CURRICULUM VITAE
Carmen (Kika) C. Sucharov
08/01/2023

Personal History

Title: Professor with Tenure
Director, Pediatric Cardiovascular Research Laboratories
Associate Section Head, Research. Cardiology Division
Division of Cardiology, Department of Medicine
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Spouse: Peter Mariner, PhD
Daughter: Juliana Sucharov-Costa

Education and Training

B.S. (1990)	Genetics – Universidade Federal do Rio de Janeiro. Undergraduate Research support to Carmen C. Sucharov (CNPq – Brazilian Government)
M.S. (1995)	Genetics – Universidade Federal do Rio de Janeiro. Research support to Carmen C. Sucharov (CNPq – Brazilian Government) Master fellowship grant support to Carmen C. Sucharov (CNPq – Brazilian Government)
PhD (1997)	Genetics – University of Pennsylvania/ Universidade Federal do Rio de Janeiro. PhD fellowship grant support to Carmen C. Sucharov (CNPq – Brazilian Government)
Post-Doctoral (1998 – 2002)	University of Colorado, Boulder
Post-Doctoral (2003 - 2004)	University of Colorado Health Sciences Center.

Academic Appointments

1997-1998	Federal University of Rio de Janeiro, Brazil – Adjunct Professor – Biophysics Institute.
2004-2011	Department of Medicine, University of Colorado Denver – Assistant Professor
2011 – 2019	Department of Medicine, University of Colorado Denver – Associate Professor
2014 – 2019	Department of Pharmacology, University of Colorado Denver – Associate Professor
2014 – 2019	Department of Physiology, University of Colorado Denver – Associate Professor

2017 – present	Director, Pediatric Cardiovascular Research Laboratories
2019 – present	Director, Mentorship Oversight Committee
2019 – present	Department of Medicine, University of Colorado Anschutz Medical Campus – Professor
2019 - present	Pharmacology Program, University of Colorado Anschutz Medical Campus –Professor
2019 - present	Physiology Program, University of Colorado Anschutz Medical Campus – Professor
2021 – present	Director of Graduate Student Admission, Integrative Physiology
2022 – present	Award of Tenure
2023 – present	Associate Section Head – Research. Division of Cardiology. University of Colorado Anschutz Medical Campus

Other Professional Activities

2002 – 2008	Board of Directors – DNA Goes To School. Responsibilities: Scientific support for projects related to teaching scientific experiments to high school students in Latin America and Portugal.
2007 – 2019	Founding Scientist – Miragen, Inc.
2015 – 2021	Founding Scientist and Member of the Scientific Advisory Board – CoramiR.

Honors and Awards

- 2004 – Jay N. Cohn New Investigator Award Finalist. Heart Failure Society of America.
- 2005 - Jay N. Cohn New Investigator Award Finalist. Heart Failure Society of America.
- 2005 – Outstanding Early Career Investigator Award Finalist. 2nd BCV American Heart Association.
- 2009-2010 - PhD Research and Teaching Award. University of Colorado, Denver.
- 2016 - Awarded *Best Paper* in the pediatric transplantation category for "Circulating miRNA as a Biomarker for Recovery in Pediatric Dilated Cardiomyopathy", *Journal of Heart and Lung Transplantation and the International Society of Heart and Lung Transplantation.*
- 2017 - Awarded APS*select* designation for, "Children with Dilated Cardiomyopathy Modulate Pathological Responses in Cardiomyocytes", *American Journal of Physiology-Heart and Circulatory Physiology*. Selected by APS as among the "best recently published articles in physiological research".

Memberships in Professional Organizations

- American Heart Association – Member since 2000.
- American Physiological Society – Member since 2011.
- International Society for Heart Research – Member since 2011.
- DNA Goes to School – Member since 2002. Board of Directors.

Major Committee and Service Responsibilities

Division:

- Director – Cardiology Fellowship Research Oversight Committee

- Director of Education

Departmental:

- PAGE – Program to Advance Gender Equity – co-chair of the Implementation task force
- Member of search committee for Faculty recruitment in the Section of Development Biology.
- Parental Leave Committee
- Chair of the DOM PhD Task Force
- Member of the Research Lessons Learned from the Pandemic Committee
- Promotions Committee – Assistant to Associate Professor
- Member of search committee for Cardiology Division Chief. 2023.
- Chair of subcommittee of the Diversity Equity and Inclusion Council. Department of Medicine.

SOM:

- Member of the MSTP recruitment/review committee (2016-2018).
- Member of the Women in Medicine and Science Committee
- Member, Scholarship Oversight Committee for Critical Care Fellows (2015 – 2017)
- Chair of Admissions, Physiology Graduate Program

National:

- American Heart Association Task Force that reviewed and re-structured all classifications related to AHA grant applications.
- Mentorship advice to American Heart Association Scientific Sessions attendees - 2018
- Early Career Investigator Council Leadership and Faculty Liaison at the International Society for Heart Research (since 2021).
- International Society for Heart Research elected council member (2022-2025).
- Women's Initiative Chair for the International Society for Heart Research. 2022-
- Co-chair of the North American Chapter of the International Society for Heart Research. Denver in-person meeting, September of 2021.
- Mentorship advice to American Heart Association Scientific BCVS attendees – 2023. Lunch with Legends.

Leadership Training

- Association of American Medical Colleges Mid-Career Women Faculty Leadership Development Seminar (2018). One of two University of Colorado School of Medicine faculty selected to attend the seminar.
- Leadership for Innovative Team Science (LITeS), a year-long program focused on the development of leadership and team-building skills within the context of the academic health center (2019-2020).

Inventions, Intellectual Property and Patents

- U.S. Patent Application No. 61/241,730. Polymorphism in the PDE3A gene. Inventors: **Carmen Sucharov**, Mathew Taylor, Michael Bristow, Dobromir Slavov. Patent Pending.
- UTEC.P0024US.P1. Selective inhibition of β1-adrenergic receptor for the treatment of pediatric heart failure. Inventors: **Carmen Sucharov**, Shelley Miyamoto, Brian Stauffer. Patent Approved.

- U.S. Patent Application No. 14/203,022. miRNAs as a prognostic biomarker in pediatric heart failure. Inventors**: Carmen Sucharov**, Shelley Miyamoto, Brian Stauffer. Patent Pending.

Scientific and Medical Advisory Boards

- 2007 Scientific co-founder of miRagen Therapeutics, Boulder CO. The mission of miRagen is to develop miRNA-based therapeutics.
- 2014 – present Co-Founder and Member of the Scientific Advisory Board for CoramiR Biomedical, Inc. The mission of CoramiR is to utilize circulating microRNA as a diagnostic tool in heart disease.

Review and Referee Work

Editorial Board:

- Journal of Molecular and Cellular Cardiology – since 2018
- Journal of Cardiology and Vascular Medicine – since 2014
- Frontiers in Endocrinology, Cardiovascular Section – since 2021
- Journal of Cardiovascular Development and Disease – since 2022
- Journal of Clinical Medicine – since 2022

Reviewer (Grants):

- American Heart Association (Since 2010)
- Horizon Programme, Netherlands Genomics Initiative (2009-2011)
- National Institutes of Health (Since 2015):
    - MCBS – NHLBI Mentored Clinical and Basic Science Review Committee - Ad Hoc
    - CCHF – Cardiac Contractility, Hypertrophy and Failure Study Section – Ad Hoc
    - ZRG1 CVRS-S 80 – Ad Hoc
    - MIM – Myocardial Ischemia and Metabolism Study Section – Ad Hoc
    - CICS - Clinical and Integrative Cardiovascular Sciences Study Section – Ad Hoc
    - Special Emphasis Panel ZRG1 CVRS-J 80 – Ad Hoc
    - Special Emphasis Panel ZRG1 CVRS-C (02) – Ad Hoc
    - NIH Cardiovascular SBIR/STTR – Ad Hoc
    - MPPA – Myocardial Physiology/Pathophysiology A. Ad Hoc and Permanent member since 2021
- Grant reviewer – Stanford Diabetes Research center (2017)

Reviewer (Journals):

- American Journal of Human Biology
- Circulation
- Circulation Research
- Circulation Heart Failure
- American Journal of Physiology – Regulatory, Integrative and Comparative Physiology

- European Journal of Heart Failure
- ISL Medical Science Monitor
- Molecular Cell Biology
- American Journal of Physiology – Cell Physiology
- Human Genetics
- Journal of Cardiovascular Pharmacology
- Journal of Cardiovascular Translational Research
- Journal of Cardiac Failure
- PLOS One
- Biochimica and Biophysica Acta
- Genes
- American Heart Journal
- JMCC
- Science Translational Medicine
- JCDD
- JACC

Invited Extramural Lectures and Presentations

Invited Presentations

Local:

- Division of Cardiology Research Conference. "Molecular Pathways involved in the β_1-adrenergic receptor hypertrophic response." University of Colorado Denver, 2005
- Division of Cardiology Lab Meeting Seminar Series. "Cardiac Hypertrophy – signaling pathways and gene expression." University of Colorado Denver, 2006
- Division of Cardiology Research Conference. "The transcription factor YY1 protects against pathologic cardiac hypertrophy by interacting with HDAC5". University of Colorado Denver, 2007
- Division of Cardiology Research Conference. Differential Expression of miRNAs in Heart Disease. University of Colorado Denver, 2009.
- Division of Cardiology Lab Meeting Seminar Series. "β_1-adrenergic receptor and signaling pathways in heart disease." University of Colorado Denver, 2009
- Division of Cardiology Lab Meeting Seminar Series. "Overview of talks presented at the AHA Basic Cardiovascular Meeting." University of Colorado Denver, 2009
- Molecular Biology Department. "Molecular Pathways in Pediatric Heart failure." University of Colorado Denver, 2011
- Department of Medicine Research Conference series. "miRNAs as Biomarkers in Dilated Cardiomyopathy." University of Colorado Denver, 2012
- Division of Cardiology Research Conference. "miRNA Regulation in the Cardiac System." University of Colorado Denver, 2012.
- Translational Cardiovascular Biology seminar series. "Regulation of miRNA Function in Cardiac Disease and Cardiomyocyte Differentiation." University of Colorado Denver, 2014
- Pharmacology Program. "Novel mechanisms of Heart Failure. Lessons from the Pediatric Heart." University of Colorado Denver, 2015

- Translational Cardiovascular Biology seminar series. "Novel mechanisms of Heart Failure. Lessons from the Pediatric Heart." University of Colorado Denver, 2015.
- Division of Cardiology Research Conference. "Novel mechanisms of Heart Failure. Lessons from the Pediatric Heart." University of Colorado Denver, 2017
- Translational Cardiovascular Biology seminar series. "Novel Mechanistic Approaches to Investigate Heart Failure: The Ins and Outs of the Pediatric Heart." University of Colorado Denver, 2017
- Neonatology Department. "Novel Mechanistic Approaches to Investigate Heart Failure: The Ins and Outs of the Pediatric Heart." University of Colorado Denver, 2017
- Somalogic Invited Speaker. Serum Circulating Factors in Pediatric Heart Failure. Somalogic, Boulder, Colorado, 2017.
- Translational Cardiovascular Biology seminar series. "Pathogenesis of Heart Failure in Children and Adults: Key Differences in Treatment Implications." University of Colorado Anschutz Medical Campus. 2020
- Translational Cardiovascular Biology seminar series. "Pathogenesis of Heart Failure in Children and Adults: Key Differences in Treatment Implications." University of Colorado Anschutz Medical Campus. 2020
- Division of Cardiology Research Conference Clinical and Research talks. "Pathogenesis of Heart Failure in Children and Adults: Key Differences in Treatment Implications – in vivo and in vitro studies." University of Colorado Anschutz Medical Campus. 2020
- Division of Cardiology Research Conference. "Mitochondrial Dysfunction in Human Dilated Cardiomyopathy: Possible Therapies and Their Effect on Contractility". University of Colorado Anschutz Medical Campus. 2020
- Integrated Research Talks - Biomarkers to predict response to therapy and/or diagnose disease subtypes. University of Colorado Anschutz Medical Campus. 2022

National:

- Heart Failure Society of America, 9th Annual Scientific Meeting "YY1 protects against pathologic cardiac hypertrophy trough a mechanism that involves HDAC5 interaction: evidence of CaMKII inhibition of YY1-HDAC5 interaction". Boca Raton, FL. 2005.
- 2nd BCVS American Heart Association "YY1 protects against pathologic cardiac hypertrophy trough a mechanism that involves HDAC5 interaction: evidence of CaMKII inhibition of YY1-HDAC5 interaction". Keystone, CO, 2005.
- FASEB Research Summer Conference on Histone Deacetylases "The Transcription Factor YY1 Protects Against Pathologic Hypertrophy by Interacting with HDAC5". Snowmass, CO. 2007.
- Heart Failure Society of America, 13th Annual Scientific Meeting "Differential Expression of miRNAs in Heart Disease". Boston, MA. 2009.
- International Society for Heart Research, North American Session "Regulation of miRNA Function in Heart Disease and Myocyte Differentiation". Miami, FL. May 2014.

- International Society for Heart Research, North American Session "Novel Mechanisms of Heart Failure – Lessons from the Pediatric Heart". Seattle, WA. June 2015.
- Children's Cardiomyopathy Foundation 4th International Conference on Cardiomyopathy in Children "Age and Gender Differences in Response to Heart Failure Medications in Children: Evidence for What Works and Impact of Future Trials". Baltimore, MD, May 2017.
- International Society for Heart Research, North American Session "Novel Cardioprotective Signals" New Orleans, LA 2017.
- PCMR Winter Retreat "Prognostic Significance of microRNA Expression in Children with Cardiomyopathy". microRNA Grant Presentation. New Orleans, LA, February, 2018.
- Gordon Conference on Cyclic Nucleotide Phosphodiesterases "A Novel Polymorphism in the PDE3A Promoter Regulates cAMP-Induced Transcriptional Activity and Affects cAMP Levels in Failing Human Heart". Newry, ME, June, 2018.
- International Society for Heart Research, North American Session. "The Ins and Outs of the Pediatric Heart". Online Conference, September, 2020
- PCMR Spring Retreat "Circulating and Tissue microRNA Expression in Children with Cardiomyopathy". Online Conference, April, 2020.
- BCVS American Heart Association "Pediatric DCM Secretome and its role in Pathologic Remodeling". Online Conference, July, 2021
- International Society for Heart Research, North American Session. "The Role of the Secretome in Pediatric Dilated Cardiomyopathy". Denver, CO, September, 2021
- Cleveland Clinic. "The Role of Serum Circulating Factors in Pediatric Heart Failure". Online invited presentation. September, 2021.
- University of Minnesota. "The Secretome in Heart Failure: miRNAs and Proteins in Pathologic Remodeling". April 07, 2022.
- Albert Einstein College of Medicine. "The Secretome in Heart Failure: miRNAs and Proteins in Pathologic Remodeling". April 12, 2022.
- Stanford University. Frontiers in Cardiovascular Science. "Pediatric Heart Failure Secretome in Pathologic Remodeling and Mitochondrial Dysfunction". June, 2022.
- University of Wisconsin. "Pediatric Heart Failure Secretome in Pathologic Remodeling and Mitochondrial Dysfunction". April, 2023.
- International Society for Heart Research, North American Session. "The Secretome in Pathological Remodeling: More than a Prognostic Biomarker". June, 2023.

International:

- Universidade Federal do Rio de Janeiro. "Identification of a new transcription factor that is increased in Heart Failure and represses the human αMyHC promoter activity". Rio de Janeiro, Brazil. 2003.
- Heart Failure Society of America, 8th Annual Scientific Meeting. "The Ku protein complex interacts with YY1, is up-regulated in human heart failure and represses the activity of the αMyHC promoter". Toronto, Canada, 2004.
- International Society for Heart Research, XXI ISHR World Congress "A Polymorphism in the PDE3A Gene Promoter that Prevents cAMP-Induced Increases

in Transcriptional Activity, and May Protect Against PDE3A Inhibitor Drug Tolerance". San Diego, CA. July 2013.
- St. Boniface Research Center. "Novel Mechanistic Approaches to Investigate Heart Failure: Lessons from the Pediatric Heart". Winnipeg, Canada, 2017.
- Midkine Conference. "The Role of Midkine in Pediatric Dilated Cardiomyopathy". Munich, Germany, 2018.
- International Society for Heart Research, North American Session. "The Pathogenesis of Heart Failure in Children and Adults: Key Differences and Treatment Implications". Halifax, Canada, 2018
- 2nd Olympiad in Cardiovascular Medicine. "The Secretome and Cellular Respiration in Cardiomyopathies". Heraklion, Greece, 2022.

Community Outreach:
- AHA donor presentation – Children's Hospital, Colorado. 2017
- For Elysa Foundation donor presentation – online. 2020
- STEM Scholars presentation; 8th grade – online. 2021
- International Society For Heart Research – Women's breakfast – Issues facing women in STEM - 2021.
- Teen Science Café – Presentation for High School students on career paths in science and medicine. April, 2023.
- International Society For Heart Research – Women's breakfast – 2023.
- American Hear Association BCVS – Women's breakfast – 2023.

Invited Podcasts:
- AJP Heart and Circ Physiol – April 2017. Exosomes from Pediatric Dilated Cardiomyopathy Patients Modulate a Pathological Response in Cardiomyocytes
- Pediatric Research – March 2022. Integrated Analysis of miRNA-mRNA Interaction in Pediatric Dilated Cardiomyopathy

Teaching Record

Classroom instructional activities:

1. IDPT7646: Tissue Biology and Disease. March, 2006. University of Colorado, Cell Biology Graduate Course Program. Role: Lecture given.
2. Transcription Regulation, Signal Transduction and Cardiomyopathies. October, 2007. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
3. Molecular Biology techniques and their application in disease. November, 2007. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
4. IDPT5001: Problem Base Learning. August, 2010 – May, 2011 (20 classes). University of Colorado Medical School. Role: Small group leader.
5. Transcription Regulation, Signal Transduction and Cardiomyopathies. September, 2010. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
6. Molecular Biology techniques and their application in disease. October, 2010. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
7. Graduate School of Bioengineering. May 2012. University of Colorado, Department of Bioengineering. Role: Lecture given.

8. Graduate School of Bioengineering. May 2013. University of Colorado, Department of Bioengineering. Role: Lecture given.
9. Transcription Regulation, Signal Transduction and Cardiomyopathies. September, 2013. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
10. Molecular Biology techniques and their application in disease. October, 2013. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
11. Molecular Mechanisms of Heart Failure. September, 2015. University of Colorado Pharmacology Graduate Program. Role: Lecture given.
12. Molecular Mechanisms of Heart Failure. September, 2016. University of Colorado Pharmacology Graduate Program. Role: Lecture given.
13. Transcription Regulation, Signal Transduction and Cardiomyopathies. September, 2016. University of Colorado Cardiology Fellowship Core Curriculum. Role: Lecture given.
14. Molecular Mechanisms of Heart Failure. September, 2017. University of Colorado Pharmacology Graduate Program. Role: Lecture given.
15. Molecular Mechanisms of Heart Failure. September, 2020. University of Colorado Pharmacology Graduate Program. Role: Lecture given.
16. Heart Failure – Clinical Manifestations and Molecular Mechanisms. February, 2021. University of Colorado Physiology Graduate Program. Role: Lecture given.
17. Molecular Mechanisms of Heart Failure. September, 2022. University of Colorado Pharmacology Graduate Program. Role: Lecture given.

Teaching administration:

1. Faculty, Co-Director - University of Colorado Denver, Division of Cardiology Lab Meeting Seminar Series. 2006-2009. These seminar series are presented in a bi-monthly basis by Faculty and Post-Docs of the Research group of the Division of Cardiology. Its main objective is to integrate the various research laboratories in possible collaborations and problem solving.
2. Faculty, Director – University of Colorado Denver, Division of Cardiology Journal Club Series. 2016 – 2019. I initiated a Journal Club series for post-docs and graduate students in the Division. These happen on a monthly basis and focus on recently published articles. The main goal of these presentations is to increase discussions on current topics in molecular cardiology.
3. Faculty, Director - University of Colorado Denver, Division of Cardiology Grant Rant. 2016 – 2018. These seminar series are presented in a monthly basis by investigators applying for grants. Its main objective is to provide criticism to grant applications before submission.
4. Faculty, Director, Research Oversight Committee – Cardiology Fellows – University of Colorado Anschutz Medical Campus. 2019 – present. My responsibility is to oversee and insure that cardiology fellows have appropriate research projects.
5. Chair of Admission Committee – Integrative Physiology Graduate Program - University of Colorado Anschutz Medical Campus. 2020 – present.
6. Curriculum Development - University of Colorado Anschutz Medical Campus, Integrative Physiology Graduate Program. 2020-2021. I am a faculty member of the committee that developed the new core curriculum for the Integrative Physiology Graduate Program
7. Faculty, Director of Education – Cardiology Division. University of Colorado Anschutz Medical Campus. 2021-present. I supervise the basic research educational component of the division, including organizing Cardiology Research Conference.

Trainees and Mentees:

List of Current and Past Trainees. NA – Not applicable – member only of oversight or thesis committees.				
Year	**Name**	**My Role**	**Accomplishments (During Mentorship)**	**Current Position or Degree**
Undergraduate and Graduate Students				
2006-2008	Katie Melhado	Primary Mentor	-Poster presentation	DO
2009-2010	Lisa Walker	Primary Mentor	-Publication -APS Undergraduate Research Grant	PhD Graduate Harvard University
2009-2011	Jamie Hijmans	Co-Mentor	-Publication	PhD Graduate, University of Colorado Boulder
2010	Raquel Barra	Primary Mentor	-Poster presentation	MD
2012	Gloria Russell	Primary Mentor	-Publication	MD
2012	Robert Van Dusen	Primary Mentor	-Publication	MBA student
2012-2013	Jonathan Grudis	Co-Mentor	- Achievement Rewards for College Scientists (ARCS) Foundation Scholarship -Publication	Medical Student, University of Colorado School of Medicine, Aurora, CO
2013	William Melhado	Primary Mentor	-Publication	HS Chemistry Teacher
2013	Sam Payne	Co-Mentor	-Poster presentation -Oral Presentation at Scientific Meeting	Medical Student, University of Colorado School of Medicine, Aurora, CO
2013-2018	Juliana Sucharov	Primary Mentor	-Poster presentation -Oral Presentation at Scientific Meeting -Publications -Children's Colorado Summer Research and APS undergraduate research grants	PhD student at UCSF
2013-2014	Mackenzie Cecil	Primary Mentor	-Poster presentation -Oral Presentation at Scientific Meeting -Publications	Graduated from College
2013	Sean Wickers	Primary Mentor	-Publication	Medical Student, University of Colorado School of Medicine, Aurora, CO
2016	Tara Riedl	Primary Mentor	-AHA undergraduate research grant	Graduated from College
2017	Emma Selner	Co-Mentor	-Children’s Hospital of Colorado Summer Research Program Award	In DO school

			-Formal presentation of her findings; will be co-author on submitted manuscript	
2017-present	Danting Cao	Pre-Doctoral Thesis Committee	NA	PhD graduate
2017-present	Keith Strand	Pre-Doctoral Thesis Committee Chair	NA	PhD graduate
2018	Joseph Wall	Co-mentor	-Children's Hospital of Colorado Summer Research Program Award -Poster presentation	Medical Student at New York Medical College
2017-2020	Denis Ohlstrom	Co-mentor	-Publication	MSTP student at Emory University
2021	Danielle Jeffrey	Mentor Rotation Student	-Publication	PhD Student, Pharmacology Program
2022	Ilili Wakgari	Co-mentor	- Children's Colorado Summer Research and oral presentation at the end of summer project	Undergraduate student
2022	Ethan Rausch	Primary mentor		Undergraduate student
2022	Nardos Getahun	Primary mentor	-GEMS fellowship and oral presentation at the end of summer project	Undergraduate student
2022-	Obed Nyarko	Primary mentor	Editorial and review publications	PhD Student, IPHY program
2023	Ethan Rausch	Primary mentor	- Children's Colorado Summer Research and oral presentation at the end of summer project	Undergraduate student
2023	Sariah Hyacinth	Primary mentor	-GEMS fellowship and oral presentation at the end of summer project	Undergraduate student
2023	Catie Conard	Primary mentor		Undergraduate student
MD or PhD Fellows				
2004-2005	Peter Robinson, MD	Co-mentor	-Poster presentations	Assistant Professor – UCONN Health
2004-2006	Sarah Weiss, MD	Co-mentor	-Poster presentations	Cardiologist – Virginia Mason Hospital and Seattle Medical Center
2008-2010	Daniela Botolin, MD	Mentor		Surgeon – El Paso County, CO
2010-2013	Daren Wang, PhD	Co-mentor	-Publication	Research Associate, Division of Oral Maxillofacial Pathology and Radiology College of

				Dentistry. The Ohio State University.
2013	Kathryn Chatfield, MD, PhD	Co-mentor	-KO8 Award -Center for Women's Health Research Seed Grant -Publications	Associate Professor – Department of Pediatrics
2011-2013	Stephanie Nakano, MD	Mentor	-Cardiology T32 -Publications	Asspciate Professor – Department of Pediatrics
2012-2016	Elizabeth Medina, PhD	Co-mentor	-R01 Minority Supplement -Publication	Adjunct Assistant Professor – Regis University
2015-2018	Megan Soohoo, MD	Co-mentor	- Children's Hospital Funding -Poster presentation -Publications	Assistant Professor of Pediatrics, University of Colorado
2013-2015	Austine Siomos, MD	Co-mentor	-Publications	Pediatric Cardiologist – Rocky Mountain Heart and Lung, MT
2014-2017	Ryan Good, MD	Co-mentor and member of advisory committee	-Publications	Assistant Professor – Department of Pediatrics
2014-2017	Alison Santana, MD	Co-mentor and member of advisory committee	-Manuscript submitted	Private practice
2014-2017	Kathleen Woulfe, PhD	Co-mentor	-Cardiovascular Pulmonary T32 -AHA post-doc award -Publications	Assistant Professor – Department of Medicine – University of Colorado – NIH K01 and AHA CDA award recipient.
2015-2017	Kalin Swain, PhD	Co-mentor	-Publication	
2015-2018	Xuan Jiang, PhD	Mentor	-Cardiovascular Pulmonary T32 -Publications	Associate Clinical Trials Manager – Medpace.
2015-2019	Anastacia Garcia, PhD	Co-primary mentor	-R01 Minority Supplement -AHA Post-doc award -CCTSI -Publications	Assistant Professor. Department of Pediatrics. NIH KL2, NIH PRIDE program, Additional Ventures awards recipient.
2016-2019	Lee Toni, PhD	Primary Mentor	-Cardiovascular Pulmonary T32 -Publication	Clinical Scientist, Teleflex
2017-2018	Eleanor Schuchardt, MD	Co-primary mentor	-Children's Hospital Funding -Poster presentation -Manuscript in revision	Assistant Professor, Pediatric Cardiologist, University of California, San Diego, CA
2017-2018	Jessica McPhaul, MD	Co-mentor	-Poster presentation -Publication	Pediatric cardiology fellow

2018-present	Eileen Chang, PhD	Member of advisory committee	NA	NA
2018-present	Frehiwet Hailu, DVM	Primary Mentor	-NIH minority supplement T32 training grant -Publication	Post-doctoral fellow
2018-2021	Julie Pires da Silva, PhD	Primary Mentor	-Publication	Post-doctoral fellow
2018-present	Suet-Nee Chen, PhD	Member of advisory committee	NA	NA
2018-2021	Emily Willner, MD	Primary Mentor	-Publication	
2018-2020	Chloe Nielsen, MD	Primary Mentor	-Poster presentation	Maternal Fetal Medicine Fellow
2020-Present	Sarkis Derderian, MD	Mentor	- Paper submitted	Assistant Professor, Department of Pediatrics University of Colorado
MD or PhD Faculty				
2014-2018	Scott Auerbach, MD	Co-mentor	-AHA MCPR Award -AHA Scientific Sessions Oral Abstract Presentation -Manuscript in preparation	Associate Professor, Department of Pediatrics, University of Colorado
2014-2019	Kathryn Chatfield, MD, PhD	Co-mentor	-K08 award -Publications	Associate Professor, Department of Pediatrics, University of Colorado
2016-present	Stephanie Nakano, MD	Mentor	-K08 award -AHA Scientific Sessions Oral Abstract Presentation -AHA MCPR Award -Publications	Assistant Professor, Department of Pediatrics, University of Colorado
2015-2017	Katja Gist, MD	Co-mentor	-AHA MCPR -Publication	Associate Professor, Department of Pediatrics, University of Colorado
2017-present	Vitaly Kheyfets, PhD	Co-mentor	-K25 award -Entelligence Grant -Publication	Assistant Professor, School of Bioengineering, University of Colorado
2017-2019	Pei-Ni Jone, MD	Co-mentor	-AHA MCPR Award -AHA Scientific Sessions Oral Abstract Presentation -Publication	Associate Professor, Department of Pediatrics, University of Colorado
2018-present	Kathleen Woulfe, PhD	Mentor	-K12 BIRCWH Award -Lorna Grindlay Moore Faculty Launch Award -K01 awardee	Assistant Professor, Department of Medicine, University of Colorado
2018-present	Brisa Pena Castellanos, PhD	Member of advisory committee	-K25 Awardee, AHA CDA awardee	Assistant Professor, School of Bioengineering, University of Colorado
2019-present	Anastacia Garcia, PhD	Co-primary mentor	-Publications -KL2-funded	Assistant Professor. Department of Pediatrics University of Colorado

2020-present	Roni Jacobsen, MD	Member of advisory committee	-Resubmission of K23	Assistant Professor. Department of Pediatrics University of Colorado
2020-Present	Sarkis Derderian, MD	Mentor	-Will submit a K08	Assistant Professor, Department of Pediatrics University of Colorado
2021-present	Benjamin Frank, MD	Mentor	NIH K23-funded	Assistant Professor. Department of Pediatrics University of Colorado

Scholarly Oversight Committee
Alison Santana – Pediatric Critical Care Fellow
Ryan Good – Pediatric Critical Care Fellow

Mentorship Committee
Suet-Nee Chen – Assistant Professor, Cardiology Division
Brisa Pena Castellanos – Assistant Professor, Cardiology Division
Eileen Chang – Instructor, Neonatology Division

Pre-Doctoral Thesis Committee
Danting Cao – PhD candidate, Pharmacology Program
Keith Strand – PhD candidate, Physiology Program
Alisson Dubner – PhD candidate, Physiology Program

Grant Support

ASPIRE (Sucharov, PI) 07/01/2023-06/30/2025
SOM, University of Colorado Anschutz Medical Campus
"Organ crosstalk in the cardio-pulmonary-renal axis and the effect on heart mitochondrial and cardiac function."
The goal of our program is to define the effect of organ injury on heart mitochondrial and cardiac function. Our central hypothesis is that mitochondrial dysfunction is a central driver of cardiac dysfunction in models of direct cardiac injury as well as injury to remote organs, including the lung and the kidney.

Innovative Program Award (Sucharov, PI) 07/01/2023–06/30/2025 1.2 calendar
AHA
"Pediatric Dilated Cardiomyopathy Multiomic Atlas"
The overarching goal of this proposal is to define the cell types that comprise the pediatric heart and understand how individual cell populations and their respective transcriptional signatures, networks, and niches are affected by different classes of mutations and how the pediatric DCM heart differs from healthy, age-matched control hearts.

Innovative Program Award (Stauffer, PI; Role: Co-I) 07/01/2023–06/30/2025 1.2 calendar
AHA
"Cardiolipin Mechanisms Underlying Mitochondrial Dysfunction in the Heart"
This proposal will determine the mechanisms of a mitochondria-targeted peptide on membrane

localization of the mitochondrial lipid cardiolipin, and how this peptide improves mitochondrial stress

R01 HL156670 (Sucharov, MPI) 03/15/2021-03/14/2026 2.4 calendar
NIH/NHLBI
"Targeting Mitochondria in Single Ventricle Heart Disease"
The purpose of this study is to define the mechanisms by which PDE5 inhibition improves mitochondrial function in the single ventricle disease population.

R01 HL157973 (Sucharov, MPI) 04/10/2021- 04/09/2025 2.4 calendar
NIH/NHLBI
"Cardiac dysfunction after ischemic AKI in mice"
The purpose of this study is to investigate the consequences of Acute Kidney Injury on metabolism, cardiac hemodynamic and mitochondrial function.

RNA Biosciences Initiative (Sucharov) 07/15/2021 – 07/14/2022 0.6 calendar
RNA Biosciences Initiative, University of Colorado Anschutz Medical Campus
"Spatial Transcriptomics in the Failing Pediatric Heart"
This is a pilot grant to investigate the spatial transcriptomics profile from hearts of pediatric dilated cardiomyopathy patients.

K24 HL 150630-01 (Sucharov) 12/01/2019 – 11/30/2024 3.6 calendar
NIH/NHLBI
"Investigations of Pathologic Remodeling Using Pediatric Heart Failure Serum"
The goal of this project is to define the mechanistic effect of pediatric heart failure serum circulating factors in pathologic remodeling of neonatal cardiomyocytes.

Transplant Longevity Award (Miyamoto) 07/01/2019 – 10/31/2023 0.36 calendar
ISHLT/Enduring Hearts
"Circulating microRNAs: Biomarker for Acute Graft Rejection in Pediatric Heart Transplant Recipients"
The goal of this project is to determine if circulating miRNAs can predict acute graft rejection is pediatric heart transplant recipients.

R01 HL 139968 (Sucharov, MPI) 02/17/2018 – 01/31/2024 (NCE) 1.8 calendar
NIH/NHLBI
"Prognostic Significance of microRNA Expression in Children with Cardiomyopathy"
The goal of this application is to identify biomarkers of outcomes in the pediatric DCM population

K01AG066845 (Woulfe, PI; Sucharov, mentor) 05/01/2020 – 03/31/2024
NIH/NIA
"Sex-specific regulation of myofibrillar function in the aging heart"
The overall goal of this proposal is to define the differences in myofibril relaxation between males and females during normal cardiac aging.

R25 HL146166-01 (Flores, Site PI) 01/07/2019 – 12/31/2023 0.6 calendar
NIH/NHLBI
"PRIDE Academy: Impact of Ancestry and Gender on omics of lung diseases"
This project will recruit 8 junior faculty members from under-represented backgrounds to

participate in 2 summer academies that will focus on didactic, career development, cultural and social components to improve retention of these faculties in academic medicine. The scholars will be paired with mentors who will stay in contact with the scholars throughout the 2 years of the training.

Past Support

POCg, Sucharov, PI 10/31/2006 – 10/31/2008
University of Colorado Technology Transfer
"Preventing Pathologic Cardiac Hypertrophy"
The goal of this project is to identify a peptide sequence that can retain HDAC5 in the nucleus and prevent pathologic cardiac hypertrophy.

POCg Port, PI (Sucharov, Co-PI) 02/01/2008–01/31/2009
University of Colorado Technology Transfer
"microRNAs as therapeutic targets in heart failure"
The goal of this project is to analyze microRNA expression in serial biopsies of heart failure patients.

Innovative and collaborative grant initiatives - Sucharov, PI 03/01/2008-02/28/2009
Department of Medicine, University of Colorado Denver
"Target Delivery of TAT-siRNA to the Rat Heart"
The goal of this project is to generate a reliable methodology of siRNA delivery to the heart tissue

Department of Medicine Small Grants Sucharov, PI 06/01/2009-05/31/2010
Department of medicine, University of Colorado
"Regulation of miRNA function in the human failing heart"
The goal of this project is to understand how miRNA function is regulated in human heart failure.

CCTSI. Sucharov, PI 01/10/2010-01/09/2011
Child and Maternal Health Pilot Grant
"β-Adrenergic Receptor Regulation in Pediatric Heart Failure"
The goal of this project is to determine the relative contribution of β1- and β2-adrenergic receptors in pediatric heart failure.

R21 HL097123 Sucharov, PI (MPI) 09/01/2009-08/31/2011
NIH NHLBI
"Cardiac Beta-Adrenergic Adaptation in Pediatric Heart Failure"
The general aim of this project is to determine whether the beta-adrenergic receptor changes in response to heart failure are similar between children and adults.

Leducq Transatlantic Networks of Excellence. Bristow, PI (Sucharov, Co-I)
12/01/2006-11/30/2011
"Localized Control of cAMP Signaling and Novel Therapeutic Approaches for Heart Failure"
The general aim of this project is to determine the relative contribution of cAMP and its downstream signaling pathways to heart failure.

Children Cardiomyopathy Foundation Sucharov, PI 02/01/2012-01/31/2013
"microRNA expression in children with heart failure"

The goal of this project is to define circulating microRNAs in children with dilated cardiomyopathy.

K01 HL088708 **Sucharov PI** 04/01/2007-03/31/2012
NIH NHLBI
"Mechanisms of YY1 Inhibition of Cardiac Hypertrophy"
The major goal of this project is to establish the role of YY1 in preventing Cardiac Hypertrophy.

11IRG5070006 **Sucharov, PI** 01/01/2011-12/31/2012
American Heart Association
"Regulation of miRNA function in cardiac disease"
The goal of this project is to understand how miRNA function is regulated in heart disease.

State of Colorado and University of Colorado Sucharov, PI 06/09/2011-04/30/2013
"Selective β_1-adrenergic Blockade in Children with Heart Failure"
The goal of this project is to determine the efficiency of selective β_1-adrenergic blockade for the treatment of pediatric heart failure.

Sponsored Research Agreement Sucharov, PI 08/01/2010-07/31/2013
Miragen, Inc.
"miRNA regulation in the failing human heart"
The goal of this project is to analyze the miRNA expression profile in human heart failure patients treated with beta-blockers.

Cardiology and Cardiac Surgery Research Fellowship Nakano, PI (Sucharov, Mentor)
American Academy of Pediatrics 06/01/2012-12/31/2013
"Regulation of Phosphodiesterase Activity in Pediatric Heart Failure". The purpose of this grant is to investigate the activity of phosphodiesterase isoforms in the hearts of children with idiopathic dilated cardiomyopathy.

Clinical Research Program Award - Auerbach, PI (Sucharov, Co-I)
American Heart Association 07/01/2013-06/30/2015
"Circulating miRNAs as a Biomarker to Predict Cardiac Allograft Vasculopathy in Pediatric Heart Transplant Recipients". The purpose of this project is to prospectively investigate circulating miRNAs as a biomarker of cardiac allograft vasculopathy in pediatric heart transplant recipients.

13GRNT16950045 **Sucharov, PI** 07/01/2013-06/30/2015
American Heart Association
"Regulation and Function of SRF isoforms in Pediatric Heart Failure"
The purpose of this study is to investigate the role of pediatric isoforms of the SRF transcription factor in regulating miRNA expression and protein phosphorylation in children with heart failure secondary to idiopathic dilated cardiomyopathy.

Bioscience Discovery Evaluation Grant 02/01/2015-09/30/2016
State of Colorado and University of Colorado
"Non-invasive Diagnostic Tests for Pediatric Heart Failure Patients"
The miRNA biomarkers identified by the research efforts at the University of Colorado have the potential to significantly impact children diagnosed with heart failure. Funding for the early stages of test development is required, however, in order to translate the basic research that discovered the miRNA biomarker into a diagnostic option that can be offered to these patients. It

is the objective of this project to develop a non-invasive test for measuring miRNA biomarkers in serum samples obtained from pediatric heart failure patients.
Role: Management team (includes Miyamoto, Sucharov, Stauffer, Mariner, Bristow and Purvis)

R01 HL107715-01A1 **Stauffer, PI (Sucharov, Co-I)** 12/01/2011-11/30/2016
NIH NHLBI
"Molecular and Functional Mechanisms of Pediatric Heart Failure"
The general aim of this project is to understand how the myocardial response to heart failure in children is different from the response in adults. Molecular, epigenetic, and trabeculae and sarcomere functional mechanisms will be addressed.

Lawrence J. and Florence A. De George Award - Nakano, PI (Sucharov, Mentor)
American Heart Association 07/01/2015-06/30/2017
"Predicting Outcome of Single Ventricle Heart Disease with Circulating microRNA". The purpose of this project is to prospectively investigate circulating miRNAs as a biomarker of outcome in children with single ventricle heart disease. In addition, we will determine if miRNAs are differentially regulated through the various stages of single ventricle palliation.

K12 HD068372 **Nakano, PI (Sucharov, Mentor)** 07/01/2015-06/30/2017
NIH NICHD
"Myocardial effects of cyclic guanosine monophosphate-hydrolyzing phosphodiesterase inhibition in pediatric right ventricular heart failure".
The goal of this proposal is to investigate the role of cGMP-hydrolyzing PDEs in the myocardium of pediatric patients with severe forms of congenital heart disease and the intracellular consequences of PDE-inhibition in cardiac myocytes.

Clinical Research Program Award - Gist, PI (Sucharov, Co-I)
American Heart Association 01/01/2016-12/31/2017
"Platelet and Tissue cAMP: Novel Biomarkers of Milrinone Efficacy in Children". The purpose of this project is to determine if circulating levels of cAMP detectable in platelets can determine clinical efficacy of milrinone in children. In addition, correlations between cardiac tissue and platelet concentrations of cAMP in children undergoing transplant while on milrinone therapy will be determined.

R01HL114753-01 **Shandas, PI (Sucharov, Co-I)** 09/01/2012-08/31/2018
NIH/NHLBI
"Functional and biological Phenotyping of Pediatric PH"
The major goals of this proposal are to develop combination biological and imaging-based biomarkers of pediatric pulmonary hypertension, with particular focus on elucidating metrics of right-ventricular to pulmonary artery coupling, and how this changes with pulmonary hypertension.

R41HL137564 **Sucharov, PI** 09/01/2017-02/28/2019
NIH NHLBI
"Non-invasive risk assessment tool for pediatric heart failure"
The purpose of the study is to translate miRNA biomarker discoveries into a validated medical test.

R01HL119533 **Sucharov, PI (MPI)** 09/01/2014-06/30/2019

NIH NHLBI
"miRNA Regulation of Vascular Permeability and Inflammation in the Lung Injury"
The purpose of this study is to study the miRNAs involved in lung injury, and alter their expression in the lung.

Children's Cardiomyopathy Foundation - Miyamoto, PI (Sucharov, Co-I) 12/01/2017-11/30/2018
"Circulating MicroRNA in Genotype-Positive Hypertrophic Cardiomyopathy"
The goal of this project is to determine if circulating microRNAs (miRs) can serve as a useful biomarker to assess the future risk of the development of hypertrophic cardiomyopathy (HCM) in individuals with HCM-associated gene mutations.

Clinical Research Program Award - Jone, PI (Sucharov, Co-I) 07/01/2017-06/30/2019
American Heart Association
"Circulating microRNA as a diagnostic and prognostic biomarker of Kawasaki Disease". The purpose of this project is to investigate circulating miRNAs as a biomarker for the diagnosis, risk stratification for the development of associated coronary disease and as a predictor of IVIG resistance in children with Kawasaki Disease.

Academic Industry Accelerator Sucharov, PI (MPI) 07/01/2016-02/28/2019
State of Colorado
Biomarker test for pediatric Cardiac Allograft Vasculopathy
The purpose of this study is to develop a miRNA-based biomarker test for cardiac allograft vasculopathy patients.

16SFRN31420008 (Bristow, PI) 07/01/2016 – 06/30/2021
AHA
Therapeutic Molecular and Structural Phenotypic Changes of Heart Rate Reduction in HFrEF.
The goal of this application is to define b1-adrenergic receptor gene network in heart failure patients.

R01 HL126928 (Miyamoto) 04/01/2015 – 03/31/2021
NIH/NHLBI
"Myocardial Effects of PDE5-inhibition in Single Ventricle Heart Disease"
The goal of this proposal is to determine the contribution of PDE5 to right ventricle dysfunction in single ventricle heart disease patients.

KL2TR002534 (Garcia, PI; Sucharov, mentor) 12/1/2019 - 11/31/2021
NIH/NCATS Colorado CTSI KL2 (K12)
"Metabolic Remodeling in the Failing Pediatric Right Ventricle"
The purpose of this project is to determine changes in mitochondrial bioenergetics in explanted pediatric heart tissue and assess the impact of PDE5 inhibition in human SV myocardium and in primary cardiomyocytes treated with SV patient serum. The PDE5-mediated metabolic consequences of sphingolipid remodeling in vitro and in vivo will also be assessed.

R56 HL153740 (Chatfield) 9/17/2020 - 8/31/2022
NIH/NHLBI
"Oxidization of Cardiolipin and its Role in Mitochondrial Dynamics in Pediatric Dilated Cardiomyopathy"
The purpose of this study is to determine the role of oxidation of the mitochondrial phospholipid cardiolipin in mitochondrial dynamics. We propose to use a neonatal rat ventricular myocyte

culture system with oxidizing agents to create oxCLs and assay mitophagy as a result of oxCL formation.

K08 HL130592 (Nakano, PI; Sucharov, mentor) 01/01/2017 - 12/31/2021
NIH/NICHD
"Functional Characterization of Phosphodiesterase 1 in Single Ventricle Heart Disease"
The goal of this proposal is to investigate the role of PDE1 in the myocardium of pediatric patients with severe forms of congenital heart disease and the intracellular consequences of PDE-inhibition in cardiac myocytes.

Transformative Research Program (Stauffer) 07/01/2019 – 06/30/2022
AHA
"Bioenergetics and Myofibril Function in Pediatric Dilated Cardiomyopathy"
The general aim of this project is to identify novel mitochondrial interventions for heart failure in children.

Bibliography

Papers published in peer-reviewed journals

1. **Sucharov C**, Basu A, Carter RS, Avadhani NG. 1995. A novel transcriptional initiator activity of the GABP Factor Binding ets sequence repeat from the murine cytochrome c oxidase Vb gene. Gene Expression 5: 93-111.

2. Mullick J, Addya S, **Sucharov C**, Avadhani NG. 1995. Localization of transcription promoter within the second exon of the cytochrome P-450 C27/25 gene for the expression of the major species of two-kilobase mRNA. Biochemistry 34: 13729-42.

3. **Sucharov CC**, Silva R, Rondinelli E, and Moura-Neto RS. 1999. Fragile X trinucleotide repeats from a normal population in Rio de Janeiro, Brazil. Hereditas 130: 189-190.

4. **Sucharov CC**, Mariner P, Long C, Bristow M, Leinwand LA. 2003. YY1 is increased in human heart failure and represses the activity of the human alphaMyHC promoter. J Biol Chem 278: 31233-9.

5. **Sucharov CC***, Helmke SM, Langer SJ, Perryman MB, Bristow M and Leinwand LA. 2004. The Ku protein complex interacts with YY1, is up-regulated in human heart failure and represses the activity of the αMyHC promoter. Mol Cell Biol, 24(19):8705-8715

6. Mariner PD, Luckey S, Long CS, **Sucharov CC,** and Leinwand LA. 2004. Ying Yang 1 represses a myosin heavy chain gene expression in pathologic cardiac hypertrophy. Biochem Biophys Res Commun 326(1):79-86.

7. **Sucharov CC**, Mariner PD, Nunley KR, Long CS, Leinwand LA and Bristow MR. 2006. A β_1-adrenergic receptor, CaM Kinase II dependent pathway mediates cardiac myocyte fetal gene induction. Am J Physiol Heart Circ Physiol 291(3):H1299-308.

8. **Sucharov CC***, Bristow MR, Leinwand LA. 2006. Shuttling of HDAC5 in H9C2 cells regulates YY1 function through CaMKIV/PKD and PP2A. Am J Physiol Cell Physiol 291(5):C1029-37.

9. Taylor MRG, Slavov D, Ku L, Di Lenarda A, Sinagra G, Carniel E, Haubold K, Boucek M, Ferguson D, Graw S, Zhu X, Cavanaugh J, **Sucharov CC,** Long, CS, Lavori P, Mestroni L, and the Familial Cardiomyopathy Registry and the BEST DNA Bank. 2007. Prevalence of desmin mutations in dilated cardiomyopathy. Circulation 115(10):1244-51

10. **Sucharov CC**. 2007. Beta-adrenergic pathways in human heart failure. Expert Rev Cardiovasc Ther. 5(1):119-24.

11. **Sucharov CC*,** Dockstader K, McKinsey T. 2008. YY1 prevents against pathologic cardiac hypertrophy by interacting with HDAC5. Mol Biol Cell. 19(10):4141-53

12. **Sucharov CC*,** Bristow MR, Port JD. 2008. Regulation of miRNA Expression in the Failing Human Heart: Functional Correlates. J Mol Cell Cardiol. 45(2): p. 185-92

13. Cresci S, Jones PG, **Sucharov CC,** Marsh S, Lanfear DE, Garsa A, Courtois M, Weinheimer CJ, Wu J, Province MA, Kelly D, McLeod HL, Spertus JA. 2008. Interaction Between *PPARA* Genotype and β-Blocker Treatment Influences Clinical Outcomes Following Acute Coronary Syndromes**.** Pharmacogenomics. 9(10):1403-17.

14. Sihag S, Cresci S, Li AY, **Sucharov CC**, Lehman JJ. 2009. PGC-1alpha and ERRalpha target gene downregulation is a signature of the failing human heart. J Mol Cell Cardiol. 46(2):201-12.

15. Calalb MB, McKinsey TA, Newkirk S, Bohlmeyer T, Huynh K, PhD, **Sucharov CC**, Bristow MR. 2009. Increased phosphorylation-dependent nuclear export of class II histone deacetylases in failing human heart. Clin Translational Sci. 2 (5): 325-332.

16. Port JD**, Sucharov CC.** 2010. Role of miRNAs in Cardiovascular Disease: a lot remains to be learned. Journal of Cardiovascular Pharmacology, 56(5):444-53.

17. **Sucharov CC***, Dockstader K, Nunley K, McKinsey TA, Bristow MR. 2011. β-adrenergic receptor stimulation and activation of PKA protect against α_1-adrenergic mediated phosphorylation of PKD and HDAC5. J Card Fail, 17(7):592-600.

18. Stauffer BL, Sobus R, **Sucharov CC**. 2011. Sex differences in cardiomyocyte Connexin 43 expression. Journal of Cardiovascular Pharmacology, 58(1):32-39.

19. Port JD, Walker LA, Polk J, Nunley K, Buttrick PM, **Sucharov CC*** 2011. Temporal Expression of miRNAs and mRNAs in a Mouse Model of Myocardial Infarction. Physiol Genomics, 43(19): 1087-95.

20. Dockstader K, Nunley K, Karimpour-Fard A, Medway A, Nelson P, Port JD, Liggett SB, Bristow MR, **Sucharov CC*** 2011. Temporal Analysis of mRNA and miRNA Expression in Transgenic Mice Over Expressing Arg- and Gly389 Polymorphic Variants of the β_1-Adrenergic Receptor. Physiol Genomics, 43(23):1294-306.

21. Miyamoto SD, Stauffer BL, Nakano S, Sobus R, Nunley K, Nelson P, **Sucharov CC*** Beta-Adrenergic Adaptation in Pediatric Idiopathic DCM. European Heart Journal, 35:33-41.

22. Stauffer BL, Russell G, Nunley K, Miyamoto SD, **Sucharov CC***. 2013. miRNA expression in the pediatric failing human heart. Journal of molecular and cellular cardiology. J Mol Cell Cardiol 57:43-6.

23. **Sucharov CC,** Hijmans J, Sobus R, Miyamoto SD, Stauffer BL. 2013. Beta Adrenergic Receptor Antagonism in Mice: A Model for Pediatric Heart Disease. Journal of Applied Physiology. 115(7):979-87.

24. Wang D, Zhang H, Li M, Frid MG, Flockton AR, McKeon BA, Yeager ME, Fini MA, Morrell NW, Pullamsetti SS, Velegala S, Seeger W, McKinsey TA, **Sucharov C**, Stenmark KR. 2014. MicroRNA-124 Controls the Proliferative, Migratory, and Inflammatory Phenotype of Pulmonary Vascular Fibroblasts. Circ Res, 114:67-78.

25. Chatfield KC, Sparagna GC, **Sucharov CC**, Miyamoto SD, Grudis JE, Sobus RD, Hijmans J, Stauffer BL. 2014. Dysregulation of cardiolipin biosynthesis in pediatric heart failure. J Mol Cell Cardiol., 74:251-9.

26. Nakano SJ, Miyamoto SD, Movsesian M, Nelson P, Stauffer BL, **Sucharov CC***. 2015. Age-Related Differences in Phosphodiesterase Activity and Effects of Chronic Phosphodiesterase Inhibition in Idiopathic Dilated Cardiomyopathy. Circ Heart Failure. 8: 57-63.

27. **Sucharov CC***, Sucharov J, Karimpour-Fard A, Nunley K, Stauffer BL, Miyamoto SD. 2015. miRNA Expression in Hypoplastic Left Heart Syndrome. J Card Fail, 21-83-8.

28. Miyamoto SD**,** Stauffer BL, Polk J, Medway A, Friedrich M, Haubold K, Peterson V, Nunley K, Nelson P, Sobus R, Stenmark KS, **Sucharov CC***. 2014. Gene Expression and β-adrenergic Signaling is Altered in Children with Hypoplastic Left Heart Syndrome. J Heart Lung Transplant, 33:785-93.

29. Miyamoto SD, Karimpour-Fard A, Peterson V, Auerbach SR, Stenmark KR, Stauffer BL, **Sucharov CC***. 2015. Circulating miRNA as a Biomarker for Recovery in Pediatric Dilated Cardiomyopathy. J Heart Lung Transplant, 34: 724-33

30. Stauffer BL, Dockstader K, Russell G, Hijmans J, Walker L, Cecil M, Demos-Davies K, Medway A, McKinsey TA, **Sucharov CC***. 2015. Transgenic over-expression of YY1 induces pathologic cardiac hypertrophy in a sex-specific manner. Biochem Biophys Res Commun, 462:131-37

31. Nakano SJ, Nelson P, **Sucharov CC**, Miyamoto SD. 2016. Myocardial Response to Milrinone in Single Right Ventricle Heart Disease. The Journal of Pediatrics. 174:199-203.

32. Stratton MS, Yin CY, Anand P, Tatman PD, Ferguson BS, Wickers ST, Ambardekar AV, **Sucharov CC**, Bradner JE, Haldar SM, McKinsey TA. 2016. Signal-Dependent Recruitment of BRD4 to Cardiomyocyte Super-Enhancers is Suppressed by a microRNA. Cell Reports. 16:1366-78.

33. Nakano SJ, Sucharov J, Cecil M, Nunley K, Wickers S, Karimpour-Fard A, Stauffer BL, Miyamoto SD, **Sucharov CC***. 2017. Cardiac Adenylyl Cyclase and Phosphodiesterase Expression Profiles Vary by Age Disease and Chronic Phosphodiesterase Inhibitor Treatment. J Card Fail. 23:72-80

34. Woulfe KC, Siomos AK, Nguyen H, SooHoo M, Galambo C, Stauffer BL, **Sucharov C**, Miyamoto S. 2017. Fibrosis and Fibrotic Gene Expression in Pediatric and Adult Patients With Idiopathic Dilated Cardiomyopathy. J Card Fail. 23: 314-324.

35. Medina E, **Sucharov CC**, Nelson P, Miyamoto SD, Stauffer BL. 2017 Molecular Changes in Children with Heart Failure Undergoing Left Ventricular Assist Device Therapy. J Pediatr. 182: 184-189

36. **Sucharov CC**, Kao D, Port JD, Karimpour-Fard A, Quaife R, Minobe W, Nunley K, Lowes B, Gilbert E, Bristow M. 2017 MicroRNAs Associated with Myocardial Reverse Remodeling from β1-Adrenergic Receptor Blockade in Human Heart Failure. Journal of Clinical Investigation – Insight. Jan 26;2(2):e89169.

37. Jiang X, Sucharov J, Stauffer BL, Miyamoto SD, **Sucharov CC***. 2017 Serum Circulating Factors in Children with Dilated Cardiomyopathy Modulate a Pathological Response In Cardiomyocytes. Am J Physiol Heart Circ Physiol. 312: H818-H826. *Selected as one of the best APS publications in March 2017*.

38. Tatman PD, Woulfe KC, Karimpour-Fard A, Jeffrey DA, Jaggers J, Cleveland JC, Nunley K, Taylor MRG, Miyamoto SD, Stauffer BL, **Sucharov CC***. 2017 Pediatric Dilated Cardiomyopathy Hearts Display a Unique Gene Expression Profile. Journal of Clinical Investigation – Insight. Jul 20;2(14):e94249.

39. Nakano SJ, Siomos AK, Garcia AM, Nguyen H, SooHoo M, Galambos C, Nunley K, Stauffer BL, **Sucharov CC**, Miyamoto SD. 2017. Fibrosis-Related Gene Expression in Single Ventricle Heart Disease. J Pediatr. 191:82-90

40. Woulfe KC, **Sucharov CC.*** 2017. Midkine's Role in Cardiac Pathology. J Cardiovasc Dev Dis. 4(3). pii: 13

41. Kheyfets VO, **Sucharov CC**, Truong U, Dunning J, Hunter K, Ivy D, Miyamoto S, Shandas R. 2017. Circulating miRNAs in Pediatric Pulmonary Hypertension Show Promise as Biomarkers of Vascular Function. Oxid Med Cell Longev. 2017:4957147.

42. Mariner PD, Korst A, Karimpour-Fard A, Stauffer BL, Miyamoto SD, **Sucharov CC***. 2018. Improved Detection of Circulating MiRNAs in Serum and Plasma Following Rapid Heat/Freeze Cycling. microRNA 7:138-147.

43. Miyamoto SD, **Sucharov CC**, Woulfe KC. 2018 Differential Response to Heart Failure Medications in Children. Progress in Pediatric Cardiology 49: 27-30

44. **Sucharov CC***; Miyamoto SD; Garcia AM. 2018. Circulating microRNAs as Biomarkers in Pediatric Heart Diseases. Progress in Pediatric Cardiology 49: 50-52

45. Toni LS, Garcia AM, Jeffrey DA, Jiang X, Stauffer BL, Miyamoto SD, **Sucharov CC***. 2018. Optimization of Phenol-Chloroform RNA Extraction. MethodsX. 5: 599-608

46. Garcia AM, Nakano SJ, Karimpour-Fard A, Nunley K, Blain-Nelson P, Stafford NM, Stauffer BL, **Sucharov CC**, Miyamoto SD. Phosphodiesterase-5 is Elevated in Failing Single Ventricle Myocardium and Affects Cardiomyocyte Remodeling in vitro. Circ Heart Failure 11:e004571.

47. Garcia AM, Allawzi A, Tatman P, Hernandez-Lagunas L, Swain K, Mouradian G, Bowler RP, Karimpour-Fard A, **Sucharov CC*,** Nozik-Grayck E. 2018. The R213G polymorphism in SOD3 protects against bleomycin-induced inflammation and attenuates induction of pro-inflammatory pathways. Physiol Genomics 50:807-816.

48. Good RJ, Hernandez-Lagunas L, Allawzi A, Maltzahn JK, Vohwinkel CU, Upadhyay AK, Kompella U, Birukov KG, Carpenter TC, **Sucharov CC***, Nozik-Grayck E. 2018. MicroRNA Dysregulation in Lung Injury: The Role of the miR-26a/EphA2 Axis in Regulation of Endothelial Permeability. Am J Physiol Lung Cell Mol Physiol 315:L584-L594.

49. Woulfe KC, Wilson CE, Nau S, Chau S, Phillips EK, Zang S, Tompkins C, **Sucharov CC**, Miyamoto SD, Stauffer BL. 2018. Acute isoproterenol leads to age-dependent arrhythmogenesis in guinea pigs. Am J Physiol Heart Circ Physiol 315:H1051-H1062.

50. Coverstone ED, Bach RG, Chen LS, Bierut LJ, Li AY, Lenzinni PA, O'Neill HC, Spertus JA, **Sucharov CC**, Stitzel JA, Schilling JD, Cresci S. 2018. A novel genetic marker of decreased inflammation and improved survival after acute myocardial infarction. Basic Res Cardiol 113:38.

51. Patil MA, Upadhyay AK, Hernandez-Lagunas L, Good R, Carpenter TC, **Sucharov CC,** Nozik-Grayck E, Kompella UB. 2018. Targeted delivery of YSA-functionalized and non-functionalized polymeric nanoparticles to injured pulmonary vasculature. Artif Cells Nanomed Biotechnol 19:1-8.

52. Chatfield K, Sparagna GC, Chau S, Phillips EK, Ambardekar AV, Aftab M, Mitchell MB, **Sucharov CC,** Miyamoto SD, Stauffer BL. 2019. Elamipretide Improves Mitochondrial Function in the Failing Human Heart. JACC: Basic Transl Sci.4: 147-157

53. **Sucharov CC***, Nakano SJ, Slavov D, Schwisow JA, Rodriguez E, Nunley K, Medway A, Stafford N, Nelson P, McKinsey TA, Movsesian M, Minobe W, Carroll IA, Taylor MRG, Bristow MR. 2019. A PDE3A Promoter Polymorphism Regulates cAMP-Induced Transcriptional Activity in Failing Human Left Ventricles. J Am Coll Cardiol. 19;73:1173-1184.

54. Aguado BA, Schuetze KB, Grim JC, Walker CJ, Cox AC, Ceccato TL, Tan AC, **Sucharov CC,** Leinwand LA, Taylor MRG, McKinsey TA, Anseth KS. 2019. Transcatheter aortic valve replacements alter circulating serum factors to mediate myofibroblast deactivation. Sci Transl Med. 11(509):eaav3233.

55. Allawzi A, McDermott I, Delaney C, Nguyen K, Banimostafa L, Trumpie A, Hernandez-Lagunas L, Riemondy K, Gillen A, Hesselberth J, El Kasmi K, **Sucharov CC,** Janssen WJ, Stenmark K, Bowler R, Nozik-Grayck E. 2019. Redistribution of EC-SOD resolves bleomycin-induced inflammation via increased apoptosis of recruited alveolar macrophages. FASEB J. 33:13465-13475.

56. Nakano SJ, Walker JS, Walker LA, Li X, Du Y, Miyamoto SD, **Sucharov CC,** Garcia AM, Mitchell MB, Ambardekar AV, Stauffer BL. 2019. Increased myocyte calcium sensitivity in end-stage pediatric dilated cardiomyopathy. Am J Physiol Heart Circ Physiol. 317:H1221-H1230.

57. Garcia AM, McPhaul JC, Sparagna GC, Jeffrey DA, Jonscher R, Patel SS, **Sucharov CC,** Stauffer BL, Miyamoto SD, Chatfield KC. 2020. Alteration of cardiolipin biosynthesis and remodeling in single right ventricle congenital heart disease. Am J Physiol Heart Circ Physiol. Apr 1;318(4):H787-H800.

58. Toni LS, Hailu F, **Sucharov CC***. 2020. Dysregulated micro-RNAs and long noncoding RNAs in cardiac development and pediatric heart failure. Am J Physiol Heart Circ Physiol. May 1;318(5):H1308-H1315.

59. Ohlstrom D, Hernandez-Lagunas L, Garcia AM, Allawzi A, Karimpour-Fard A, **Sucharov CC***, Nozik-Grayck E. 2020. MicroRNA regulation post bleomycin due to the R213G extracellular superoxide dismutase variant is predicted to suppress inflammatory and immune pathways. Physiol Genomics. Jun 1;52(6):245-254.

60. Jone PN, Korst A, Karimpour-Fard A, Thomas T, Dominguez SR, Heizer H, Anderson MS, Glode MP, **Sucharov CC,** Miyamoto SD. 2020. Circulating microRNAs differentiate Kawasaki Disease from infectious febrile illnesses in childhood. J Mol Cell Cardiol. Sep;146:12-18.

61. Gist KM, Korst A, Nakano SJ, Stauffer BL, Karimpour-Fard A, Zhou W, Campbell K, Wempe MF, **Sucharov CC,** Miyamoto SD. 2021. Circulating cyclic adenosine monophosphate concentrations in milrinone treated paediatric patients after congenital heart surgery. Cardiol Young. Feb 3:1-8.

62. Woulfe KC, Jeffrey DA, Da Silva JP, Wilson CE, Mahaffey JH, Lau E, Slavov D, Hailu F, Karimpour-Fard A, Dockstader K, Bristow MR, Stauffer BL, Miyamoto SD, **Sucharov CC***. 2021. Serum response factor deletion 5 regulates phospholamban phosphorylation and calcium uptake. J Mol Cell Cardiol. Jun;159:28-37.

63. Willner EC, Galan HL, Cuneo BF, Hoffman HA, Neltner B, Schuchardt EL, Karimpour-Fard A, Miyamoto SD, **Sucharov CC***. 2021. Amniotic fluid microRNA profiles in twin-twin transfusion syndrome with and without severe recipient cardiomyopathy. Am J Obstet Gynecol. Oct;225(4):439.e1-439.e10.

64. Jeffrey DA, Pires da Silva J, Garcia AM, Jiang X, Karimpour-Fard A, Toni LS, Lanzicher T, Pena B, Miyano C, Nunley K, Korst A, Sbaizero O, Taylor MRG, Miyamoto SD, Stauffer BL, **Sucharov CC***. 2021. Serum Circulating Proteins from Pediatric Dilated Cardiomyopathy Patients Cause Pathologic Remodeling and Cardiomyocyte Stiffness. JCI Insight. Oct 8;6(19):e148637.

65. Schuchardt EL, Miyamoto SD, Crombleholme T, Karimpour-Fard A, Korst A, Neltner B, Howley LW, Cuneo B, **Sucharov CC***. 2022. Amniotic Fluid microRNA in Severe Twin-Twin Transfusion Syndrome Cardiomyopathy—Identification of Differences and Predicting Demise. JCDD Jan 23;9(2):37. doi: 10.3390/jcdd9020037.

66. Hailu FT, Karimpour-Fard A, Toni LS, Bristow MR, Miyamoto SD, Stauffer BL, **Sucharov CC*.** 2022. Integrated analysis of miRNA-mRNA interaction in pediatric dilated cardiomyopathy. Pediatr Res. Jul;92(1):98-108.

67. Ohlstrom DJ, Sul C, Vohwinkel CU, Hernandez-Lagunas L, Karimpour-Fard A, Mourani PM, Carpenter TC, Nozik ES, **Sucharov CC***. 2022. Plasma microRNA and metabolic changes associated with pediatric acute respiratory distress syndrome: a prospective cohort study. Sci Rep. Aug 26;12(1):14560.

68. Garcia AM, Toni LS, Miyano CA, Sparagna GC, Phillips EK, Jonscher R, Karimpour-Fard A, Selner E, Chapman HL, Neltner BS, Stauffer BL, **Sucharov CC*,** Miyamoto SD*. 2022. Integrated Multi-Omic and Functional Analysis of Cardiac Tissue in Single Ventricle Congenital Heart Disease. JACC Basic Transl Sci. 8:258-279.

69. **Sucharov CC**, Neltner B, Pietra AE, Karimpour-Fard A, Patel J, Ho CY, Miyamoto SD. 2023. Circulating microRNAs Identify Early Phenotypic Changes in Sarcomeric Hypertrophic Cardiomyopathy. Circ Heart Fail. 16:e010291.

70. Nyarko OO, **Sucharov CC***. 2023. The secretome as a biomarker and functional agent in heart failure. J Cardiovasc Aging. 3:27.

* Denotes corresponding author

Invited Editorials

1. **Sucharov C.C.** 2005. Gene expression and heart failure. 24-27 July 2005 2nd Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences Keystone CO USA. Expert Rev Cardiovasc Ther. 3(6):983-4.

2. **Sucharov C.C.** 2007 Role of p38MAPK in β2AR-induced cardiomyopathy: at the heart of the matter? Future Cardiol. 3(4) 387-389.

3. **Sucharov CC**; Nakano SJ. 2013. Phosphodiesterase Inhibition in Pediatric Heart Failure – Beneficial or Detrimental? Comparison to Adults with Heart Failure. Journal of Cardiology and Vascular Medicine. In press.

4. Miyamoto SD Stauffer BL **Sucharov CC**. Differential Response to Medications between Children and Adults with Heart Failure. ISHLT Links Newsletter October 2014.

5. Jeffrey DA; **Sucharov CC**. 2018. CELF1 Regulates Gap Junction Integrity Contributing to Dilated Cardiomyopathy – Invited Editorial. Non-coding RNA Investigation 2:10.

6. **Sucharov CC**. 2020. Paracrine Factors in Uremic Cardiomyopathy. JACC Basic Transl Sci. 2020 Feb 24;5(2):167-168.

7. Nyarko OO, **Sucharov CC***. 2023. Big tau Aggregation and the Broken Heart. Eur Heart J. 44:1571-1573.

Book Chapters

1. Port JD **Sucharov C** and Bristow MR Adrenergic Receptor Signaling in Chronic Heart Failure. In: Heart Failure: A Companion to Braunwald's Heart Disease. 2nd Edition. Edited by Mann DL. W.B. Saunders Co. 2010

2. Port JD **Sucharov C** and Bristow MR Adrenergic Receptor Signaling in Chronic Heart Failure. In: Heart Failure: A Companion to Braunwald's Heart Disease. 3rd Edition. Edited by Felker GM Mann DL. Elsevier 2015

3. Miyamoto SD Stauffer BL **Sucharov CC**. Molecular Pathways in Cardiomyopathies. Cardioskeletal Myopathies in Children and Young Adults; edited by Jeffries Blaxall Robbins and Towbin Elsevier 2017.

4. Port JD **Sucharov C** and Bristow MR Adrenergic Receptor Signaling in Chronic Heart Failure. In: Heart Failure: A Companion to Braunwald's Heart Disease 4th Edition. Edited by Felker GM Mann DL Elsevier 2020

Abstracts (since 2003)

1. **Sucharov CC** Mariner P. Long C. Bristow M. Leinwand LA. (2003). YY1 is increased in human heart failure and represses the activity of the human αMyHC promoter. Journal of Cardiac Failure 9:5(Suppl 1) S40. Presented at the 7th Annual Scientific Meeting of the Heart Failure Society of America. Poster.

2. **Sucharov CC** Bristow MR. (2004). Repression of the Human α Myosin Heavy Chain promoter by the β-Agonist isoproterenol. First Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences. Poster.

3. **Sucharov CC** Helmke S Lange S Perryman B Bristow M Leinwand L. (2004). The Ku protein complex interacts with YY1 is up-regulated in human heart failure and represses the activity of the αMyHC promoter. First Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences. Poster.

4. Weiss SO **Sucharov CC** Long CS. (2004). HDAC inhibitors promote a more differentiated and physiologic genotype in cardiac hypertrophy. First Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences. Poster.

5. **Sucharov CC** Bristow MR. (2004). Phosphatase 2A represses the human α Myosin Heavy Chain promoter activity. Journal of Cardiac Failure 10:4(Suppl 1) S58 2004. Presented at the 8th Annual Scientific Meeting – Heart Failure Society of America. Poster.

6. **Sucharov C**C Nunley KN Bristow MR. (2004). Repression of α Myosin Heavy Chain gene expression and promoter activity by the β-agonist isoproterenol – role for Ca^{2+}/Calmodulin protein kinase and ERK 1/2 pathway. Journal of Cardiac Failure 10:4(Suppl 1) S60 2004. Presented at the 8th Annual Scientific Meeting – Heart Failure Society of America. Poster.

7. Weiss SO **Sucharov CC** Long CS. (2004). HDAC inhibitors promote a more differentiated and physiologic genotype in cardiac hypertrophy. Journal of Cardiac Failure 10:4(Suppl 1) S61 2004. Presented at the 8th Annual Scientific Meeting – Heart Failure Society of America. Poster.

8. Robinson PF Tsvetkova TO Nunley K Calalb MB **Sucharov CC** Bristow MR (2004). The peroxisomal proliferator-activated receptor-alpha regulatory pathway is activated in patients with severe idiopathic dilated cardiomyopathy. Journal of Investigative Medicine 53:1 (Suppl. S) S95. Poster.

9. Tsvetkova T Robinson PF Nunley KR Calalb MB **Sucharov CC** Bristow MR (2004). PPAR-alpha regulatory pathway is activated in patients with severe idiopathic dilated cardiomyopathy. Circulation 110: 17 (Suppl. S) S24. Presented at the American Heart Association Scientific Sessions. Poster.

10. Dockstader K Bristow M **Sucharov CC**. (2005) Beta1-adrenergic stimulation results in ERK1/2 activation that is prohypertrophic and dependent on CaMKII and Calcineurin. Circulation Research 97: 2 E9. Presented at the Second Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences. Poster.

11. **Sucharov CC** Bristow MR. (2005) TRPC channels and beta1-adrenergic-mediated activation of the fetal gene program. Circulation Research 97: 2 E9. Presented at the Second Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences. Poster.

12. Dockstader K Bristow M **Sucharov CC**. (2005) Beta1-adrenergic stimulation results in ERK1/2 activation that is prohypertrophic and dependent on CaMKII and Calcineurin. Journal of Cardiac Failure 11:6(Suppl 1) S129. Presented at the 9th Annual Scientific Meeting – Heart Failure Society of America. Poster.

13. **Sucharov CC** Bristow MR. (2005) TRPC channels and beta1-adrenergic-mediated activation of the fetal gene program. Journal of Cardiac Failure 11:6(Suppl 1) S127. Presented at the 9th Annual Scientific Meeting – Heart Failure Society of America. Poster.

14. **Sucharov CC** Nelson B Morrison J Minobe W Bristow MR. (2006) Gene expression changes in human trabeculae treated with the β-adrenergic agonist isoproterenol. Journal of Cardiac Failure 12:6(Suppl 1) S44 2006. Presented at the 10th Annual Scientific Meeting – Heart Failure Society of America. Poster.

15. **Sucharov CC** Nelson B Morrison J Minobe W Bristow MR. (2006) Gene expression changes in human trabeculae treated with the β-adrenergic agonist isoproterenol. Circulation Research 99: 5 E43. Presented at the Third Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences. Poster.

16. Weiss SO **Sucharov CC** Long CS. (2006). Trichostatin A differentially regulates pathologic and physiologic hypertrophy. Journal of Investigative Medicine 54:1 (Suppl. S) S94. Poster.

17. **Sucharov CC** Dockstader K Nelson P Melhado K Nunley K Bristow MR. (2007). The β_1 Arg 389 Polymorphism Increases Fetal Gene Program Expression in Human Non-Failing Male Subjects and in Neonate Rat Cardiac Myocytes. Journal of Cardiac Failure 13:6(Suppl 1) S110 2007. Presented at the 11th Annual Scientific Meeting – Heart Failure Society of America. Poster.

18. **Sucharov CC** Bristow MR Port JD. (2008) Regulation and function of MicroRNAs in the failing human heart. Keystone Symposia in Pathological and Physiological Regulation of Cardiac Hypertrophy. Poster.

19. **Sucharov CC** Bristow MR Port JD (2008) miRNA expression profile in patients treated with β-blocker therapy. Circulation Research 103: 5 E37. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. Poster.

20. **Sucharov CC** (2008) miR-133b is down-regulated in human heart failure and is involved in β-adrenergic receptor-mediated activation of hypertrophic gene program through up-regulation of calmodulin. Circulation Research 103: 5 E37. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. Poster.

21. **Sucharov CC** Dockstader K Nunley K Bristow MR (2009) PKA activation protects against α-adrenergic-mediated phosphorylation of PKD and HDAC5 in NRVMs. Circulation Research 105: 7 E20. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. Poster.

22. **Sucharov C** Miyamoto S Nelson P Sobus R Stauffer B. Regulation of beta-adrenergic receptors in pediatric heart failure. (2009) Circulation Research 105:e31. Presented at the American Heart Association Basic Cardiovascular Science Conference 2009 – Molecular Mechanisms of Cardiovascular Disease July 2009. Poster.

23. Miyamoto S **Sucharov C** Nelson P Sobus R Stauffer B. (2009). Cardiac β-adrenergic receptor changes due to heart failure are different in children and adults. Presented at the Northwestern Cardiovascular Young Investigators' Forum September 27 2009. **Oral.**

24. Bristow MR Taylor MRG Slavov D Blain-Nelson PL Nunley KR Medway AM **Sucharov CC** (2010). A polymorphism in the PDE3A gene promoter that prevents cAMP-induced increases in transcriptional activity and may protect against PDE3A inhibitor drug tolerance. J. Am. Coll. Cardiol. 55:A20. E189. Presented at the 2010 American College of Cardiology meeting. Poster.

25. Miyamoto S **Sucharov C** Nelson P Sobus R Stauffer B. (2010). Regulation of β-adrenergic receptors in pediatric heart failure. Journal of Cardiac Failure 15:6(Suppl 1) S40. Presented at the 13th Heart Failure Society annual meeting. Poster.

26. Walker JS Walker LA Miyamoto SD **Sucharov CC** Stauffer BL. (2010) Skinned myocytes from children in heart failure show normal responses to PKA treatment. Presented at the American Heart Association Scientific Sessions Nov. 2010. **Oral**.

27. Miyamoto SD Stauffer BL Haubold K Nelson P Medway A Friedrich M Stenmark KR **Sucharov CC**. (2010). Beta-adrenergic Receptors are Downregulated in Hypoplastic Left Heart Syndrome. Presented at the American Heart Association Scientific Sessions Nov. 2010. **Oral.**

28. **Sucharov C** Polk J Bristow MR and Port JD. (2010). Expression and function of miRNA in the nonfailing and failing heart. Presented at the 4th RNA Stability Meeting: RNA Turnover and Translation. Biological and Pathological Ramifications. Montreal Canada. **Oral**.

29. **Sucharov C** Port JD and Bristow MR. (2010). Temporal Expression of miRNAs and mRNAs in a mouse model of cardiomyopathy. Presented at the 4th RNA Stability

Meeting: RNA Turnover and Translation. Biological and Pathological Ramifications. Montreal Canada. Poster.

30. Walker JS Walker LA Miyamoto SD **Sucharov CC** Stauffer BL. (2010). Skinned Myocytes from Children in Heart Failure Show Normal Responses to PKA Treatment. Circulation 122: A20803. American Heart Association Scientific Sessions Chicago IL. Poster.

31. Miyamoto SD Stauffer BL Haubold KW Nelson PL Medway AM Friedrich M Pietra BA Stenmark KR **Sucharov CC**. (2010). Circulation 122: A18448. American Heart Association Scientific Sessions Chicago IL. Poster.

32. Dockstader K **Sucharov CC**. (2012). FXR-1G differentially regulates miRNA function in hypertrophic-induced cardiac myocytes. Presented at Keystone Symposia: Protein-RNA Interactions in Biology and Disease. Santa Fe NM. Poster.

33. Hijmans JG Miyamoto S Sobus R **Sucharov C** Stauffer B. (2012). A Novel Animal Model of Pediatric Heart Failure. Journal of Investigative Medicine 60(1):135. Presented at the Western Regional Meeting of the American Federation of Medical Research Carmel CA. **Oral**.

34. Miyamoto SD Polk J Stauffer BL Stenmark KR **Sucharov C**. (2012). Calcium/Calmodulin-dependent Protein Kinase Activity is Increased in Hypoplastic Left Heart Syndrome. Presented at the Pediatric Heart Failure Summit. Toronto Canada. Poster.

35. Nakano S Movsesian M Stauffer BL Miyamoto SD **Sucharov CC**. (2012). Regulation of Phosphodiesterase Activity in Pediatric Heart Failure. Presented at the Pediatric Heart Failure Summit Toronto Canada. Poster.

36. Miyamoto SD Polk J Nunley K Nelson P Sobus R Stauffer BL **Sucharov CC** Stenmark KR. (2012). Gene Expression and β-adrenergic Signaling is Altered in Hypoplastic Left Heart Syndrome. Presented at the Child Health Research Centers/NICHD Annual Retreat Santa Monica CA. **Oral**.

37. Grudis JE Chatfield KC Sparagna GC Hijmans J Sobus RD **Sucharov CC** Miyamoto SD Stauffer BL. (2013). Expression of Cardiolipin Biosynthesis and Remodeling Enzymes In Adult Heart Failure. Journal of the American College of Cardiology 61(Suppl 10): E698. Poster.

38. Miyamoto SD Peterson V Cagle L Freed B Stauffer BL **Sucharov CC.** (2013). Circulating microRNA: Prognostic Biomarker for Pediatric Heart Failure. Presented at the International Society for Heart and Lung Transplantation. Montreal Canada. **Oral**.

39. **Sucharov CC** Nakano S Taylor MRG Slavov D Blain-Nelson PL Nunley K Bristow MR. (2013). A Polymorphism in the PDE3A Gene Promoter that Prevents cAMP-Induced

Increases in Transcriptional Activity and May Protect Against PDE3A Inhibitor Drug Tolerance. Presented at the International Society for Heart Research XXI World Congress. San Diego CA Poster and **Oral**.

40. Miyamoto SD Peterson V Cagle L Freed B Stauffer BL **Sucharov CC**. (2013). Circulating microRNA: Prognostic Biomarker for Pediatric Heart Failure. Presented at the International Society for Heart Research XXI World Congress. San Diego CA. Poster.

41. Grudis JE Chatfield KC Sparagna GC Hijmans J Sobus RD **Sucharov CC** Miyamoto SD Stauffer BL. (2013). Expression of Cardiolipin Biosynthesis and Remodeling Enzymes In Adult Heart Failure. Presented at the ISHLT 33rd Annual Meeting and Scientific Sessions Montreal Canada. **Oral**.

42. Sucharov J **Sucharov CC** Siomos A Nunley K Stauffer BL Miyamoto SD. (2014). miR-29 Expression is Regulated by Stage of Surgery and Correlates with Fibrosis in Hypoplastic Left Heart Syndrome. Presented at the Keystone Symposia Conference Keystone CO. Poster.

43. Sucharov J **Sucharov CC** Nunley K Stauffer BL Miyamoto SD. (2014). miRNA Expression in Hypoplastic Left Heart Syndrome. Presented at the 34th International Society for Heart Research Meeting Miami FL. Poster

44. Miyamoto S Taylor M Karimpour-Fard A Jones K Stauffer B **Sucharov C.** (2014). Gene Expression Profiling in Pediatric and Adult Heart Failure. Presented at the 34th International Society for Heart Research Meeting Miami FL Poster.

45. Medina E **Sucharov C** Dockstader K Sobus R Miyamoto S Stauffer B. (2014). Differences in GRK2 & GRK5 Expression Levels in Adult Versus Pediatric Patients Suffering from Idiopathic Dilated Cardiomyopathy. Presented at the 34th International Society for Heart Research Meeting Miami FL Poster.

46. Miyamoto SD Nelson P Sobus R Nunley K Peterson V Stauffer BL **Sucharov CC**. (2014). Phosphodiesterase-5 Expression and Activity is Increased in Children with Single Ventricle Heart Failure. Circulation 130: A16396. American Heart Association Scientific Sessions Chicago IL. Poster.

47. Chatfield KC Friederich MW Miyamoto SD **Sucharov CC** Van Hove JL Stauffer BL. (2014). Abnormalities of Mitochondrial Number and Function in Pediatric Idiopathic Dilated Cardiomyopathy. Circulation 130: A20609. American Heart Association Scientific Sessions Chicago IL. Poster.

48. Cecil M Dockstader K Slavov D **Sucharov CC**. (2015). Serum Response Factor in Pediatric Heart Failure. Presented at the Western Regional Meeting. Carmel CA. **Oral.**

49. Jiang X Reid B Stauffer B Miyamoto S **Sucharov C**. (2015). Identification of Pathologic Circulating Factors in Children with Dilated Cardiomyopathy. Presented at the 35th International Society for Heart Research North America Session. Seattle WA. Poster.

50. Sucharov-Costa J **Sucharov C** Miyamoto S Walker L Stauffer B. (2015). Hypertrophy Inducing Factor In Pediatric Idiopathic Dilated Cardiomyopathy Serum. Western Regional Meeting. **Oral**.

51. Pena B Martinelli V Bosi S **Sucharov C** Jeong M Taylor MRG Prato M Long CS Shandas R Park D Mestroni L. (2015). Temperature-responsive cell delivery Biopolymers for Cardiac Tissue Engineering. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. New Orleans LA. Poster.

52. Pena B Park D Long CS Martinelli V Bosi S Ballerini L Prato M **Sucharov C** Jeong M Taylor MR Shandas R Mestroni L. Injectable reverse thermal gel biopolymers may act as an extracellular matrix and cell vehicle for cardiac tissue engineering. (2015) Biophysical Society Annual Meeting. Poster.

53. Nakano SJ Nelson P **Sucharov CC** Miyamoto SD (2015) Myocardial Response to Milrinone in Single Ventricle Heart Disease. Circulation 132: A17697. American Heart Association Scientific Sessions Orlando FL. Poster.

54. Kheyfets VO Truong U Dunning J Hunter K **Sucharov CC** Ivy D Miyamoto S Shandas R. (2015). Circulating miRNAs as Biomarkers of Afterload Acute Vascular Reactivity and Ventricular-Vascular Coupling in Pediatric Idiopathic Pulmonary Arterial Hypertension: Initial Clinical Studies. Circulation 132: A14123. American Heart Association Scientific Sessions Orlando FL. Poster.

55. Auerbach SR Miyamoto SD Karimpour-Fard A Gralla J Stauffer B **Sucharov CC**. (2015). Circulating miRNAs Can Predict Cardiac Allograft Vasculopathy in Pediatric Heart Transplant Recipients in a Sex-dependent Manner Circulation 132: A16838. American Heart Association Scientific Sessions Orlando FL. **Oral**.

56. Grayck EN **Sucharov C** Hernandez AL Kompella U Carpenter T. (2015). Dysregulated Mirnas In Pediatric Ards And Animal Models Of Acute Lung Injury: Focus On Mir26a And Epha2. American Thoracic Society Annual Meeting. **Oral**.

57. Garcia AM Stauffer BL **Sucharov CC** Miyamoto SD. (2016). Investigations of the Failing Single Ventricle: Role of Circulating Factors. Presented at the Keystone Symposia on Exosomes. Keystone CO. Poster.

58. Woulfe KC Tatman P Karimpour-Fard A Nunley K Miyamoto SD Stauffer BL **Sucharov CC**. (2016). Pluripotent Stem Cell Signaling in Pediatric Heart Failure Patients. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. Phoenix AZ. Poster.

59. Jeong M **Sucharov CC** Stauffer B Ambardekar A Lin Y Mahaffey J. (2016). Myofibrils

from Pediatric IDC Patients Display Faster Relaxation Kinetics and Reduced Tension Generation. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. Phoenix AZ. Poster.

60. Woulfe KC Chau S Walker LA Tompkins C **Sucharov CC** Miyamoto SD Stauffer BL. (2016). Age-specific Differences in Outcomes Following Isoproterenol-induced Sudden Cardiac Death in Guinea Pigs. Presented at the American Heart Association Basic Cardiovascular Sciences Conferences. Phoenix AZ. Poster.

61. Swain K Mouradian G Gaurav R Pugliese S Hernandez-Lagunas AL El Kasmi K Karimpour-Fard A Bowler R **Sucharov C** Nozik-Grayck E. (2016). The R213G Polymorphism in SOD3 Protects Early Bleomycin-Induced Pulmonary Inflammation and Attenuates Induction of Genes Involved in Agranulocyte/granulocyte Adhesion and Diapedesis. SfRBM 23rd Annual Conference. Poster.

62. Garcia AM Nakano SJ Stauffer BL **Sucharov CC** Miyamoto SD. (2016). Circulating Factors Contribute to PDE5-Mediated Pathological Myocardial Remodeling in Single Ventricle Congenital Heart Disease. Circulation 134: A19517. American Heart Association Scientific Sessions New Orleans. LA. **Oral**.

63. Good R **Sucharov C** Hernandez-Lagunas L Vohwinkel C Kompella U Carpenter T Grayck E. (2016). Dysregulated Micrornas (mirnas) In Pediatric Acute Respiratory Distress Syndrome (ards) And Animal Models Of Acute Lung Injury: Focus On Mir-26a And Epha2. American Thoracic Society Annual Meeting. Poster.

64. Jeong MY Lin Y Mahaffey J Ambardekar A **Sucharov C** Stauffer B Miyamoto S. (2016). Characterization of Myofibril Mechanics in Pediatric and Adult Patients with Idiopathic Dilated Cardiomyopathy. Circulation 134: A18368. American Heart Association Scientific Sessions New Orleans. LA. Poster.

65. Stauffer BL Sparagna GC Chau S Rodegheri-Brito J Ambardekar A Korst A Miyamoto SD **Sucharov CC** Chatfield KC. (2016). MTP131 a cardiolipin targeting peptide improves mitochondrial activity in the failing human heart. European Society of Cardiology Annual Meeting. **Oral.**

66. Watanabe K Auerbach SR Stauffer BL **Sucharov CC** Miyamoto SD Karimpour-Fard A Korst A Jone P. (2017). MicroRNA-376a and -381 Correlate with Echocardiographic Indices of Graft Function in Pediatric Heart Transplant Recipients with Cardiac Allograft Vasculopathy. J Heart Lung Transplant Vol. 36 Issue 4S103. ISHLT 38th Annual Meeting and Scientific Sessions San Diego CA. **Oral**.

67. Santana A Grayck E **Sucharov C** Mourani P Karimpour A Burgess K Carpenter T. (2017). Identification Of Plasma Microrna Changes Highly Associated With Pediatric Acute Respiratory Distress Syndrome. American Thoracic Society Annual Meeting. Poster.

68. Sparagna GC Chatfield KC Chau S Brown DA Phillips E Stafford N Ambardekar A Korst A Miyamoto SD **Sucharov CC** Stauffer BL. (2017). Elamipretide a cardiolipin-targeting peptide decreases mitochondrial oxidant stress in the failing human heart. European Society of Cardiology Annual Meeting. **Oral.**

69. Garcia A Nakano S Karimpour-Fard A Stauffer B **Sucharov C** Miyamoto S. (2017). Circulating factors Contribute to PDE5-Mediated pathological Remodeling in Single Ventricle Congenital Heart Disease. Presented at the 36th International Society for Heart Research North America Session. New Orleans LA. Poster.

70. Jiang X Woulfe K Karimpour-fard A Koch K Stauffer B Miyamoto S **Sucharov C**. (2017). The role of Midkine in Children with Dilated Cardiomyopathy. Presented at 36th the International Society for Heart Research North America Session. New Orleans LA. Poster.

71. Woulfe KC Tatman PD Karimpour-Fard A Jeffrey DA Nunley K Taylor MRG Miyamoto S Stauffer B **Sucharov CC**. (2017). Pediatric Dilated Cardiomyopathy Hearts Display a Gene Expression Profile Consistent with Pluripotency and Dedifferentiation. Presented at the 36th International Society for Heart Research North America Session. New Orleans LA. **Young Investigator Finalist. Oral**.

72. Garcia AM Nakano SJ Karimpour-Fard A Stauffer BL **Sucharov CC** Miyamoto SD. (2017). Transcriptome Profiling and a Novel in vitro Model of Single Ventricle Congenital Heart Disease. Circulation 136: A20597. American Heart Association Scientific Sessions Anaheim CA. **Oral**.

73. Nakano SJ Nunley K Nelson P Garcia AM Stauffer BL **Sucharov CC** Miyamoto SD. (2017). Unique Upregulation of Phosphodiesterase 1 in Single Ventricle Congenital Heart Disease. Circulation 136: A19486. American Heart Association Scientific Sessions Anaheim CA. **Oral**.

74. Lanzicher T Garcia AM Jiang X Miyamoto SD Stauffer BL Mestroni L Taylor MRG Sbaizero O **Sucharov CC**. (2017). Altered Cytoskeletal Mechanics in Cardiomyocytes Treated with Pediatric Heart Failure Serum. Circulation 136: 19248. American Heart Association Scientific Sessions Anaheim CA. Poster.

75. Woulfe KC Jiang X Phillips EK Jeffery DA Sparagna GC Chatfield KC Miyamoto SD Stauffer BL **Sucharov CC.** (2017). Treatment of primary cardiomyocytes with serum from pediatric dilated cardiomyopathy patients induces gene expression and functional changes observed in the pediatric heart. Circulation 136: A20616. American Heart Association Scientific Sessions Anaheim CA. Poster.

76. Allawzi A Swain K Hernandez-Laguna L **Sucharov C** Mouradian G Gaurav R Bowler R (2017). R213G Polymorphism of SOD3 Augments M1 Polarization of Macrophages in a Mouse Model of Bleomycin-Induced Pulmonary Fibrosis. American Thoracic Society International Conference. Poster.

77. Grayck EN Elajaili H Allawzi A Hernandez-Lagunas L Nguyen K El Kasmi K Sherlock L Wright C Gaurav R Bowler R Karimpour-Fard A **Sucharov C.** (2017). The SOD3 R213G Polymorphism Promotes Resolution of Innate Immune Activation and Blocks Induction of miR29b in Bleomycin Induced Lung Inflammation and Fibrosis. SfRBM 24th Annual Conference. **Oral.**

78. Jone PN Korst A Dominguez SR Miyamoto SD **Sucharov CC**. (2018). Circulating MicroRNA in Kawasaki Disease and Viral Infection Patients.12IKDS Yokohama Japan. Poster.

79. Woulfe KC Wilson CE Jiang X Jeong MY Miyamoto SD Stauffer BL **Sucharov CC**. (2018). Sex-dependent regulation of autophagy by midkine in pediatric dilated cardiomyopathy. Presented at the 37th International Society for Heart Research North America Session. Halifax Canada. Poster.

80. Woulfe KC Lin YH Li X Mahaffey JH Sweet ME Taylor MRG Mestroni L Miyamoto SD Stauffer BL **Sucharov CC** Jeong MY. (2018). Age-specific changes in myofibril mechanics in pediatric dilated cardiomyopathy. Presented at the 37th International Society for Heart Research North America Session. Halifax Canada. Poster.

81. Garcia AM Nakano SJ Karimpour-Fard A Stauffer BL **Sucharov CC** Miyamoto SD. (2018). Phosphodiesterase-5 is Elevated in Failing Single Ventricle Myocardium and Affects Cardiomyocyte Remodeling in vitro North America Session. Presented at the 37th International Society for Heart Research. Halifax Canada. Poster.

82. Woulfe KC Lin YH Li X Mahaffey JH Miyamoto SD Stauffer BL **Sucharov CC** Jeong MY. (2018). Altered relaxation mechanics in pediatric dilated cardiomyopathy is associated with differences in myofibril acetylation. Presented at the 2018 Myofilament Meeting. Madison WI. **Oral.**

83. Nakano SJ Garcia AM Nunley K Movsesian M Nelson P Stauffer BL **Sucharov CC** Miyamoto SD. (2018). Unique Upregulation of PDE1 in Single Ventricle Congenital Heart Disease. Gordon Research Conference on Cyclic Nucleotide Phosphodiesterases. Newry ME. Poster.

84. Auerbach SR Miyamoto SD Karimpour-Fard A Gralla J Stauffer BL **Sucharov CC** (2018). Circulating Mirnas Can Predict Pediatric Cardiac Allograft Vasculopathy in Pediatric Heart Transplant Recipient. Accepted to the 2018 American Heart Association Scientific Sessions. Poster.

85. Jone PN Korst A Karimpour-Fard A Thomas T Dominguez SR **Sucharov CC** Miyamoto SD (2018). Circulating Microrna Differentiate Kawasaki Disease From Infectious Febrile Illnesses in Childhood. Accepted to the 2018 American Heart Association Scientific Sessions. **Oral.**

86. Garcia AM Chatfield KC Sparagna GC Phillips EK Karimpour-Fard A Stauffer BL **Sucharov CC** Miyamoto SD (2018). Metabolic Gene Expression and Mitochondrial Function Are Altered in the Failing Single Ventricle Myocardium. American Heart Association Scientific Sessions. Poster.

87. McPhaul JC Garcia AM Sparagna GC Patel SS Stauffer BL **Sucharov CC** Miyamoto SD Chatfield KC. (2018) Alteration of Cardiolipin Biosynthesis and Remodeling in Single Right Ventricles. American Heart Association Scientific Sessions. Poster.

88. Schuchardt EL Crombleholme TM Zuk J Korst A Karimpour-Fard A Cuneo B Howley LW Miyamoto S; **Sucharov CC** (2018). The Unique Micro-Rna Signature in Amniotic Fluid of Recipients Fetuses With Twin-Twin Transfusion Syndrome Cardiomyopathy. Accepted to the 2018 American Heart Association Scientific Sessions. Poster.

89. Nakano SJ SooHoo M Karimpour-Fard A Korst A Pauly K Michael A Mackey A Miyamoto SD **Sucharov CC** (2018). Circulating Micrornas as Prognostic Biomarkers in Single Ventricle Heart Disease. Accepted to the 2018 American Heart Association Scientific Sessions. Poster.

90. Allawzi A Nguyen K Banimostafa L Riemondy K Gaurav R Hesselberth J Garcia A El Kasmi KC Stenmark KR **Sucharov C** Janssen WR Bowler RP Grayck EN (2018). Redistribution of Extracellular Superoxide Dismutase (SOD3) Due to the R213G SNP Alters RNA-seq Profile of Recruited Alveolar Macrophages in Response to Bleomycin. American Thoracic Society International Conference. Poster.

91. Miyamoto SD Ho CY Karimpour-Fard A Korst A **Sucharov CC.** (2019). Circulating microRNA as a Biomarker of Pediatric Hypertrophic Cardiomyopathy. American College of Cardiology. Poster.

92. Miyamoto S Wall JB **Sucharov C** Garcia AM. (2019). Differential Gene Expression in Pediatric Heart Failure: Dilated Cardiomyopathy versus Single Ventricle Heart Disease. American College of Cardiology. Poster.

93. Vaughan OR Powell TL **Sucharov CC** Jansson T. (2019). Placenta-Derived Fetal Circulating Factors in Pregnancies Complicated by Maternal Obesity Induce Cardiomyocyte Hypertrophy In Vitro. Society for Reproductive Investigation 66th Annual Scientific Meeting. Poster.

94. Garcia AM Sparagna GC Phillips EK Miyamo EK Karin N Chatfield K Stauffer BL **Sucharov CC** Miyamoto SD (2019). Reactive Oxygen Species Accumulation and Mitochondrial Dysfunction in Peripheral Blood Mononuclear Cells Are Associated With Heart Failure in Patients With Single Ventricle Congenital Heart Disease. American Heart Association Scientific Sessions. Poster.

95. Woulfe KC Jeffrey DA Da Silva JP Wilson CE Mahaffey JH Stauffer BL Miyamoto SD **Sucharov CC**. 2019. Age-Specific Expression of Serum Response Factor Deletion 5

Isoform Affects Cardiomyocyte Calcium Reuptake and Whole Cell Relaxation. American Heart Association Scientific Sessions. Poster.

96. Pires Da Silva J Miyano CA Garcia AM. **Sucharov CC**. (2020). The Role of BCAT1 on Pediatric Dilated Cardiomyopathy. Experimental Biology Meeting.

97. Elajaili H Hernandez-Lagunas L Allawzi A Harris P Sparagna G Ohlstrom D McDermott I **Sucharov C** Bowler R Suliman H Fritz K Roede J Nozik-Grayck E. (2020). Redox Regulation by Extracellular Superoxide Dismutase (EC-SOD) due to the R213G variant and the protection against bleomycin-induced lung injury. SfRBM 27th Annual Conference. Poster.

98. Woulfe KC Wilson CE Karimpour-Fard A Miyamoto SD Stauffer BL **Sucharov C**. (2020). Sex-Dependent Regulation of Cardiomyocyte Function by Midkine in Pediatric Dilated Cardiomyopathy. American Heart Association Council on Basic Cardiovascular Sciences. Poster.

99. Pires Da Silva J Garcia AM Miyano CA Sparagna GC Jonscher RL Elajaili H **Sucharov CC**. (2020). Serum From Pediatric Dilated Cardiomyopathy Patients Causes Dysregulation of Cardiolipin Biosynthesis and Mitochondrial Function AHA SFRN Annual Meeting. **Oral.**

100. Garcia AM Miyamo C Joschner R Stone M Stauffer BL **Sucharov CC** Miyamoto SD (2020). Sildenafil Improves Mitochondrial Function in Failing Single Ventricles. American Heart Association Scientific Sessions. Poster.

101. Pires Da Silva J Garcia AM Miyano CA Sparagna GC Jonscher RL Elajaili H **Sucharov CC**. (2021). Serum From Pediatric Dilated Cardiomyopathy Patients Promotes Dysregulation of Cardiolipin Biosynthesis and Mitochondrial Function. GRRC - French community in cardiovascular research. **Oral**.

102. Pires Da Silva J Garcia AM Miyano CA Sparagna GC Jonscher RL Elajaili H **Sucharov CC**. (2021). Serum from pediatric dilated cardiomyopathy patients promotes dysregulation of cardiolipin biosynthesis and mitochondrial dysfunction in primary cardiomyocytes. ISHR-European section. **Oral**.

103. Pires Da Silva J Garcia AM Miyano CA Sparagna GC Jonscher RL Elajaili H **Sucharov CC**. (2021). Serum from pediatric dilated cardiomyopathy patients promotes dysregulation of cardiolipin biosynthesis and mitochondrial dysfunction in primary cardiomyocytes. American Heart Association Council on Basic Cardiovascular Sciences. Poster

104. Hailu FT Karimpour-Fard A Toni LS Bristow MR Miyamoto SD Stauffer BL **Sucharov CC**. (2021). Integrated Analysis of miRNA-mRNA Interaction in Pediatric Dilated Cardiomyopathy. Department of medicine CCTSI Spring Virtual Pediatric Research University of Colorado Denver. Poster

105. Hailu FT Karimpour-Fard A Toni LS Bristow MR Miyamoto SD Stauffer BL **Sucharov CC**. (2021). Integrated Analysis of miRNA-mRNA Interaction in Pediatric Dilated Cardiomyopathy. International Society for Heart Research. Poster

106. Pires Da Silva J Garcia AM Miyano CA Sparagna GC Jonscher RL Elajaili H **Sucharov CC**. (2021). Serum from pediatric dilated cardiomyopathy patients promotes dysregulation of cardiolipin biosynthesis and mitochondrial dysfunction in primary cardiomyocytes. International Society for Heart Research. Poster

107. Jeffrey D Pires Da Silva J Garcia AM Jiang X Karimpour-Fard A Toni L Lanzicher T Pena B Miyano C Nunley K Korst A Sbaizero O Taylor MRG Miyamoto S Stauffer B **Sucharov C**. (2021). Serum Circulating Proteins from Pediatric Dilated Cardiomyopathy Patients Cause Pathologic Remodeling and Cardiomyocyte Stiffness. International Society for Heart Research. Poster

108. Garcia AM Pires da Silva J Baybayon-Grandgeorge AN Miyano CAA Sparagna GC Sucharov CC Miyamoto SD (2021). Circulating Factors Promote Metabolic Remodeling and Mitochondrial Dysfunction in Single Ventricle Congenital Heart Disease. Circulation 144(s1):A13349

109. Zegelbone PM Baybayon-Grandgeorge AN Stauffer BL Sucharov CC Miyamoto SD Garcia AM (2021). Mitochondrial Dysfunction in Peripheral Blood Mononuclear Cells is Associated With Heart Failure in Patients With Single Ventricle Congenital Heart Disease. Circulation 144(s1):A8963

110. Nakano SJ Schwisow JA Neltner B Stone M Stauffer BL Sucharov CC Bristow M Miyamoto SD (2021). Sensitivity to Beta-Adrenergic Stimulation in Pediatric Failing Single Ventricle Myocardium. Circulation 144(s1):A13285

111. Pires Da Silva J Garcia AM Miyano CA Sparagna GC Jonscher RL Elajaili H **Sucharov CC**. (2022). Serum from pediatric dilated cardiomyopathy patients promotes dysregulation of cardiolipin biosynthesis and mitochondrial dysfunction in primary cardiomyocytes. International Society for Heart Research. Journal of Molecular and Cellular Cardiology, 173 (s. 61-62). Poster

112. Miyamoto SD Pietra A Feingold BD Neltner B Wilkinson JD Karimpour-Fard A Webber SA **Sucharov CC** (2022). Unique Circulating microRNA Profile in Pediatric Heart Transplant Recipients. Circulation 146(s1):A14074

113. Pietra AE Jonscher R Sparagna G Baybayon-Grandgeorge AN Stauffer BL Sucharov CC Miyamoto SD Garcia AM (2022). Sildenafil Promotes Mitochondrial Protein Deacetylation and Improves Mitochondrial Bioenergetics in Single Ventricle Congenital Heart Disease. Circulation 146(s1):A15079

114. Miyamoto SD Lipshultz SE Neltner B Hamza T Wilkinson JD Karimpour-Fard A Colan S **Sucharov CC** Pediatric Cardiomyopathy Registry Investigators (2022). Circulating

microRNAs Predict Recovery in Pediatric Dilated Cardiomyopathy Patients. Circulation 146(s1):A14006

115. Hidalgo DC Burciaga S Dee N Elajaili H Jordan M Posey J Jonscher R Sparagna G Sucharov CC Delaney C Nozik E (2022). Loss of vascular EC-SOD leads to worse RV hypertrophy and metabolic alterations in PH. Free Radical Biology and Medicine 192:5.

116. Garcia A Jonscher R Sparagna G Chatfield K Stone M Baybayon-Grandgeorge AN **Sucharov CC** Miyamoto SD Stauffer BL (2023). Elamipretide Improves Cardiac Mitochondrial Function In Children With Single Ventricle Heart Disease. Journal Cardiac Failure 29(4):661

117. De Vito M Sparagna G Jonscher R Chatfield K Ambardekar A **Sucharov CC** Miyamoto SM Stauffer BL. (2023). Elamipretide Improves Cardiac Mitochondrial Function in Patients with Dilated Cardiomyopathy. International Society for Heart Research. Poster