutek M, Regula KM, Zhang T, Aguilar F and **Kirshenbaum LA**. Regulation of NF- $\kappa$ B gene transcription by Class I HDACs in ventricular myocytes. *Circ.* 112:II-117; 2005.
59. Shaw J, Baetz D, Regula KM, Yurkova N, Zhrebetskaya E and **Kirshenbaum LA**. NF- $\kappa$ B suppresses mitochondrial permeability transition pore opening and apoptosis of ventricular myocytes during hypoxic injury. Keystone Symposium, Banff, Canada; 2006.
60. Shaw J, Baetz D, Regula KM, Yurkova N and **Kirshenbaum LA**. NF- $\kappa$ B mediated cell survival involves transcriptional silencing of the mitochondrial death gene Bnip3 in ventricular myocytes. International Academy of Cardiovascular Sciences, Sapporo, Japan; 2006.
61. **Kirshenbaum LA**. Regulation of NF- $\kappa$ B gene transcription by class I HDACs in ventricular myocytes. International Society for Heart Research, Toronto, Canada; 2006.
62. Ma X, Hirst C, Cattini PA, **Kirshenbaum LA** and Kardami E. Nuclear FGF-2 triggers reciprocal communication between nucleus and mitochondria, resulting in ERK1/2 pathway dependent chromatin compaction and cell death. *Circulation* 114 (Suppl. II): A367; 2006.
63. Shaw J, Yurkova N, Regula KM, Zhang T, Aguilar F and **Kirshenbaum LA**. Divergent control of mitochondrial death gene BNIP3 by opposing actions of cellular factors NF- $\kappa$ B and E2F-1 in ventricular myocytes. American Heart Association Meeting, Orlando, USA; 2007.
64. Stanley BA, Shaw J, Arab S, Liu P, **Kirshenbaum LA** and Van Eyk JE. UNC-45 exhibits increased abundance in heart failure patients and functions as a novel dual regulator of myosin heavy chain at both the transcriptional and assembly level. American Heart Association Meeting, Orlando, USA; 2007.
65. Yurkova N, Shaw J, Jayas R, Blakie K and **Kirshenbaum LA**. Hypoxia-induced disruption of Rb/E2F-1 inhibitory complexes provokes mitochondrial perturbations and cell death of ventricular myocytes through de-regulated depression of the death protein Bnip3. American Heart Association Meeting, Orlando, USA; 2007.
66. Shaw J, Yurkova N, Aguilar F, Zhang T and **Kirshenbaum LA**. Regulation of the intrinsic death pathway by NF- $\kappa$ B and histone deacetylase 1 in ventricular myocytes. Keystone Symposium Meeting on Cell Death, Colorado, USA; 2008.
67. **Kirshenbaum LA**, Aguilar F, Shaw J, Yurkova N, Baetz D and Zhang T. Nuclear factor kappa B and histone deacetylase 1 regulate the mitochondrial death protein BNIP3 in post-

- natal cardiac myocytes during hypoxic injury. Keystone Meeting on NF-kappaB, Banff, Canada; 2008.
68. Shaw J, Baetz D, Yurkova N, Aguilar F, Zhang T and **Kirshenbaum LA**. Casein kinase II dependent regulation of the death protein BNIP3 promotes cell survival of ventricular myocytes. XXVIII European Section Meeting of the International Society for Heart Research, Athens, Greece; 2008.
  69. Shaw J, Yurkova N and **Kirshenbaum LA**. De-regulated expression of E2F-1 increases BNIP3 and cell death of ventricular myocytes during hypoxia. 14<sup>th</sup> World Congress of Heart Disease, Toronto, Canada; 2008.
  70. Shaw J, Yurkova N and **Kirshenbaum LA**. Hypoxia-induced expression of E2F-1 activates Bnip3 and apoptosis in ventricular myocytes. American Heart Association Meeting on Heart Failure, Keystone, USA; 2008.
  71. **Kirshenbaum LA**. Constitutive basal repression of the mitochondrial death protein Bnip3 by NF-κB averts cell death of post-natal ventricular myocytes. 8<sup>th</sup> International Calreticulin Workshop, Chile; 2009.
  72. Dhingra R, Gang H, Aviv Y, Yurkova N, **Kirshenbaum LA**. Hypoxia-induced loss of Rb/E2F-1 complexes provokes Bnip3 gene transcription and cell death of ventricular myocytes. Keystone Symposium meeting on Cell Death Pathways, Whistler, Canada; 2009.
  73. **Kirshenbaum LA**. Regulation of Bnip3 during hypoxia. Sudden Cardiac Death Meeting, Denmark, Europe; 2009.
  74. Dhingra R, Gang H, Zhang T, Aviv Y, Yurkova N and **Kirshenbaum LA**. Hypoxia-induced loss of RB/E2F-1 complexes provokes Bnip3 gene transcription and cell death of ventricular myocytes. 6<sup>th</sup> Meeting of the Canadian Oxidative Stress Consortium, Winnipeg, Canada; 2009.
  75. Gang H, Dhingra R, Yurkova N and **Kirshenbaum LA**. Histone deacetylase-1 induces autophagy in post-natal ventricular myocytes. 6<sup>th</sup> Meeting of the Canadian Oxidative Stress Consortium, Winnipeg, Canada; 2009.
  76. Shaw J, Yurkova N, Gang H, and **Kirshenbaum LA**. Antagonism of E2F-1 Regulated Bnip3 Transcription by NF-κB is Essential for Basal Cell Survival. American Heart Association, Las Vegas, USA; 2009
  77. **Kirshenbaum LA**. Constitutive basal repression of the mitochondrial death protein Bnip3 by NF-κB averts cell death of post-natal ventricular myocytes. IX ISAM Congress, Taiwan; 2009.
  78. Shaw J, Yurkova N, Gang H, and **Kirshenbaum LA**. Antagonism of E2F-1 regulated Bnip3 transcription by NF-κB is essential for basal cell survival. The 7th Annual Scientific Sessions of the Society for Heart and Vascular Metabolism, Italy; 2009.
  79. Shaw J, Dhingra R, Gang H, Zhang T, Yurkova N and **Kirshenbaum LA**. Constitutive basal repression of the mitochondrial death protein Bnip3 by NF-κB averts cell death of post-natal ventricular myocytes. *Circ.* 120: S873 - S874; 2009.
  80. Gang H, Yurkova N, Shaw J and **Kirshenbaum LA**. Histone deacetylase-1 induces autophagy in post-natal ventricular myocytes. *Circ.* 120: S584; 2009.

81. Eydelnant I, Zhang T, Bednarczyk J, Gang H, Regula KM and **Kirshenbaum LA**. Recruitment of p53 to mitochondrial VDAC1 by Bnip3 triggers autophagy of ventricular myocytes during metabolic stress. *Circ.*120: S902; 2009.
82. Shaw J, Dhingra R, Gang H, Zhang T, Yurkova N and **Kirshenbaum LA**. Basal Repression of the Mitochondrial Death Protein Bnip3 by NF- $\kappa$ B Averts Cell Death of Post-natal Ventricular Myocytes. Keystone Symposium Meeting on NF- $\kappa$ B in Inflammation and Disease, Santa Fe, USA; 2010.
83. Gang H, Shaw J, Dhingra R, Aviv Y, Yurkova N and **Kirshenbaum LA**. NF- $\kappa$ B Averts Cell Death by Antagonizing E2F-1 Dependent Activation of Bnip3. Keystone Symposium Meeting on Cell Death Pathways: Apoptosis, Autophagy and Necrosis, Vancouver, Canada; 2010.
84. Gang H, Yurkova N, Shaw J, and **Kirshenbaum LA**. Epigenetic Regulation of Cell Survival by Histone Deacetylase-1 in Post-natal Ventricular Myocytes. American Association for Cancer Research, Hawaii, USA; 2010.
85. Dhingra R, Gang R, Aviv Y, and **Kirshenbaum LA**. A Novel Signaling Pathway that links the Mammalian Target of Rapamycin (mTOR) to Cell Survival via NF- $\kappa$ B Activation in Post-Natal Adult Ventricular Myocytes. XX 2010 International Society for Heart Research (ISHR) World Congress. Japan; 2010.
86. **Kirshenbaum LA**. The Mammalian Target of Rapamycin (mTOR) Links to a Novel Cell Survival Signaling Pathway via IKK $\beta$ -NF- $\kappa$ B Signaling Pathway. XX 2010 International Society for Heart Research (ISHR) World Congress, Japan; 2010.
87. Gang H, Shaw J, and **Kirshenbaum LA**. 1A Novel Tumor Suppressor Pathway that Antagonizes E2F-1 Dependent Activation of Bnip3. First Conference of the European Research Institute for Integrated Cellular Pathology (ERI-ICP), France; 2010.
88. Aviv Y, Aguilar F, Gang H, **Kirshenbaum LA**. E2F-1 dependent activation of the death chain of Bnip3 in Ventricular Myocytes. International Symposium. Advances in Cardiovascular Research. Slovak Republic; 2010.
89. **Kirshenbaum LA**. Molecular Regulation of Apoptosis in the Heart: "To Be or Not to NF- $\kappa$ B". 15<sup>th</sup> World Congress on Heart Disease, Vancouver, Canada; 2010.
90. Gang H, Aviv Y, Dhingra R, Aguilar F, Leygue E, and **Kirshenbaum LA**. Novel Splicing of Bnip3 Promotes Cell Survival of Post-Natal Ventricular Myocytes. American Heart Association Meeting, Palm Springs, USA; 2010.
91. **Kirshenbaum LA**. The Mammalian target of Rapamycin (mTOR) links to a novel cell survival signaling pathway via IKK $\beta$ -NF- $\kappa$ B signaling pathway, 8<sup>th</sup> Annual Scientific Sessions SHVM, Kananaskis, Canada; 2010.
92. Mughal W, Gang H, Aviv Y, Dhingra R, Wang Y and **Kirshenbaum LA**. TNF $\alpha$  Regulated Cell Survival via HDAC-1 Regulated NF- $\kappa$ B Signaling Pathway in Ventricular Myocytes, Institute of Cardiovascular Sciences, Winnipeg, Canada; 2010.
93. Dhingra R, Gang H, Aviv Y, and **Kirshenbaum LA**. Mammalian Target of Rapamycin (mTOR) Suppresses Intrinsic Death Pathway Activation via NF- $\kappa$ B linked-IKK $\beta$  Dependent Pathway in Ventricular Myocytes. *Circ.* 122: A20500, 2010.

94. Dhingra R and **Kirshenbaum LA**. Mammalian Target of Rapamycin (mTOR) Suppresses the Intrinsic Death Pathway in Ventricular Myocytes. Cuba-Canada International Heart Symposium, Cuba; 2011.
95. **Kirshenbaum LA**. Novel Alternative Splicing of Death Gene Bnip3 Promotes Cell Survival of Post-Natal Ventricular Myocytes. Keystone Symposium, Keystone, USA; 2011.
96. Baetz D, Gordon JW, Gang H, and **Kirshenbaum LA**. Regulation of BNIP3 by Casein Kinase II Promotes Cell Survival of Ventricular Myocytes. ESC Congress, Paris; 2011.
97. Dhingra R, Gordon JW, Margulets V, Gang H, and **Kirshenbaum LA**. Molecular Regulation of Cardiac Cell Survival by NF- $\kappa$ B and mTOR Signaling pathways. International Society for Heart Research (ISHR) European Section Haifa, Israel; 2011
98. **Kirshenbaum LA**. Novel Alternative Splicing Of Death Gene Bnip3 Promotes Cell Survival Of Post-Natal Ventricular Myocytes. 16<sup>th</sup> World Congress on Heart Disease, Vancouver, Canada; 2011.
99. Dhingra R and **Kirshenbaum LA**. Mammalian Target of Rapamycin (mTOR) Suppresses the Intrinsic Death Pathway in Ventricular Myocytes. Cardiac Sciences Resident Research Day, Winnipeg, Canada; 2011.
100. Mughal W, Gang H, Dhingra R, Wang Y and **Kirshenbaum LA**. TNF $\alpha$  Regulated Cell Survival via HDAC-1 Regulated NF- $\kappa$ B Signaling Pathway in Ventricular Myocytes, Canadian Student Health Research Forum, Winnipeg, Canada; 2011.
101. Gordon JW, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Preferential Targeting of Bnip3 Isoforms to Mitochondria and Endoplasmic Reticulum during Metabolic Stress. Mitochondrial Dynamics 2011, Sardinia, Italy; 2011.
102. Dhingra R, Gordon JW, Gang H, and **Kirshenbaum LA**. NF- $\kappa$ B Activation Down Stream of Tuber Sclerosis Complex -mTOR Signaling pathway is Suppressed in Doxorubicin-Induced Cardiotoxicity. American Heart Association, Scientific Sessions, Orlando, USA; 2011.
103. Wang Y, Gordon JW, Dhingra R, Hai Y, Baines C and **Kirshenbaum LA**. Programmed Necrosis of Ventricular Myocytes During Ischemic Stress Involves a Mitochondrial Regulated Bnip3- RIP-1- Cyclophilin D Signaling Pathway Axis. American Heart Association, Scientific Sessions, Orlando, USA; 2011.
104. Gordon JW, Wang Y, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Preferential Targeting of Bnip3 Isoforms to Mitochondria or Endoplasmic Reticulum During Metabolic Stress Promotes Apoptosis or Autophagy of Post-Natal Ventricular Myocytes. American Heart Association, Scientific Sessions, Orlando, USA; 2011.
105. Gordon JW, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Preferential Targeting of Bnip3 Isoforms to Mitochondria and Endoplasmic Reticulum during Metabolic Stress of Post-natal Ventricular Myocytes. ICCAD, Venice, Italy; 2011.
106. **Kirshenbaum LA**. Targeting of Bnip3 Isoforms to Mitochondria and Endoplasmic Reticulum during Hypoxia Regulates Cell Death of Ventricular Myocytes. 9<sup>th</sup> International Calreticulin Workshop. Statens Serum Institute, Copenhagen, Denmark; 2011.



107. Gordon JW, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Preferential Targeting of Bnip3 Isoforms to Mitochondria and Endoplasmic Reticulum during Metabolic Stress. BSCR Autumn Meeting 2011, London, England; 2011
108. Baetz D, Gordon JW, Gang H and **Kirshenbaum LA**. Regulation Of Bnip3 By Casein Kinase II Promotes Cell Survival of Ventricular Myocytes. Winnipeg Heart International, Winnipeg, Canada; 2011.
109. Mughal W, Gang H, Dhingra R, Wang Y and **Kirshenbaum LA**. TNF- Regulated Cell Survival via Hdac-1 Regulated NF- $\kappa$ B Signaling Pathway in Ventricular Myocytes. Winnipeg Heart International, Winnipeg, Canada; 2011.
110. Gordon JW, Hai Y, Gang H and **Kirshenbaum LA**. Alternatively Spliced Bnip3 Isoform Promotes Cell Survival by Recruiting BCL-2 to the IP3-Receptor. Winnipeg Heart International, Winnipeg, Canada; 2011.
111. Wang Y, Gordon JW, Dhingra R, Gang H, Mughal W and **Kirshenbaum LA**. Alternatively Spliced Bnip3 Isoform Inhibits Hypoxia and Nutrient Deprivation-Induced Autophagy In Ventricular Myocytes. Winnipeg Heart International, Winnipeg, Canada; 2011.
112. Dhingra R, Gordon JW, Gang H and **Kirshenbaum LA**. NF- $\kappa$ B Activation Down Stream of mTOR Signaling Pathway is Suppressed in Hypoxia Induced Cardiac Cell Death. Winnipeg Heart International, Winnipeg, Canada; 2011.
113. Wang Y, Gordon JW, Dhingra R, Hai Y, Baines C and **Kirshenbaum LA**. Programmed Necrosis of Ventricular Myocytes During Ischemic Stress Involves a Mitochondrial Regulated Bnip3- RIP-1- Cyclophilin D Signaling Pathway Axis. American Heart Association, Orlando, USA; 2011.
114. Dhingra R, Gordon JW, Gang H and **Kirshenbaum LA**. NF- $\kappa$ B Activation Down Stream of Tuber Sclerosis Complex-mTOR Signaling pathway is Suppressed in Doxorubicin-Induced Cardiotoxicity. American Heart Association, Scientific Sessions, Orlando, USA; 2011.
115. Gordon JW, Wang Y, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Preferential Targeting of Bnip3 Isoforms to Mitochondria or Endoplasmic Reticulum During Metabolic Stress Promotes Apoptosis or Autophagy of Post-Natal Ventricular Myocytes. American Heart Association, Orlando, USA; 2011.
116. **Kirshenbaum LA**, Gordon JW, Hai Y, Gang, H. Alternatively spliced Bnip3 isoform promotes cell survival by recruiting bcl-2 to the ip3-receptor. Keystone Symposium, Banff, Canada; 2012.
117. **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart. Basic Cardiology Symposium of 14th South China International Congress of Cardiology, Guangzhou, China; 2012.
118. **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart. Canadian Oxidative Stress Consortium. Thunder Bay, Canada; 2012.
119. **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart. Canadian. International Society for Heart Research (ISHR) North American Section, Banff, Canada; 2012.

120. Gordon JW, Wang Y, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Preferential Targeting of Bnip3 Isoforms to Mitochondria or Endoplasmic Reticulum During Metabolic Stress of Post-Natal Ventricular Myocytes. 10th Annual Meeting of the Society for Heart and Vascular Metabolism, Oxford, United Kingdom; 2012.
121. Biala A, Wang Y, Hai Y, Dhingra R, Gang H and **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart. Basic Cardiovascular Sciences Scientific Sessions, New Orleans, USA; 2012.
122. **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart. International Academy of Cardiology 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada; 2012.
123. **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart, ECDO, Rome, Italy; 2012.
124. **Kirshenbaum LA**, NF-kappaB, Inflammation, and Cell Death in Heart Failure. First Annual Symposium of the UAB Comprehensive Cardiovascular Center, Birmingham, USA; 2012.
125. Gordon JW, Wang Y, Dhingra R, Gang H, Margulets V, Aviv Y, Zhang T, and **Kirshenbaum LA**. Dual Regulation of Autophagy and Cell Death of Ventricular Myocytes by the Tumor Suppressor Protein is Obligatory Linked to Mitochondrial Targeting by Bnip3. American Heart Association, Scientific Sessions, Los Angeles, USA; 2012.
126. **Kirshenbaum LA**. Cross-Talk Between Mitochondrial and ER Death Pathways in the Heart. Canadian Hypertension Congress, Toronto, Canada; 2012.
127. **Kirshenbaum LA**. Cell Death Signaling Pathways in the Heart. Scientific Forum XXII-International Congress of Cardiovascular Sciences. Belo Horizonte, Brazil; 2012.
128. **Kirshenbaum LA**. Preferential targeting of Bnip3 isoforms to mitochondria or endoplasmic reticulum during metabolic stress promotes apoptosis or autophagy of post-natal ventricular myocytes. 10<sup>th</sup> Calreticulin Workshop, Banff, Canada; 2013.
129. **Kirshenbaum LA**. Novel Alternative Splicing of Death Gene Bnip3 Promotes Cell Survival. International Cell Death Society - Mechanisms of Cell Death. Fuengirola, Malaga Spain; 2013.
130. Dhingra R, Gang H, Aguilar F, and **Kirshenbaum LA**. Canonical NF- $\kappa$ B signaling pathway and cell survival of ventricular myocytes. International Society for Heart Research (ISHR) World Congress XXI, San Diego, USA; 2013.
131. Gang H, Shaw J, Dhingra R and **Kirshenbaum LA**. Epigenetic Regulation of Canonical TNF $\alpha$  Pathway by HDAC1 Determines Survival of Cardiac Myocytes. American Heart Association, Basic Cardiovascular Sciences Scientific Sessions. Las Vegas, USA; 2013.
132. **Kirshenbaum LA**. Molecular Regulation of Cell Death Pathways: Where Life Meets Death. Canadian Hypertension Congress – Montreal, Canada; 2013
133. Dhingra R, Gang H, Wang Y, Biala A, Margulets V, and **Kirshenbaum LA**. Novel Linkage Between Metabolic Sensor Mechanistic target of Rapamycin (mTOR) and Canonical NF- $\kappa$ B Signaling Pathway Preserves Mitochondrial Integrity in Ventricular Myocytes during hypoxia. American Heart Association, Scientific Sessions. Dallas, USA; 2013.

134. Dhingra R, Margulets V and **Kirshenbaum LA**. Disruption of TRAF2-TAK1-IKK $\beta$  Signaling Triggers Mitochondrial Perturbations and Necrotic Cell Death in Doxorubicin Cardiotoxicity. American Heart Association, Scientific Sessions. Dallas, USA; 2013.
135. Wang Y, Gang H, Dhingra R, **Kirshenbaum LA**. Maladaptive Autophagy and Necrotic Death of Ventricular Myocytes Induced by p53 is Contingent Upon Mitochondrial Death Gene Bnip3. American Heart Association, Dallas, USA; 2013.
136. Wang, Y, Gang H, Aviv Y, Dhingra R, Margulets V and **Kirshenbaum LA**. p53 Mediates Autophagy and Cell Death by a Mechanism Contingent On Bnip3 Novelty and Significance. Cardiac Growth and Regeneration Conference, Viterbo, Italy; 2014.
137. Wang Y, Gang H, Dhingra R and **Kirshenbaum LA**. Molecular Regulation of Cell Death. New Frontiers in Basic Cardiovascular Research, Bratislava, Slovak Republic; 2014.
138. Lin J, Gang H, and **Kirshenbaum LA**. Metabolic Stress Triggers a Novel Survival Pathway Linked to Alternative Splicing of Bnip3. 2nd Cardiovascular Forum for Promoting Centres of Excellence and Young Investigators, Winnipeg, Canada; 2014.
139. Dhingra R, Lin J, Jassal D, Dorn II G and **Kirshenbaum LA**. Loss of Mitochondrial UCP3-Cytochrome c Oxidase Complexes Underlies Maladaptive Autophagy and Cardiac Failure in Anthracycline Cardiotoxicity. 2nd Cardiovascular Forum for Promoting Centres of Excellence and Young Investigators, Winnipeg, Canada; 2014.
140. Biala A and **Kirshenbaum LA**. Autonomous Regulation of Alternative Splicing Factor TIA-1 Promotes Cardiac Cell Survival Following Mitochondrial Injury. 2nd Cardiovascular Forum for Promoting Centres of Excellence and Young Investigators, Winnipeg, Canada; 2014.
141. **Kirshenbaum LA**. Regulation of Cell Death Pathways in the Heart. XXIV Scientific Forum, International Congress of Cardiovascular Sciences, Alagoas, Brazil; 2014.
142. Biala AK, Wang E, Dhingra R, Gordon J, Mughal W, Gang H, and **Kirshenbaum LA**. Molecular Regulation of Cell Death by ER-and Mitochondrial Pathways. 11<sup>th</sup> International Calreticulin Workshop, New York City, USA; 2015.
143. Dhingra R, Lin J, Gang H and **Kirshenbaum LA**. Loss of Mitochondrial UCP3-Cytochrome c Oxidase Complexes Underlies Respiratory Defects and Cardiac Failure in Anthracycline Cardiotoxicity, 11th World Congress of the International Society for Adaptive Medicine, Yonago, Japan; 2015.
144. Dhingra R, Margulets V, Jassal D, Dorn II G and **Kirshenbaum LA**. Bnip3 Provokes ROS production and Maladaptive Autophagy by Displacing Uncoupling Protein3 (UCP3) from Cytochrome c Oxidase of Respiration chain Complex in Cardiotoxicity. Basic Cardiovascular Sciences Conference, New Orleans, USA; 2015.
145. Dhingra R, Dhingra A, Jayas R and **Kirshenbaum LA**. Polyphenolic - Ellagic Acid Suppresses Mitophagy- Induced Necrotic Cell Death During Doxorubicin Cardiotoxicity. Basic Cardiovascular Sciences Conference, New Orleans, USA; 2015.
146. Dhingra R, Margulets V and **Kirshenbaum LA**. Disruption of TRAF2-TAK1-NF-kB Signaling Axis Triggers K-48 Linked Poly-Ubiquitylation of RIP1 and Necrotic Cell Death in Doxorubicin Cardiotoxicity. American Heart Association, Basic Cardiovascular Sciences Conference; New Orleans, USA; 2015.

147. Dhingra R, Margulets V, Jassal D, Dorn II G and **Kirshenbaum LA**. Molecular Regulation of Doxorubicin induced Heart Failure, 20th World Congress on Heart Disease, Vancouver, Canada; 2015.
148. **Kirshenbaum LA**. Alternative Splicing Targets Death Gene Bnip3 to Endoplasmic Reticulum for Cell Survival. New Frontiers in Cell Death Signaling and Heart Failure Conference, Honolulu, USA; 2016.
149. Dhingra R, Margulets V, Dorn II G, and **Kirshenbaum LA**. Bnip3 Provokes ROS production and Maladaptive Autophagy by Displacing Uncoupling Protein3 (UCP3) from Cytochrome c Oxidase of Respiration chain Complex in Cardiotoxicity. New Frontiers in Cell Death Signaling and Heart Failure Conference, Honolulu, USA; 2016.
150. **Kirshenbaum LA**. Regulation of autophagy and cell death pathways in health and disease. 2016 XXII ISHR World Congress. Buenos Aires, Argentina; 2016.
151. Dhingra R, Rabinovich-Nikitin I, Margulets V, **Kirshenbaum LA** Disruption of RIP1-FADD Complexes by mRNA 103/107 Provokes Necrotic Cardiac Cell Death. American Heart Association, Basic Cardiovascular Sciences. Phoenix, USA; 2016.
152. Dhingra R, Gang H, Margulets V and **Kirshenbaum LA**. Doxorubicin provokes maladaptive autophagy and necrotic cell death of cardiac myocytes by disrupting mitochondrial respiration chain complex IV. American Heart Association, Scientific Sessions, New Orleans, USA; 2016.
153. Gang H, Dhingra R, **Kirshenbaum LA**. PDK2-mediated alternative splicing switches Bnip3 from cell death to cell survival. American Heart Association, Scientific Sessions Conference. New Orleans, USA; 2016.
154. Rabinovich-Nikitin I, Margulets V, Gang H, **Kirshenbaum LA**. Bnip3 Displaces Uncoupling Protein3 (UCP3) from Cytochrome c Oxidase of Respiration chain Complex IV promoting maladaptive autophagy and necrotic cell death in doxorubicin Cardiotoxicity. Ben Gurion University- St. Boniface Hospital Albrechtsen Research Centre without Borders Collaborative Meeting, Beer-Sheva, Israel; 2017.
155. Gang H, Guberman M, Rabinovich-Nikitin I, Shi R and **Kirshenbaum LA**. Alternative Spliced Form of Bnip3 preferentially interacts with Mitofusion2 and Endoplasmic Reticulum for Cell Survival. Keystone Mitochondria, Metabolism and Heart Conference, Santa Fe, USA; 2017.
156. Rabinovich-Nikitin I, Margulets V, Gang H, and **Kirshenbaum LA**. PDK2-mediated alternative splicing switches Bnip3 from cell death to cell survival. International Cell Death Society, Cell Death in Development and Disease Conference, Rehovot, Israel; 2017.
157. Margulets V, Dhingra R, and **Kirshenbaum LA**. Bnip3 Displaces Uncoupling Protein3 (UCP3) from Cytochrome c Oxidase of Respiration chain Complex IV promoting maladaptive autophagy and necrotic cell death in doxorubicin Cardiotoxicity. International Cell Death Society, Cell Death in Development and Disease Conference, Rehovot, Israel; 2017.
158. Rabinovich-Nikitin I, Gang H, Margulets V, and **Kirshenbaum LA**. Alternative Splicing Targets Death Gene Bnip3 to Endoplasmic Reticulum for Cell Survival. International Cell Death Society, Cell Death in Development and Disease Conference, Rehovot, Israel; 2017.
159. Margulets V, Dhingra R, Guberman M, Lieberman B and **Kirshenbaum LA**. Bnip3 Displaces Uncoupling Protein3 (UCP3) from Cytochrome c Oxidase of Respiration chain Complex IV

- promoting maladaptive autophagy and necrotic cell death in doxorubicin Cardiotoxicity. European Society of Cardiology Congress, Barcelona, Spain; 2017.
160. Margulets V, Dhingra R, **Kirshenbaum LA**. Bnip3 Displaces Uncoupling Protein3 (UCP3) from Cytochrome c Oxidase of Respiration chain Complex IV promoting maladaptive autophagy and necrotic cell death in doxorubicin Cardiotoxicity. 12th International Congress on Coronary Artery Disease – From Prevention to Intervention Conference, Venice, Italy; 2017.
  161. Rabinovich-Nikitin, I, Gang H, Margulets, V, Aguilar F, Martino TA, **Kirshenbaum LA**. Regulation of Hypoxia Induced Cardiac Cell Death by the Intrinsic Circadian Clock. American Heart Association, Scientific Sessions Conference, Chicago, USA; 2017.
  162. Dhingra R, Guberman M, Shi R, Margulets V, Nepon H and **Kirshenbaum LA**. Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial Death protein Bnip3 to Doxorubicin Cardiomyopathy. American Heart Association, Scientific Sessions, Chicago, USA; 2017.
  163. Dhingra R, Margulets V, Kelman Y, Gavathiotis E, **Kirshenbaum LA** Regulation of Anthracycline Mediated Cell Death in Cardiac Myocytes. 2nd New Frontiers in Cell Death Signaling and Heart Failure Conference in Honolulu, USA; 2018.
  164. Rabinovich-Nikitin I, Dhingra R, Gang H, Margulets V, Lieberman B, and **Kirshenbaum LA**. Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial Death protein Bnip3 to Doxorubicin Cardiomyopathy. 2nd New Frontiers in Cell Death Signaling and Heart Failure Conference, Honolulu, USA; 2018.
  165. Rabinovich-Nikitin I, Dhingra R, Guberman M, Margulets V, Aguilar F and **Kirshenbaum LA**. Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial Death protein Bnip3 to Doxorubicin Cardiomyopathy. R30 St. Boniface Hospital Albrechtsen Research Centre Winnipeg, Canada; 2018.
  166. Dhingra R, Margulets V, Rabinovich-Nikitin I and **Kirshenbaum LA**. Regulation of Cell Death in Cardiac Myocytes, International Symposium on Experimental and Clinical Cardiology. Athens, Greece; 2018.
  167. Rabinovich-Nikitin I, Dhingra R, Guberman M, Aguilar F, Margulets V and **Kirshenbaum LA**. Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial Death protein Bnip3 to Doxorubicin Cardiomyopathy, International Society for Heart Research, 37th Annual Conference – Halifax, Canada; 2018.
  168. Dhingra R, Margulets V, Kelman Y, Gavathiotis E and **Kirshenbaum LA**. Regulation of Anthracycline Mediated Cell Death in Cardiac Myocytes. 5th European Section meeting of the International Academy of Cardiovascular Sciences (IACS-ES). Smolenice, Slovak Republic; May 2018.
  169. Dhingra R, Margulets V, Kelman Y, Gavathiotis E and **Kirshenbaum LA**. Regulation of Anthracycline Mediated Cell Death in Cardiac Myocytes. International Academy of Cardiovascular Sciences International Academy of Cardiovascular Sciences (IACS) North American Section Conference - Havana, Cuba; 2018.
  170. Rabinovich-Nikitin I, Dhingra R, Guberman M, Aguilar F, Margulets V and **Kirshenbaum LA**. Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial

Death protein Bnip3 to Doxorubicin Cardiomyopathy. 35th meeting of the International Society of Heart Research – European Section, Amsterdam, Netherlands; 2018

171. Rabinovich-Nikitin I, Lieberman B, Martino TA and **Kirshenbaum LA**. *Clock* Regulates Autophagy and Cell Survival of Cardiac Myocytes During Hypoxia Stress; American Heart Association, Basic Cardiovascular Sciences Scientific Sessions Conference. San Antonio, USA; 2018.
172. Rabinovich-Nikitin I, Dhingra R, Guberman M, Margulets V, Aguilar F and **Kirshenbaum LA**. Dual Regulation of Autophagy and Necrotic Cell Death in Doxorubicin Cardiomyopathy. American Heart Association, Basic Cardiovascular Sciences Scientific Sessions Conference. San Antonio, USA; 2018.
173. Gang H, Lieberman B, Dhingra R, Minuk I, Rabinovich-Nikitin I and **Kirshenbaum LA**. Bnip3-induced Mitochondrial Injury and Mitophagy as targets for cardioprotection. European Cooperation in Science and Technology (COST) 3rd European Cardioprotection COST Action WG Meeting; Santorini, Greece; 2018.
174. Rabinovich-Nikitin I, Lieberman B, Martino TA and **Kirshenbaum LA**. *Clock* Regulates Autophagy and Cell Survival of Cardiac Myocytes During Hypoxia Stress; 3rd International Hawaii Cardiovascular Symposium (IHCVS) Honolulu, USA; 2019.
175. Singer S, Guberman M, Dhingra R, Rabinovich-Nikitin I, Margulets V, and **Kirshenbaum LA**, Non-Canonical IKK $\beta$ -MFN2 Signaling Preserves Mitochondrial Network Integrity and Oxidative Metabolism in Cardiac Myocytes Treated with Doxorubicin; 3rd International Hawaii Cardiovascular Symposium (IHCVS) Honolulu, USA; 2019.
176. Dhingra R, Guberman M, Margulets V, Aguilar F and **Kirshenbaum LA**, Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial Death protein Bnip3 to Doxorubicin Cardiomyopathy; 3rd International Hawaii Cardiovascular Symposium (IHCVS) Honolulu, USA; 2019.
177. Rabinovich-Nikitin I, Minuk I, Margulets V, Aguilar F, Martino TA, **Kirshenbaum LA**. *Clock* Regulates Autophagy and Cell Survival of Cardiac Myocytes During Hypoxia Stress. 4th Conference of the Canadian Society for Chronobiology, Montreal, Canada; 2019.
178. Rabinovich-Nikitin I, Dhingra R, Guberman M, Margulets V, Aguilar F, **Kirshenbaum LA**. Dual Mitophagy and Necrosis Dependent Pathways Functionally Couple Mitochondrial Bnip3 to Doxorubicin Cardiomyopathy. 25th Cell Death Through the Ages, International Cell Death Society Conference New York, USA; 2019.
179. Rabinovich-Nikitin I, Martino, TA, and **Kirshenbaum LA**. Circadian *Clock* Disruption Promotes Cardiac Cell Death During Hypoxic Injury. European Biological Rhythms Society Conference. Lyon, France; 2019.
180. Dhingra R, Guberman M, Margulets V, Aguilar F, **Kirshenbaum LA**. Molecular Regulation of Cardiac Cell Death by Modulation of Cyclophilin D in Doxorubicin Cardiomyopathy. Joint 6th Meeting of European Section and 7th Meeting of North American Section of the International Academy of Cardiovascular Sciences (IACS). Vrnjacka Banja, Serbia; 2019.
181. Dhingra R, Guberman M, Margulets V, Aguilar F, **Kirshenbaum LA**. NF-kB Signaling Regulates Mitochondrial Permeability Transition Pore Opening of Cardiac Myocytes via

- Cyclophilin D (CypD) Modulation. American Heart Association, Basic Cardiovascular Sciences Scientific Sessions; Boston, USA; 2019.
182. Dhingra R, Guberman M, Rabinovich-Nikitin I, Gerstein J, Margulets V, Gang H, Thliveris J and **Kirshenbaum LA**. Impaired NF- $\kappa$ B Signaling Underlies Cyclophilin D Mediated Mitochondrial Permeability Transition Pore Opening in Dox Cardiomyopathy. American Heart Association, Scientific Sessions Conference. Philadelphia; USA 2019.
  183. Dhingra R, Guberman M, Margulets V, Aguilar F, **Kirshenbaum LA**. Molecular Regulation of Cardiac Cell Death by Modulation of Cyclophilin D in Doxorubicin Cardiomyopathy. 2020 Annual International Hawaii Cardiovascular Symposium (IHCVS). Honolulu, USA; 2020.
  184. Rabinovich-Nikitin I, Dhingra R, Guberman M, Margulets V, Aguilar F and **Kirshenbaum LA**. Regulation of Mitochondrial Metabolism in Doxorubicin Cardiomyopathy. The International Conference of Cardiovascular Sciences - 2020, (ICCS-2020) International Academy of Cardiovascular Sciences (IACS)-India Section and the International Society of Heart Research (ISHR)-India Section Conference. New Delhi, India; 2020.
  185. Rabinovich-Nikitin I, Martino TA, and **Kirshenbaum LA**. Circadian Clock Disruption Promotes Cardiac Cell Death During Hypoxic Injury. American Heart Association, Basic Cardiovascular Sciences Scientific Sessions Conference (Virtual Conference due to COVID-19) 2020
  186. Rabinovich-Nikitin I, Posen I, Margulets V, Martino TA and **Kirshenbaum LA**. Circadian Clock Dysfunction Impairs Mitochondrial Fitness and Contributes To Myocardial Ischemic Injury. American Heart Association, Hypertension Scientific Sessions (Virtual Conference due to COVID-19) 2020
  187. Rabinovich-Nikitin I and **Kirshenbaum LA**. Mitochondrial autophagy and cell survival are regulated by the circadian clock gene in cardiac myocytes during ischemic stress. The joint 7th Meeting of the European Section and 8th Meeting of the North American Section of the International Academy of Cardiovascular Sciences (IACS), Banja Luka, the Republic of Srpska, Bosnia and Herzegovina; 2021.
  188. Rabinovich-Nikitin I, Posen I, Margulets V, Martino TA and **Kirshenbaum LA**. Mitochondrial autophagy and cell survival is regulated by the circadian clock gene in cardiac myocytes during ischemic stress. International Cell Death Society (ICDS), Virtual; 2021.
  189. Rabinovich-Nikitin I, Rasouli M, Reitz CJ, Posen I, Margulets V, Dhingra R, Khatua TN, Thliveris JA, Martino TA, **Kirshenbaum LA**. Circadian Regulation of Autophagy in Cardiac Repair, Experimental Biology (Virtual Conference due to COVID-19) 2021
  190. Rabinovich-Nikitin I, Rasouli M, Reitz CJ, Posen I, Margulets V, Dhingra R, Khatua TN, Thliveris JA, Martino TA, **Kirshenbaum LA**. Circadian Regulation of Autophagy in Cardiac Repair. Experimental Biology (Virtual Conference due to COVID-19) 2021
  191. Rabinovich-Nikitin I and **Kirshenbaum LA**. Mitochondrial Autophagy and Cell Survival is Regulated by the Circadian Clock Gene in Cardiac Myocytes during Ischemic Stress. Keystone Symposia, Mitochondria, Metabolism and Heart 2022

192. Rabinovich-Nikitin I, Martino TA, and Kirshenbaum LA. Circadian Clock Disruption Promotes Cardiac Cell Death During Hypoxic Injury. 5<sup>th</sup> Annual International Hawaii Cardiovascular Symposium (IHCVS), Honolulu, USA 2022