

Poster Sessions I & II
Wednesday (August 21, 2024)

Poster Presentations of W-1 – W-39 (Session I)
Poster Presentations of W-40 – W-78 (Session II)

7:00 am – 9:00 am	Poster Set Up (Beacon Ballroom AB, Upper Level)
7:00 am – 7:30 pm	Poster Room Open (Beacon Ballroom AB, Upper Level)
1:30 pm – 3:00 pm	***Lightning Talks I (Beacon Ballroom AB, Upper Level)
6:10 pm – 7:10 pm	***Lightning Talks II (Beacon Ballroom AB, Upper Level)

Poster Presentations of W-1 – W-39 (Session I Presenters Please Attend Your Posters from 1:30 – 3:00pm)

W-1. YAP Induces a Neonatal Like Pro-Renewal Niche in the Adult Heart.

Rich Li, Xiao Li, Yuka Morikawa, Francisco Grisanti, Fansen Meng, Chang-Ru Tsai, Yi Zhao, Lin Liu, Jong Kim, Bing Xie, Elzbieta Klysik, Shijie Liu, Md Abul Hassan Samee, James Martin
 The Texas Heart Institute, Houston, USA.

W-2. The Human Glucocorticoid Receptor Variant rs6190 Protects the Heart from Metabolic Stress.

Ashok Daniel Prabakaran, Mattia Quattrocchi
 Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-3. Discovery of Long-Acting Angiotensin 1-7, Apelin-13, and Bispecific Mimetics for the Treatment of Cardiovascular and Metabolic Diseases.

Weike Bao, Hannah Bolt, Nicholas Bhagroo, Kevin Minton, Fiona Shilliday, Ashot Sargsyan, Marie Persson, Elise Bernard, Petra Thulin, Pia Davidsson, Anders Cavallin, Claudio Colombo, Yasunori Aoki, Ulrik Jurva, Gabor Foldes, Liang Guo, Sarah Will, Regina Fritsche Danielson, Qing-Dong Wang, Kenny Hansson
 AstraZeneca, Gaithersburg, USA.

W-4. Reverse Translational Target Nomination Identifies DLK1 as a Potential Protective Factor in Atrial Myopathy.

Michael Zhang, Yuekai Ji, Dylan Gyberg, Zhaotong Lin, Faye Norby, Wendy Wang, Wei Pan, Jeremy Van't Hof, Chastity Healy, Riccardo Inciardi, Alvaro Alonso, James Pankow, Weihong Tang, Samuel Dudley, Keenan Walker, Jennifer Brody, Ting Ye, Alain Bertoni, Ravi Patel, Sanjiv Shah, Amil Shah, Scott Solomon, Susan Heckbert, Timothy O'Connell, James Floyd, Lin Yee Chen
 University of Minnesota, Minneapolis, USA.

W-5. Gdf10-mediated Fibroblast-Cardiomyocyte Crosstalk During Postnatal Heart Development.

Maria Uscategui Calderon, Maria Spaeth, Marissa Granitto, Brittany Gonzalez, Christina Alfieri, Leah Kottyan, Matt Weirauch, Katherine Yutzey
 Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-6. Revealing Novel Gene Targets for Heart Failure by Correcting for Cell Type Composition.

Brian Gural, Logan Kirkland, Samantha Swift, Manuel Rosa Garrido, Thomas Vondriska, Michaela Patterson, Brian Jensen, Christoph Rau
 University of North Carolina at Chapel Hill, Chapel Hill, USA.

W-7. Fibrotic Remodeling of Myxomatous Mitral Valves in a Mouse Model of Marfan Syndrome.

Brittany A. Gonzalez, Cassandra L. Clift, Gabrielle Bogut, Taku Kasai, Sasha A. Singh, Elena Aikawa, Katherine E. Yutzey
 The Heart Institute, Division of Molecular Cardiovascular Biology, Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-8. *Metabolic-Epigenetic Coupling in Heart Failure with Preserved Ejection Fraction.**

Tatiana Gromova, Natalie Gehred, Sristi Palimar, Zhen Li, David Lefer, Thomas Vondriska
University of California at Los Angeles, Los Angeles, USA.

W-9. Sall4 and Gata4 Induce Cardiac Fibroblast Transition Towards a Partially Multipotent State with Cardiogenic Ability: A Potential Mechanism in Post-Infarct Cardiac Repair.

Hong Gao, Saliha Pathan, Beverly R.E.A. Dixon, Megumi Mathison, Todd K. Rosengart, Jianchang Yang
Baylor College of Medicine, Houston, USA.

W-10. *Inhibition of fabp7a Recapitulates Cardioprotective Effects of tfeb Overexpression on bag3 Cardiomyopathy in Adult Zebrafish.**

Yonghe Ding, Yuji Zhang, Xueying Lin, Xiaolei Xu
Mayo Clinic, Rochester, USA.

W-11. GPNMB Promotes Ventricular Remodeling After Cardiac Injury by Control of CCR2/CCL2-Dependent Induction of Inflammatory Macrophages.

Jing Liu, Ge Gao, Xiang Bu, Meng Lei
First Affiliated Hospital of Xi'an Jiaotong University School of Medicine, Xi'an, Shaanxi, China.

W-12. Microtubule Stabilization Restores Membrane Protein Trafficking and Contractility in PLN R14del Dilated Cardiomyopathy.

Rachel Baum, Maryam Kay, Nike Bharucha, Giovanni Torres, Rohin Ramchandani, Logan Dunkenberger, Ioannis Karakikes
Stanford University, Palo Alto, USA.

W-13. Characterization of Cardiomyocyte-Specific Tmem65 KO Mitochondrial Ca²⁺ Regulation and Cardiac Function During Ischemia Reperfusion Injury.

Junhui Sun, Yingfan Zhang, Brian Glancy, Elizabeth Murphy
NHLBI/NIH, Bethesda, USA

W-14. Novel mTORC1 Inhibitors Improve Cardiac Function and Reduce Infarct Size After Ischemia/Reperfusion.

Johannes Fischer, Florian Sicklinger, Christoph Hofmann, Norbert Frey, Florian Leuschner, Mirko Völkens
University Hospital Heidelberg - Internal Medicine III / Cardiology, Heidelberg, Germany.

W-15. *Sustained but Decoyed Activation of the JAK1-STAT Pathway by Aberrant Protein Aggregation Exacerbates Proteotoxicity.**

Mingqi Cai, Bo Pan, Peng Xiao, Mark Bouska, Megan Lewno, Yue Xing, Erliang Zeng, Huiyun Liang, Faqian Li, Xiang Gao, Xuejun Wang
University of South Dakota Sanford School of Medicine, Vermillion, USA.

W-16. Alpha-1 Antitrypsin Levels in Patients with Myocardial Infarction over the Course of 96 Hrs from Onset of Infarction. A Possible Clinical Significance.

Said Khatib, Bayan Abu-Rub
Department of Physiology, Jordan University of Science & Technology, Irbid, Jordan.

W-17. *Pharmacological or Genetic Inhibition of LTCC Promotes Cardiomyocyte Proliferation Through Inhibition of Calcineurin Activity.**

Lynn A.C. Devilee, Abou Bakr M Salama, Jessica M Miller, Janice D Reid, Qinghui Ou, Nourhan M Baraka, Kamal Abou Farraj, Madiha Jamal, Yibing Nong, Todd K Rosengart, Andres Douglas, Jonathan Satin, Tamer M.A Mohamed, James E Hudson, Riham R.E Abouleisa
QIMR Berghofer Medical Research Institute, Queensland, Australia.

W-18. Vestigial like 4 Regulates the Adipogenesis of Classical Brown Adipose Tissue.

Pingzhu Zhou, Chase W. Kessinger, Amanda Davenport, Genyu Wang, William T. Pu, [Zhiqiang Lin](#)
Boston Children's Hospital, Boston, USA.

W-19. *An Agentic System for Single Cell Bioinformatics Analysis, a Showcase in Cardiovascular Research.**

[Yu Yan](#), Baradwaj Simha Sankar, Irsyad Adams, Wei Wang, Peipei Ping
University of California at Los Angeles, Los Angeles, USA

W-20. Dissecting Gender-Specific Chromatin Landscapes in Cardiac Health.

Rujula Pradeep, Jose Ramirez-Guerrero, Avantika Redy, [Manuel Rosa-Garrido](#)
University of Alabama, Birmingham, Birmingham, USA.

W-21. *Elucidating the Transcriptional and Epigenetic Impact of Succinate Dehydrogenase Inhibition on Cardiac Regeneration.**

[Dakota Nuttall](#), Ahmed Mahmoud
Department of Cell and Regenerative Biology, University of Wisconsin-Madison School of Medicine and Public Health, Madison, USA.

W-22. *Cellular and Subcellular Ventricular Localization of the Fast Transient Outward Potassium Channels in the Murine Heart.**

[Renée A. Gorman](#), Robert Lakin, Manuel F. Navedo, Donald M. Bers, Peter H. Backx
York University, Toronto, Canada.

W-23. Cardiomyocyte PGC-1 α Enables Physiological Adaptations to Endurance Exercise Through Suppression of Cardiomyocyte GDF15 and Atrophy.

[Sumeet Khetarpal](#), Haobo Li, Tevis Vitale, James Rhee, Saketh Challa, Claire Castro, Amanda Smythers, Katherine Blackmore, Louisa Grauvogel, Melanie Mittenbuhler, Ariana Vargas-Castillo, Jing Liu, Casie Curtin, Chunyan Wang, Nicholas Houstis, Hans-Georg Sprenger, Sean Jurgens, Kiran Biddinger, Alexandra Kuznetsov, Rebecca Freeman, Dina Bogoslavski, Patrick Ellinor, Aarti Asnani, Phillip Dumesic, Krishna Aragam, Pere Puigserver, Jason Roh, Bruce Spiegelman, Anthony Rosenzweig
Massachusetts General Hospital, Boston, USA.

W-24. The 14-3-3 γ Interactome Integrates Changes in Myofilament Mechanotransduction with the Metabolic Machinery in the Heart.

Walter Thompson, Chad Warren, Angelie Bacon, R John Solaro, Beata Wolska, [Paul Goldspink](#)
Department of Physiology and Biophysics, University of Illinois Chicago, Chicago, USA.

W-25. A Novel Multi-Target Approach for Cardiometabolic HFpEF: Preclinical Evidence for Semaglutide and TY1 Combination Therapy.

[Mahmoud Elbatreek](#), Liz Sanchez, Zhen Li, Silpa Arkat, Alexandra Nevins, Kara Tsi, Alessandra Ciullo, Traci Goodchild, Ahmed Ibrahim, Russell Rogers, Eduardo Marbán, David Lefer
Cedars Sinai Medical Center, Los Angeles, USA.

W-26. Mechano- and Inflammatory-Signaling Alterations in Hearts of a Porcine HCM Model Harboring a β -Myosin Heavy Chain (MYH7-R403Q) Gene Mutation.

[Chad M. Warren](#), David M. Ryba, Gail E. Geist, Aileen Castro Coronado, Jan K. Kitajewski, Beata M. Wolska, Paul H. Goldspink, R. John Solaro
Department of Physiology and Biophysics, Center for Cardiovascular Research, University of Illinois Chicago, Chicago, USA.

W-27. *VWA7 Expression in the Mouse Heart Induces Maladaptation and Inflammatory Dependent Fibrosis.**

[Yasuhide Kuwabara](#), Scott Blair, Caitlin Keezer, Rajesh Kumar Kasam, Kathy Warrick, Suh-Chin Lin, Jeff Molkenin
Molecular Cardiovascular Biology, Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-28. * Mitochondrial H₂S is a Critical Regulator of Branched-Chain Amino Acids (BCAA) Catabolism in the Failing Heart.**

Zhen Li, Jake Doiron, Huijing Xia, Kyle LaPenna, Thomas Sharp, Xiaoman Yu, Noriyuki Nagahara, Traci Goodchild, David Lefer
Cedars-Sinai Medical Center, Los Angeles, USA.

W-29. * Natural Peptide Modulators of Ryanodine Receptors by a High-Throughput Expression System.**

Li Xiao, Carmen Valdivia, Wenxuan Cai, Filip Van Petegem, Héctor Valdivia
Cardiovascular Research Center, University of Wisconsin-Madison, Madison, USA.

W-30. E-cigarette Exposure Promotes Maternal Sympathetic Dominance and Ventricular Arrhythmias at Early Gestation, Labor and Post-Partum.

Brittany Reynolds, Anand Ramalingam, Helen Collins, Alex Carll
Department of Physiology, University of Louisville School of Medicine, Louisville, USA.

W-31. The Role of Secreted Frizzled Protein 1(sFRP1) in Promoting Pediatric Dilated Cardiomyopathy.

Obed Nyarko, Carmen Sucharov
University of Colorado Anschutz Medical Campus, Aurora, USA.

W-32. * Glycoprotein 130 Antagonism Counteracts Autophagy-Mediated Metabolic Derangements and Improves Right Ventricle Function in Pulmonary Artery Banded Pigs.**

Jenna Mendelson, Jacob Sternbach, Ryan Moon, Lynn Hartweck, Felipe Kazmirczak, Kurt Prins
University of Minnesota, Minneapolis, USA.

W-33. MYBPC1 Mutations Linked to Distal Arthrogyrosis and Brain Abnormalities.

Ella Bachman, Diana Lindquist, Aaron Burton, Kalyani Ananthamohan, Taejeong Song, Sakthivel Sadayappan
University of Cincinnati, Cincinnati, USA.

W-34. Mitochondrial Transplantation Therapeutics: Assessing Mitochondrial Viability in Extracellular Milieu.

Eaman Abay, Jiuzhou Huo, Jeffery Molkenin
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-35. * CaMKII S-nitrosylation Alters Post-Ischemic Recovery of Cardiac Contractility.**

Esther Asamudo, Adam Wilder, Chidera Alim, Kenneth Ginsburg, Donald Bers
University of California, Davis, California, USA.

W-36. Investigating the Role of Key Sarco(endo)plasmic Reticulum Shaping Proteins on Cardiomyocyte Structure and Development.

Kateleen Jia, Michelle Di Paola, Cristine Reitz, Allen Teng, Anthony Gramolini
Department of Physiology, University of Toronto, Toronto, Canada.

W-37. * Pooled Phenotyping of MYH7 Variants in Gene-Edited Stem Cell-Derived Cardiomyocytes Enables Reclassification of Variants of Unknown Significance.**

Clayton Friedman, Shawn Fayer, Charles Murry, Lea Starita, Douglas Fowler, Kai-Chun Yang
Institute for Stem Cell and Regenerative Medicine, University of Washington, School of Medicine, Seattle, USA.

W-38. * IRE1 α Protects Against Cardiac Fibrosis Via Selective Degradation of a Profibrotic Transcriptome.**

Ernie Sandoval, Sarah Parker, Scott Hahn, Zhiyu Dai, Christopher Glembotski, Erik Blackwood
Translational Cardiovascular Research Center, University of Arizona College of Medicine – Phoenix, USA.

W-39. * Mechanical Load Induces Insulin Resistance in Adult Cardiomyocytes via Cell Autonomous and Microtubule-Dependent Mechanisms.**

Alexia Vite, Nesrine Bouhrira, Deborah Eaton, Kenneth Bedi, Keita Uchida, Benjamin Prosser, Zoltan Arany, Kenneth Marguliea
University of Pennsylvania, Philadelphia, USA.

Poster Presentations of W-40 – W-78 (Session II Presenters Please Attend Your Posters from 6:10 – 7:10pm)

W-40. Characterization of Nr4c, a Novel Cardiac and Adipose ENriched Microprotein.

Taylor Coughlin, Catherine Makarewich
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-41. Temporal Characterization of Metabolic Remodeling During Myofibroblast Differentiation.

Collin K. Wells, Daniel Nguyen, Maleesha De Silva, Madison S. Taylor, Yania Raquel Martinez Ondaro,
Pawel Lorkiewicz, Bradford G. Hill
Center for Cardiometabolic Science, Christina Lee Brown Envirome Institute, Louisville, USA.

W-42. * Another-Regulin Regulates Cardiomyocyte Calcium Handling via Integration of Neuroendocrine Signaling with SERCA2a Activity.**

Keira Hassel, Aaron Gibson, Jaroslava Seflova, Ellen Cho, N. Scott Blair, Douglas Anderson, Seth Robia,
Catherine Makarewich
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-43. The Role of Lysyl Oxidase-Like 2 in Atrial Fibrillation Induced by Aortic Regurgitation.

Dana Sherrard, Robert Lakin, Wolfgang Jarilomek, Peter Backx
York University, Toronto, Canada.

W-44. MicroRNA Expression Profiles Associated with Oxidative Stress in Experimental Models of Aortic Aneurysm.

Shuchita Tiwari, Kishore Pasumarthi
Dalhousie University, Halifax, Canada.

W-45. Examination of Mitochondrial Calcium Dynamic Fluxing in the Heart on Preferential Fuel Selection.

Jiuzhou Huo, Eaman Abay, Haipei Zou, Suh-Chin Lin, Justin Wilson, Jeffrey Molkenin
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-46. * SGK1: A Novel Target in Fibrosis-Induced Atrial Fibrillation.**

Alina S Bilal, Scott A Hahn, Matthew B Murphy, Victoria B Murray, Katherine T Murray, Christopher C Glembotski,
Erik A Blackwood
Translational Cardiovascular Research Center, University of Arizona College of Medicine - Phoenix, Phoenix, USA.

W-47. * Loss of Cardiomyocyte Janus Kinase 1 (Jak1) Causes Cardiomyopathy.**

Arasakumar Subramani, Kobina Essandoh, Michael Y. Young, Kay-Uwe Wagner, Matthew J. Brody
University of Michigan, Ann Arbor, USA.

W-48. Aggresome Formation in PLN^{R14A} Cardiomyopathy: The Role of Fkbp8.

Ava Vandenbelt, Allen Teng, Wenping Li, Anthony Gramolini
Department of Physiology, Faculty of Medicine, University of Toronto, Toronto, Canada.

W-49. Transforming Growth Factor β -Dependent Regulation of Cardiomyocyte Maturation.

Rachel Minerath, Rajesh Kasam, Kelly Grimes, Vikram Prasad, Michelle Sargent, Hadi Khalil, Allen York,
Yasu Kuwabara, Anthony Saviola, Christina Alfieri, Kirk Hansen, Katherine Yutzey, Jeffery Molkenin
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

W-50. Myosin Modulators Mavacamten and Aficamten Inhibit Cardiac Contractility Through Different Mechanisms.

Saffie Mohran, Kristina Kooiker, Galina Flint, Max Mahoney-Schaefer, Weikang Ma, Timothy McMillen,
Thomas Irving, Michael Regnier, Farid Moussavi-Harami
University of Washington, Seattle, USA.

W-51. * The Mitochondrial Calcium Efflux Regulator TMEM65 Is Essential to the Function of the Adult Heart.**

Joanne F. Garbincius, Oniel Salik, Henry Cohen, Carmen Choya-Foces, Adam Mangold, Angelina Makhoul,
Anna Schmidt, Dima Khalil, Joshua Doolittle, Adyson B. Johnson, Anya S. Wilkinson, Emma K. Murray,
Michael Lazaropoulos, Alycia Hildebrand, Kenneth Bedi, Jr., Kenneth Margulies, Dhanendra Tomar, John W. Elrod
Aging + Cardiovascular Discovery Center, Lewis Katz School of Medicine, Temple University, Philadelphia, USA.

W-52. Phosphorylation of cMyBP-C Contributes to the Preservation of Ejection Fraction in the Early Stages of a Mouse Model of HFpEF.

Paola Rosas, Liomar Neves, Carlos Pereira, Karina Bonilla, Jingjing Zheng, Francisco Alvarado, Kathrin Banach
University of Illinois at Chicago, Chicago, USA.

W-53. Derivation of a Comprehensive Biobank of Human iPSC Lines for Open-Access Distribution to Academic Researchers.

Christopher Yan, Celine Lai, Sushma Shenoy, Rebecca Yu, Zachary Cook, Julio Guevara, Yan Zhuge, Joseph Wu, Paul Pang
Greenstone Biosciences, Palo Alto, USA.

W-54. Heart Field-specific Lineage Differentiation of Human Pluripotent Stem Cells (hPSCs) to Ventricular Cardiomyocytes Defined by Single Cell Transcriptomics.

Jianhua Zhang, Vladislav Leonov, Amy Van Aartsen, Xuan Feng, Jay Jany, Sean Palecek, Timothy Kamp
University of Wisconsin - Madison, Madison, USA.

W-55. Atrial Electrophysiological Remodeling Induced by Active Colitis.

Hiroki Kittaka, Carlos H Pereira, Edward J Ouille V, Kathrin Banach
Rush University Medical Center, Chicago, USA.

W-56. Chronic Angiotensin II Infusion Promotes Sex-Specific Ventricular Remodeling in Aged Mouse Hearts.

Manish Mishra, Ninh Khuong, Shubham Banga, Susan E Howlett
Department of Pharmacology, Dalhousie University, Halifax, Canada.

W-57. *SNAP23 is a Novel Regulator of Autophagy in Cardiac Myocytes.**

Sean Noudali, Scott Hahn, Alina Bilal, Madison Peller, Zhiyu Dai, Christopher Glembotski, Erik Blackwood
The University of Arizona, Phoenix, USA.

W-58. *Cytoplasmic Aggregation Promoted by RBM20 is Toxic to Cardiomyocytes Through the Sequestration of Distinct RNA Binding Proteins to Nuclear Aggregation.**

Yanghai Zhang, Zachery Gregorich, Eli Larson, Ying Ge, Wei Guo
University of Wisconsin-Madison, Madison, USA.

W-59. Distinguished Serum Protein Patterns Between Heart Failure and Recovered Patients Provide Insights into Pediatric Dilated Cardiomyopathy as Single Disease.

Amanda Roberta Revoredo Vicentino, Anis Karimpour-Fard, Brian L. Stauffer, Steven E. Lipshultz, Shelley D. Miyamoto, Kory J. Lavine, Carmen C. Sucharov
Department of Medicine, Division of Cardiology, University of Colorado Anschutz Medical Campus, Children's Hospital Colorado, Aurora, USA.

W-60. Amino Acid-Based Structural Improvement of CaMKAR, a CaMKII Activity Biosensor.

Alex Severino, Oscar Reyes Gaido, Elizabeth Luczak
Johns Hopkins School of Medicine, Baltimore, USA.

W-61. Isocitrate Dehydrogenase 1 Regulates Cardiac Metabolic Adaptation During Oncometabolic Stress.

Kyoungmin Kim, Brandon Faubert, Yaqi Gao, Lin Tan, Nathaniel Snyder, Philip Lorenzi, Ralph DeBerardinis, Anja Karlstaedt
Smidt Heart Institute, Cedars-Sinai Medical Center, Los Angeles, USA.

W-62. Partial Inhibition of ERK1 Ameliorates Anthracycline Induced Cardiotoxicity and Attenuates Accelerated Cardiac Senescence.

Maryam Moossavi, Ping Zhu, Yonghe Ding, David Mondaca Ruff, Feixiang Yan, Xiaolei Xu
Department of Biochemistry and Molecular Biology, Mayo Clinic, Rochester, USA.

W-63. Exploring SNO-GRK2 Interactome.

Thiele Osvaldt Rosales, Samuel Slone, Richard Premont, Jonathan Stamler, Walter Koch
Duke University, Durham, USA.

W-64. Active Colitis Promotes Left Ventricular Remodeling Through Loss of T-Tubule Integrity via Angiotensin II Signaling.

Edward J. Ouille V., Carlos H. Pereira, Hiroki Kittaka, Ali Keshavarzian, Kathrin Banach
Rush University Medical Center, Dept. IM/Cardiology, Chicago, USA.

W-65. Novel in Vitro Systems of Transthyretin Cardiac Amyloidosis.

Mark Ranek

Johns Hopkins, Baltimore, USA.

W-66. Missing Values in Longitudinal Proteomics Studies: Making a Case for Data Multiple Imputation.

Yu Yan, Baradwaj Simha Sankar, Bilal Mirza, Sarah Huang, Alexander Pelletier, Wei Wang, Karol Watson, Ding 'Dean' Wang, Peipei Ping.

University of California at Los Angeles, Los Angeles, USA.

W-67. *Explainable Biomedical Hypothesis Generation via Retrieval Augmented Generation enabled Large Language Models.**

Alexander Pelletier, Joseph Ramirez, Irsyad Adam, Simha Sankar, Alex Bui, Wei Wang, Peipei Ping

University of California Los Angeles, Los Angeles, USA.

W-68. Metadata Supported in Context Learning with GPT Improves Cardiovascular Patient Diagnostic Outcomes Using Cardiovascular Clinical Case Reports.

Yu Yan, Ryan Duan, Erika Zheng, Ethan Ji, Douglas Lin, Miriam Ojeda, Destiny Gilliland, Karol Watson, Peipei Ping

University of California Los Angeles, Los Angeles, USA.

W-69. Sustained β -Adrenergic Stress Contributes to Cardiac Hyaluronan Accumulation.

Anand Ramalingam, Caitlin Howard, Kenneth Brittian, Yibing Nong, Steven Jones

University of Louisville School of Medicine, Louisville, USA.

W-70. *Hyaluronic Acid Gel as a Viable Method for Ambient Temperature Transport of hPSC-derived Cardiomyocytes.**

Fathima Shabnam, Aaron Simmons, Carlos Gamarra, Natalia Suarez, Mara Domenech, Sean Palecek

University of Wisconsin-Madison, Madison, USA.

W-71. Heart Failure Increases miR-133b Expression Dysregulating Excitation-Contraction Coupling and Glucose Uptake in Skeletal Muscle.

Giovanni Rosales-Soto, Tomonari Fujimori, Harshita Tak, Robert G. Weiss, Samarjit Das, Erick Hernandez-Ochoa
Department of Biochemistry and Molecular Biology, University of Maryland School of Medicine, Baltimore, USA.

W-72. Adaptation to Mitochondrial Calcium Overload is Distinct in the Left and Right Ventricles.

Jae Hwi Sung, Shanmugasundaram Pakkiriswami, Hector Chapoy Villaneuva, Kshama Shah, Megan Sumera, Feng Feng, Andrea Torniainen, Jop van Berlo, Carmen C. Sucharov, Gyorgy Hajnoczky, Kurt W. Prins, Julia C. Liu
Alexion, Cambridge, USA.

W-73. *Cardiac Fibroblasts Display Sex-Specific Variation of Pro-Fibrotic Subpopulations in the Healthy and Injured Heart.**

Michael Dewar, Haisam Shah, Dylan Langburt, Fahad Ehsan, Aliya Izumi, Alison Hacker, Scott Heximer

University of Toronto, Toronto, Canada.

W-74. Latent Transforming Growth Factor- β Binding Protein-2 Knockout Mice Show Improved Heart Function and Reduced Fibrosis After Myocardial Infarction.

Fahad Ehsan, Michael Dewar, Jenny Zhang, Yuqing Zhou, Scott Heximer

University of Toronto, Toronto, Canada.

W-75. Increasing Throughput While Maintaining Coverage Depths in Single Cell Proteomics Using the timsTOF Ultra2.

Christoph Krisp, David Hartlmayr, Anjali Seth, Guilhem Tourniaire, Narayanaganesh 'Ganesh' Balasubramanian, Daniel Hornburg, Shourjo Ghose, Dijana Vitko, Ruben Shrestha, Thorsten Ledertheil, Jean-Francois Greisch, Markus Lubeck

Bruker Daltonics GmbH & Co. KG, Bremen, Germany.

W-76. *The Role of Ito,f in Excitation-Contraction Coupling Using Human Action Potentials with Variable Ito,f in Rabbit Ventricular Cardiomyocytes.**

Renée A. Gorman, Jakub Tomek, Donald M. Bers, Peter H. Backx
York University, Toronto, Canada.

W-77. The Mechanism of Coronary Collateral Growth in Adulthood Induced by Repetitive Ischemia.

Iyanuoluwa Ogunmiluyi, Molly Enrick, Yang Wang, Bevelyn Egleh, Jian Shi, James Gadd, Blessing Nagy, Liya Yin
Northeast Ohio Medical University, Rootstown, USA.

W-78. The Aryl Hydrocarbon Receptor Agonist, L-Kynurenine, modulates Cardiac Fibroblast Activation and Proinflammatory Function.

Brandon Theall, Sasha Smolgovsky, Abraham Bayer, Erin Sanders, Maria Zambrano, Zachary Robbe,
Mark Aronovitz, Kuljeet Kaur, Pilar Alcaide
Tufts Graduate School of Biomedical Sciences, Boston, USA.

Poster Session III & IV
Thursday (August 22, 2024)

Poster Presentations of T-1 – T-39 (Session III)
Poster Presentations of T-40 – T-77 (Session IV)

7:00 am – 9:00 am	Poster Set Up (Beacon Ballroom AB, Upper Level)
7:00 am – 7:30 pm	Poster Room Open (Beacon Ballroom AB, Upper Level)
1:30 pm – 3:00 pm	Lightning Talks III (Beacon Ballroom AB, Upper Level)
6:10 pm – 7:10 pm	Lightning Talks IV (Beacon Ballroom AB, Upper Level)

Poster Presentations of T-1 – T-39 (Session III Presenters Please Attend Your Posters from 1:30 – 3:00pm)

T-1. *Mitochondria-containing Extracellular Vesicle Mediate Heart Failure Sterile Inflammation.**

Dennis Wang, Kim Anh Huynh, Kevin O'Brien, Rong Tian
University of Washington, Seattle, USA.

T-2. Anthracycline Induced Cardiotoxicity and Differential Gene Expression in Old Mice.

Weike Bao, Robin Hartman, Katarina Rydén-Markinhutha, Qing-Dong Wang, Kenny Hansson, Liang Guo
AstraZeneca, Gaithersburg, USA.

T-3. Myocardial Endothelial-to-Mesenchymal Transition in Diabetic Cardiomyopathy as a Surrogate Marker for Prevention and Assess Disease Severity.

Uma Nahar Saikia, Chandni Kashyap, Vibhuti Sharma, Ajay Bahl
Postgraduate Institute of Medical Education and Research, Chandigarh, India.

T-4. *Mast Cells Are Increased in Myxomatous Mitral Valves of Marfan Syndrome.**

Na Xu, Katherine Yutzey
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

T-5. *Single Cell Proteomics Reveals Proteome Heterogeneity in iPSC-Derived Cardiomyocytes.**

Lizhuo Ai, Aleksandra Binek, Vladimir Zhemkov, Ali Haghani, Simion Kreimer, Edo Israely, Madelyn Arzt, Arun Sharma, Clive Svendsen, Jennifer Van Eyk
Cedars-Sinai Medical Center, Los Angeles, USA.

T-6. *A Novel Gene Therapy CM-YAP^{on} Protects Mouse Heart from Myocardial Infarction.**

Fansen Meng, Rich Li, Jeffrey Steimle, Jun Wang, Robia Pautler, James Martin
The Texas Heart Institute, Houston, USA.

T-7. *Stage-specific Alternative RNA Splicing Attunes Cardiomyocyte Proliferation and Contraction.**

Peiheng Gan
UT Southwestern Medical Center, Dallas, USA.

T-8. Mechanical Cues Integrated by Linker Histone H1.0 to Promote Cardiac Fibroblast Activation.

Natalie Gehred, Leland Slu, Jennifer Soto, Amy Rowat, Shuaishuai Hu, Thomas Vondriska
University of California at Los Angeles, Los Angeles, USA.

T-9. MICU3 Regulates Mitochondrial Calcium and Cardiac Hypertrophy.

Barbara Roman, Yusuf Mastoor, Junhui Sun, Hector Chapoy-Villanueva, Julia Liu, Elizabeth Murphy
NHLBI, Bethesda, USA.

T-10. *CD36-Retinoic Acid- FABP5- PPAR δ Signaling Axis Primes Neonatal Cardiomyocytes to Spontaneously Proliferate.**

Abou Bakr Salama, Qinghui Ou, Riham Abouleisa, Tamer Mohamed, Marc Dwenger, Collin Wells, Ahmad Gebreil, Jessica Miller, Kamal A. Farraj, Reham Wahid, Hania Abdelhafez, Momo Arai, Sameeha Abdulwali, Yazan Almasry, Muzammil Dastagir, Mohamed Salman, Pretty Mathew, Nourhan Baraka, Sarah Bench, Livia Eberlin, Bradford Hill Baylor College of Medicine, Houston, USA.

T-11. *MICU Dimers Display Unique Interactomes and Decode Calcium Signaling to Regulate Mitochondrial Metabolism and Energetics Independent of the Mitochondrial Calcium Uniporter.**

Henry Cohen, Tyler Stevens, Benjamin Gottschalk, Anya Wilkinson, Joanne Garbincius, Adam Chathoff, Emily Megill, Oniel Salik, Dhanendra Tomar, Nathaniel Snyder, Wolfgang Graier, John Elrod Lewis Katz School of Medicine at Temple University, Philadelphia, USA.

T-12. *Regulation of Cardiac Fibroblast Signaling by HDAC11-Reversible Myristoylation of an AKAP.**

Marion Delaunay, Emma L. Robinson, Timothy A. McKinsey University of Colorado Anschutz Medical Campus, Aurora, USA.

T-13. *Semaglutide Plus Novel Noncoding RNA Drug TY1 Exert Synergistic Benefits Against Diastolic Dysfunction in HFpEF.**

Mahmoud H. Elbatreek, Zhen Li, Silpa Arkat, Liz Sanchez, Kara Tsi, Alessandra Ciullo, Traci T. Goodchild, Ahmed G. E. Ibrahim, Russell G. Rogers, Eduardo Marbán, David J. Lefer Smidt Heart Institute, Cedars Sinai Medical Center, Los Angeles, USA.

T-14. Decreased Left Atrial Cardiomyocyte Fibroblast Growth Factor 13 Expression Promotes New Onset Postoperative Atrial Fibrillation in Humans.

Matthew Fischer, Adrian Arrieta, Marina Angelini, Elizabeth Soehalim, Douglas Chapski, Richard Shemin, Thomas Vondriska, Riccardo Olcese University of California at Los Angeles, Los Angeles, USA.

T-15. Proteomic Insights into Cardiometabolic Remodeling in SARS-CoV-2-Infected Hamsters.

Sogol Sedighi, Ting Liu, Deepthi Ashok, Meghana Prakash, Alexis Tensfeldt, Agnieszka Sidor, D.Brian Foster, Brian O'Rourke Johns Hopkins University, Baltimore, USA.

T-16. *Calmodulin Binding to Cardiac Ryanodine Receptor and Its Role in Pathological Calcium Leak.**

Victor Alencar Almeida, Christopher Ko, Robyn Rebbeck, Donald Bers University of California at Davis, Davis, USA.

T-17. Epicardium-Directed Mechanisms of Ischemic Cardiac Repair.

David Wong, Matthew Tran, Jenny Cheng, Adrian Arrieta, Elle Rathbun, Xia Yang, Thomas Vondriska, Pearl Quijada University of California at Los Angeles, Los Angeles, USA.

T-18. *A Multi-Omics Approach to Defining the Target Organ Injury in Youth with Primary Hypertension.**

Kalyani Ananthamohan, Tammy M. Brady, Mohammed Arif, Stephen Daniels, Bonita Falkner, Michael Ferguson, Joseph T. Flynn, Coral Hanevold, Stephen R. Hooper, Julie Ingelfinger, Marc Lande, Lisa J. Martin, Kevin E. Meyers, Mark Mitsnefes, Bernard Rosner, Joshua A. Samuels, Gina Kuffel, Michael J. Zilliox, Richard C. Becker, Elaine M. Urbina, Sakthivel Sadayappan Department of Internal Medicine, Division of Cardiovascular Health and Diseases, Center for Cardiovascular Research, University of Cincinnati College of Medicine, Cincinnati, USA.

T-19. *Modeling Cardiorenal Syndrome Type 1: A Time Course Evaluation of Myocardial Infarction-Induced Kidney Injury.**

Sophia M. Sears, Richa A. Singhal, Mamata Chaudhari, Daniel C. Nguyen, Kenneth R. Brittan, Bradford G. Hill, Yibing Nong, Steven P. Jones University of Louisville, Louisville, KY, USA.

T-20. A Free Fatty Acid Receptor 4 Signaling Cascade Leading to Activation of ChemR23 Protects the Heart from Ischemic Injury.

Sara Puccini, Chastity Healy, Brian Harsch, Ahmed Ahmed, Michael Zhang, Gregory Shearer, Timothy O'Connell
University of Minnesota Medical School, Minneapolis, USA.

T-21. *Ketones Promote the Maturation of Proliferating Cardiomyocytes.**

Kaya Persad, Berna Güven, Madeline Houncaren, Donna Andre, Jaelene Greenwood, Riaz Asgarali, Qutuba Karwi, Ezra Ketema, Qiuyu Sun, Liyan Zhang, Gary Lopaschuk
Cardiovascular Research Centre, Department of Pediatrics, University of Alberta, Edmonton, Canada.

T-22. Dysregulated Nutrient Sensing is a Pathological Event in Zebrafish TTNtv Cardiomyopathy That Can Be Repaired Via Inhibiting ERK Signaling.

Feixiang Yan, Weiyue Wang, Maryam Moossavi, Ping Zhu, Odell Noa, Xiaolei Xu
Mayo Clinic, Rochester, USA.

T-23. *Use of ElectroMap 2, A Novel Software, To Investigate Sympathetic Nervous Regulation of Ventricular Fibrillation.**

Christopher O'Shea, James Winter, Andrew Holmes, Kashif Rajpoot, Davor Pavlovic
Univeristy of Birmingham, Birmingham, United Kingdom.

T-24. Endothelial Deletion of Rap1 During Postnatal Development Inhibits Cardiomyocyte Sarcoplasmic Reticulum Development in the Heart.

Chad Warren, Walter Thompson, Behshid Ghadrdoost Nakhchi, Ramoji Kosuru, Mohamed Trebak, Magdalena Chrzanowska, Paul Goldspink
Department of Physiology and Biophysics, Center for Cardiovascular Research, University of Illinois Chicago, Chicago, USA.

T-25. Formate Yields Protection from Ischemic Injury Through a Nitric Oxide Synthasedependent Increase in Protein S-nitrosation.

Haley Garbus-Grant, Raihan Kabir, Oby Ebenebe, Deepthi Ashok, Diego Quiroga, Priyanka Patel, Mark Crabtree, Sam Das, Brian O'Rourke, Mark Kohr
Johns Hopkins Bloomberg School of Public Health, Baltimore, USA.

T-26. *GRK2 Regulated Cardiomyocyte Signaling Factors Are Responsible for Alterations in Adiposity And Mediate Heart-Fat Communication.**

Stephanie Kereliuk, Maya Hoteit, Eve Melbouci, Rajika Roy, Walter Koch
Duke University School of Medicine, Durham, USA.

T-27. SBK2 Kinase in Desmin Related Cardiomyopathy.

Mark Bouska, Mingqi Cai, Yu Xing, Erliang Zeng, Xiang Gao, Xuejun Wang
University of South Dakota, Vermillion, USA.

T-28. Cardiac Remodeling After TAC: Does CaMKII Nitrosylation Protect?

Chidera Alim, Phung Thai, Donald Bers
University of California at Davis, Davis, USA.

T-29. *Post-Transcriptional Regulation of Gene Expression by Ribosome-Binding Protein 1.**

Marijan Aghajani, Eric Schoger, Federico Bleckwedel, Julia Groß, Nicole Herzog, Mirko Völkers, Tobias Jakobi, Laura Zelarayan, Shirin Doroudgar
Department of Internal Medicine and the Translational Cardiovascular Research Center, The University of Arizona, Phoenix, USA.

T-30. *Aberrant Protein Nitrosylation Dynamics Underpins Nitrosative Stress in Cardiometabolic Heart Failure with Preserved Ejection Fraction.**

Zhen Li, Natalie Gehred, Tatiana Gromova, Kyle LaPenna, Thomas Sharp, Jingshu Chen, Smitha Shambhu, Xiaoman Yu, Traci Goodchild, Martin Jensen, Thomas Vondriska, David Lefer
Cedars-Sinai Medical Center, Los Angeles, USA.

T-31. *The Impact of Asporin (ASPN) On Cardiac Myocytes (CM) During In-Vitro Hypoxiareoxygenation (H/R) Induced Apoptosis.**

Deepika Rai, Mukta Basu, Liam McCarthy, Aleksandr Stotland, Sarah Parker
Cedar Sinai Medical Centre, Los Angeles, USA.

T-32. Ketone Bodies Supplementation Improves Mitochondrial Function in Cardiomyocytes Treated with Serum from Patients with Dilated Cardiomyopathy.

Mariana Casa de Vito, Genevieve Sparagna, Laura Hernandez-Lagunas, Shelley Miyamoto, Brian Stauffer, Carmen Sucharov
University of Colorado Anschutz Medical Campus, Aurora, USA.

T-33. Selective Activation of Cardiac Macrophage Subtypes Influences Pathophysiology.

Rajesh K Kasam, Kelly Grimes, Anne Katrine Johansen, Yasuhide Kuwabara, Scott Blair, Suh-Chin Lin, Ronald Vagnozzi, Jeffery Molquentin
Cincinnati Childrens Hospital Medical Center, Cincinnati, USA.

T-34. *Effects of Doxorubicin on Fibrotic Remodeling in the Heart.**

Sukriti Bagchi, Amy Cai, Christopher Glembotski, Erik Blackwood
Translational Cardiovascular Research Center, Phoenix, USA.

T-35. *Multiscale Drug Screening for Cardiac Fibrosis Identifies MD2 as a Therapeutic Target.**

Hao Zhang
Stanford University, Palo Alto, USA.

T-36. *Harnessing Metformin for Targeted Intervention: Addressing Cardiac Fibrosis in Plasminogen Activator Inhibitor-1 (PAI-1) Deficiency.**

Serena Pulente, Claire Fong-McMaster, Natasha Trzaskalski, Sweta Gupta, Magdalena Lewandowska, Amy Shapiro, Kyoung-Han Kim, Erin Mulvihill
University of Ottawa Heart Institute, Ottawa, Canada.

T-37. Integral Membrane-Shaping Proteins Drive Sarco(Endo)Plasmic Reticulum Formation and Maturation During Cardiomyocyte Development.

Cristine Reitz, Kateleen Jia, Faisal Alibhai, Michelle Di Paola, Aaron Au, Uros Kuzmanov, Christopher Yip, Michael Laflamme, Anthony Gramolini
Department of Physiology, Translational Biology and Engineering Program, University of Toronto, Toronto, Canada.

T-38. Proteomic Profiling of Human Heart Failure Reveals Specific and Shared Molecular Responses Across Etiologies.

Omar Hamed, Uros Kuzmanov, Shreya Gramolini, Jillian Halpern, Darshan Brahmabhatt, Daniela Grothe, Filio Billia, Anthony Gramolini
Ted Rogers Centre for Heart Research, University of Toronto, Toronto, Canada.

T-39. Mechanisms Driving Mechanical Memory in Adult Rat and Human Cardiomyocytes.

Nesrine Bouhrira, Alexia Vite, Deborah Eaton, Kenneth Bedi, Kenneth Margulies
University of Pennsylvania, Philadelphia, USA.

Poster Presentations of T-40 – T-77 (Session IV Presenters Please Attend Your Posters from 6:10 – 7:10pm)

T-40. Circulating Extracellular Vesicles Trigger Cardiotoxicity and Heart Failure in Chronic Kidney Disease.

Nikhil Raisinghani, Xisheng Li, Sabrina LaSalvia, Alexandre Gallinat Ocallaghan, David Sachs, Shihong Zhang, Michael Harding, Yauvez Hayrettin, Seonghun Yoon, Anh Phan, Navneet Dogra, Rupangi Vasavada, Uta Erdbruegger, Susmita Sahoo
Icahn School of Medicine at Mount Sinai, New York, USA.

T-41. Interrogating the Effect of MYH7 R904H Dilated Cardiomyopathy Variant on Sarcomeric Dynamics.

Dania Ahmed, Alexander Loiben, Clayton Friedman, Wei-Ming Chien, Kai-Chun 'Daniel' Yang
University of Washington, Seattle, USA.

T-42. *Troponin I Serine 150 Phosphorylation as a Novel Positive Inotrope.**

Lorien Salyer, Sarah Sturgill, Helena Zanella, Elizabeth Brundage, Cemantha Lane, Thomas Hund, Mark Ziolo, Brandon Biesiadecki
The Ohio State University, Columbus, USA.

T-43. Investigating The Mechanisms of miRNA-181a-Mediated Targeting of GRK2 in Heart Failure.

Heidi Cho, Melissa LaRocca, Erhe Gao, Walter Koch
Temple University, Philadelphia, USA.

T-44. Single Nucleus RNA Sequencing of Presumed Human Heart Failure Myocardium.

Deborah Eaton, Kenneth Bedi, Ryan Pfeiffer, Nathan Tucker, Kenneth Margulies
University of Pennsylvania, Philadelphia, USA.

T-45. *Role of METTL3 in the Cardiac Response to Viruses.**

Vishmi Wanasinghe, Jacob Yount, Federica Accornero
Brown University, Providence, USA.

T-46. DWORF Overexpression Enhances Mitochondrial Function and Attenuates Pressure-Overload Induced Heart Failure.

Omar Brito-Estrada
Cincinnati Children's Hospital Medical Center, Cincinnati, USA.

T-47. Effects of Innate Immune Response Activation on Tolerance to Myocardial Ischemia and Reperfusion Injury.

Meghana Prakash, Deepthi Ashok, Ting Liu, Sogol Sedighi, Alexis Tensfeldt, Agnieszka Sidor, Kyriakos Papanicolaou, Bryan Ho, Brian Foster, Brian O'Rourke
Johns Hopkins University School of Medicine, Baltimore, USA.

T-48. Enhancing Molecular Understanding Through Advanced Single-Cell Isolation and Proteomics.

Aleksandra Binek, Joshua Cantlon, Ali Haghani, Simion Kreimer, Rui Zhang, Blandine Chazarin, Eduardo Marbán, Joshua Goldhaber, Jennifer Van Eyk
Cedars Sinai Medical Center, Los Angeles, USA.

T-49. Mitochondrial GRK2 Dependent Regulation of Myocardial Cellular and Transcriptional Composition After Ischemic Injury.

Samuel Slone, Kurt Chuprun, Nathan Tucker, Gizem Kayki-Mutlu, Rajika Roy, Jessica Ibeti, Erhe Gao, Walter Koch
Duke University, Durham, USA.

T-50. Constructing A Multimodal Biomolecule Embedding Integration Platform to Support Comprehensive Biomedical Knowledge Representation.

Yu Yan, Baradwaj Simha Sankar, Yijiao Xiao, Alexander R. Pelletier, Wei Wang, Peipei Ping
Departments of Physiology and Medicine, University of California at Los Angeles, Los Angeles, USA.

T-51. *REDD1 Regulates Cardiac Glucose and Fatty Acid Utilization Independent of mTORC1 Signaling.**

Mason Wheeler, Roslyn Fawbush, Emily McAlpin, Jamie Renick, Shaunaci Stevens, David Williamson, Michael Dennis, Jessica Pflieger
Fralin Biomedical Research Institute at Virginia Tech Carilion, Roanoke, VA, USA.

T-52. *Dissecting the Limited Efficacy of Beta-Blockers in Pediatric DCM: A Transcriptome-Based Analysis.**

Zoe N. Leroux, Anis Karimpour-Fard, Bonnie Neltner, Matthew R. G. Taylor, Matthew L. Stone, Brian L. Stauffer, Shelley D. Miyamoto, Carmen C. Sucharov
University of Colorado Anschutz Medical Campus, Aurora, USA.

T-53. *Cardiac PPAR α Regulates the Heart Lipidome During the Pathogenesis of Obesity.**

Redemptor Zhou, Amellia Kuhn, Alyssa Olson, Natasha Fillmore
North Dakota State University, Fargo, USA.

T-54. Preclinical Heart Failure with Reduced Ejection Fraction Activates B Cell Immunity Directed to Cardiac Neoantigens.

Sasha Smolgovsky, Abraham Bayer, Pilar Alcaide
Tufts University, Boston, USA.

T-55. The Imbalance of Donor and Recipient Cardiac Cells in Human Cardiac Allograft.

Xiao Li, Diwakar Turaga, Rich Li, Chang-Ru Tsai, Julianna Quinn, Yi Zhao, Jun Wang, Joseph Spinner, Edward Hickey, Iki Adachi, James Martin
The Texas Heart Institute, Houston, USA.

T-56. ADMET-AI Enables Interpretable Predictions of Drug-Induced Cardiotoxicity.

Kyle Swanson, Souhrid Mukherjee, Parker Walther, Celine Lai, Christopher Yan, Rabindra Shivnaraine, Jeremy Leitz, Paul Pang, James Zou, Joseph Wu
Greenstone Biosciences, Palo Alto, USA.

T-57. *Characterizing the Mechanisms and Implications of α T-catenin Phosphoregulation at the Cardiomyocyte Intercalated Disc.**

Daniel Davoudpour, Cristine Reitz, Uros Kuzmanov, Omar Hamed, Anthony Gramolini
Department of Physiology, Translational Biology and Engineering Program, Ted Rogers Centre for Heart Research, University of Toronto, Toronto, Canada

T-58. SGLT2 Inhibitors Have No Direct Effect on CaMKII Activity in Neonatal Rat Ventricular Cardiomyocytes.

Alex Severino, Oscar Reyes Gaido, Elizabeth Luczak, Olurotimi Mesubi
Johns Hopkins University School of Medicine, Baltimore, USA.

T-59. Autophagic Signaling Promotes Systems-Wide Remodeling in Skeletal Muscle Upon Oncometabolic Stress by D2-HG.

Yaqi Gao, Kyoungmin Min, Heidi Vitrac, Rebecca L. Salazar, Benjamin D. Gould, Daniel Soedkamp, Weston Spivia, Koen Raedschelders, An Q. Dinh, Anna G. Guzman, Lin Tan, Stavros Azinas, David J.R. Taylor, Walter Schiffer, Daniel McNavish, Helen B. Burks, Roberta A. Gottlieb, Philip L. Lorenzi, Blake M. Hanson, Jennifer E. Van Eyk, Heinrich Taegtmeyer, Anja Karlstaedt
Cedars Sinai Medical Center, Los Angeles, USA.

T-60. Spatial Transcriptomics Identifies a Regeneration-Permissive Microenvironment in the Neonatal Mammalian Heart.

Saradha Miriyala, Miao Cui
Boston Children's Hospital Department of Cardiology, Boston, USA.

T-61. *Translational Link Between Gene Expression in Human Subcutaneous Adipose Tissue and Cardiac Function.**

Pooja Acharya, Sarah Anthony, Rohita Ikkurthi, David Kim, Vijay Patel, Neal Weintraub, Onur Kanisicak, Michael Tranter
Department of Molecular Medicine and Therapeutics, The Ohio State University Wexner Medical Center, Columbus, USA.

T-62. Sarco(Endo)Plasmic Reticulum Membrane Protein REEP5 Regulates Mitochondrial Dynamics In The Mouse Heart.

Michelle Di Paola, Cristine J. Reitz, Uros Kuzmanov, Kateleen Jia, Anthony O. Gramolini
Department of Physiology, Faculty of Medicine, University of Toronto, Toronto, Canada.

T-63. Remodeling of Mitochondrial Supercomplex-Associated Proteins in Murine Heart Failure: Implications for Pyruvate and Alpha-Ketoglutarate Metabolism.

Claire Fong-McMaster, Stephanie Myers, Serena M. Pulente, Arsalan Haqqani, Erin E. Mulvihill, Mary-Ellen Harper
Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, Ottawa, Canada.

T-64. *Metabolic Profiling in TET2 and IDH2 Mutant Leukemia Reveals Cardiac Adaptation.**

Alia Sadiq, Gao Yaqi, Kim Kyoungmin, Ian K Williamson, Jlenia Guarnerio, Anja Karlstaedt
Department of Cardiology, The Smidt Heart Institute, Cedars-Sinai Medical Center, Los Angeles, USA.

- T-65. *** Jak1 Palmitoylation Regulates Cardiomyocyte Cytokine Receptor Trafficking and Stat3 Signaling.**
Kobina Essandoh, Arasakumar Subramani, Felipe Da Veiga Leprevost, Alexey Nesvizhskii, Matthew Brody
University of Michigan, Ann Arbor, USA.
- W-66. Calcium Overload Prevented During Acidosis in the pH-Insensitive Cardiac Sodium-Calcium Exchanger Mouse.**
Rui Zhang, Seho Kim, Jennifer Ding, Scott John, Kenneth Philipson, Michela Ottolia, Joshua Goldhaber
Cedars-Sinai Medical Center, Los Angeles, USA.
- T-67. Data-Driven Insights into Bidirectional Association of Calcium-Regulating Proteins and Oxidative Stress on Cardiovascular Diseases.**
Namuna Panday, Dibakar Sigdel, Irsyad Adam, Joseph Ramirez, Aarushi Verma, Anirudh Eranki, Wei Wang, Ding 'Dean' Wang, Peipei Ping
University of California at Los Angeles, Los Angeles, USA.
- T-68. Building an Ethical and Trustworthy Biomedical AI Ecosystem Centered on Foundational Models and Multimodal Biomedical Data.**
Baradwaj Simha Sankar, Destiny Gilliland, Yu Yan, Irsyad Adam, Gwyneth Lemaster, Jack Rincon, Wei Wang, Ding 'Dean' Wang, Karol Watson, Alex Bui, Peipei Ping
University of California at Los Angeles, Los Angeles, USA.
- T-69. ***Towards Precision Medicine for Atherosclerosis through Multi-Modal Graph Deep Learning: A Hierarchical Network Approach.**
Irsyad Adam, Baradwaj Sankar, Gwyneth Lemaster, Katie Downs, Sia Phulambrikar, Dean Wang, Karol Watson, Alex Bui, Peipei Ping
University of California at Los Angeles, Los Angeles, USA.
- T-70. Investigating the Impact of ALDH2 on Doxorubicin-Induced Cardiotoxicity Using ALDH2*2 Knock-In Mice Through Proteomics Analysis.**
Yi Ye, Lin Yang, Linchuan Liao
Sichuan Huaxi Forensic Center, Chengdu, China.
- T-71. ***Leveraging a Multi-Omics Approach to Reveal the Cardioprotective Effect of Losmapimod Against Doxorubicin-Induced Cardiotoxicity in C57BL/6 Mice.**
Mohamed Dabour, Ibrahim Abdelgawad, Bushra Sadaf, Mary Daniel, Marianne Grant, Beshay Zordoky
University of Minnesota, Minneapolis, USA.
- T-72. Wnt1-Inducible Signaling pathway Protein-1 (WISP1) A New Mediator for Fibroblast Activities.**
Sharon Parkins, Teagan K. Goldsworthy, Lisa Green, Sarah R. Anthony, Adrienne R. Guarnieri, Onur Kanisicak, Michael Tranter
Ohio State University Wexner Medical Center, Columbus, USA.
- T-73. Mechanism on Regulation of RhoA in Myeloid Cells on Cardiac Wound Healing and Remodeling of the Infarcted Heart.**
Bing Xu, Maria Kontaridis
Department of Biomedical Research and Translational Medicine, Masonic Medical Research Institute, Utica, USA.
- T-74. Real-Time TIMSrescore: timsTOF-optimized PSM Rescoring Boosts Identification Rates of Modified and Unmodified Peptide and Protein Identifications Using Collisional Cross Section, Retention Time, and Fragmentation Patterns, in Real-Time.**
Jonathan Krieger, Arthur Declercq, Ralf Gabriels, Robbin Bouwmeester, Lennart Martens, Tharan Srikumar, George Rosenberger, Dennis Trede, Shourjo Ghose, Dijana Vitko, Heidi Vitrac
Bruker Canada, Milton, Canada.
- T-75. Rapid Mechanical Assessment of MYH7 Variants in Genome-Edited Cardiomyocytes to Predict Cardiomyopathy Risk.**
Alexander Loiben, Wei-Ming Chien, Ashley Mckinstry, Dania Ahmed, Charles Murry, Kai-Chun 'Daniel' Yang
University of Washington, Seattle, USA.

T-76. Investigating The Molecular Response to Rapamycin Treatment in Older Adults with Heart Failure.

Judi Simcox

University of Wisconsin-Madison, Madison, USA.

T-77. Light Therapy and Circadian Regulation to Prevent Endothelial Dysfunction.

Julia Bertazzo, Lori Walker, Tobias Eckle

University of Colorado, Aurora, USA.