



July 14, 2021

12:00-2:00pm

REGENERATIVE MEDICINE FOR COVID
HOPE OR HYPE?



Program



WELCOME AND INTRODUCTIONS

12:00-12:05 pm

Fred Sanfilippo MD, PhD

Director, Emory-Georgia Tech Healthcare Innovation Program
Professor of Pathology & Laboratory Medicine, Emory University School of Medicine
Professor of Health Policy & Management, Rollins School of Public Health

REGENERATIVE MEDICINE FOR COVID THERAPY

12:05-12:25 pm

Joanne Kurtzberg, MD

Jerome Harris Distinguished Professor of Pediatrics and Professor of Pathology
Director, Marcus Center for Cellular Cures
Director, Pediatric Blood and Marrow Transplant Program
Duke University Medical Center

EXPERIENCE & EXPECTATIONS

12:25-12:45 pm

Joshua Hare, MD

Chief Sciences Officer
Senior Associate Dean for Experimental and Regenerative Therapeutics
Louis Lemberg Professor of Medicine
Director, Interdisciplinary Stem Cell Institute
University of Miami Miller School of Medicine

CELL THERAPY AT EMORY - POTENTIAL FOR COVID

1:00-1:10 pm

Ed Waller, MD, PhD

Professor of Medicine, Medical Oncology and Pathology
Rein Saral MD Professorship in Cancer Medicine
Director, Emory Regenerative Engineering and Medicine Center
Medical Director, Center for Stem Cell Processing and Apheresis
Editor-in-Chief, Journal of ImmunoMedicine
Emory University School of Medicine

POTENTIAL NEW THERAPIES

1:10-1:20 pm

Steve Stice , PhD

DW Brooks Distinguished Professor
Director, Regenerative Bioscience Center
University of Georgia
Chief Scientific Officer, Aruna Bio Inc.

CHARACTERIZATION & MANUFACTURING

1:20-1:30 pm

Krish Roy, PhD

Robert A. Milton Chair Professor
Director, NSF Engineering Research Center (ERC) for Cell Manufacturing Technologies (CMaT)
Director, Marcus Center for Therapeutic Cell Characterization and Manufacturing (MC3M)
Director, Center for ImmunoEngineering
The Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory

Q&A SESSION

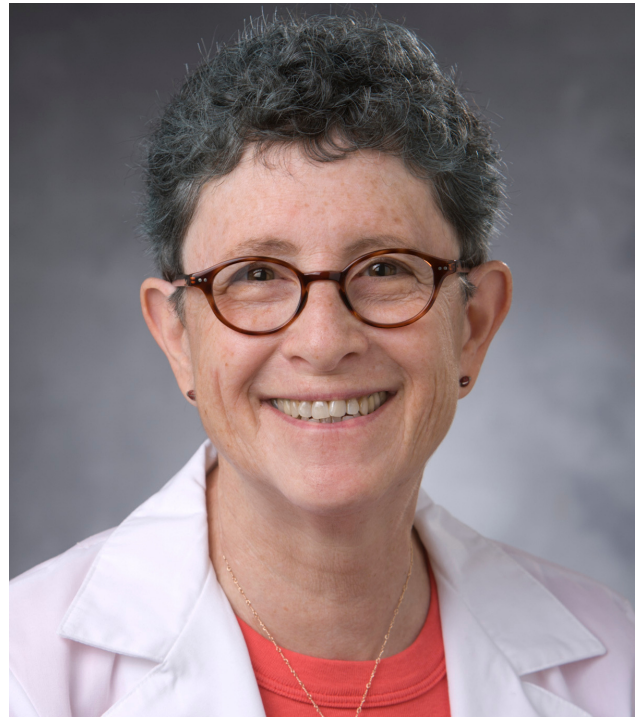
1:30-2:00 pm

Joanne Kurtzberg, MD

Marcus Center for Cellular Cures
Duke University

Dr. Kurtzberg is an internationally renowned expert in pediatric hematology/oncology, pediatric blood and marrow transplantation, umbilical cord blood banking and transplantation, and novel applications of cord blood in the emerging fields of cellular therapies and regenerative medicine. Dr. Kurtzberg serves as the Director of the Marcus Center for Cellular Cures (MC3), Director of the Pediatric Blood and Marrow Transplant Program, Director of the Carolinas Cord Blood Bank, and Co-Director of the Stem Cell Transplant Laboratory at Duke University.

Dr. Kurtzberg's research in MC3 focuses on translational studies from bench to bedside, seeking to develop transformative clinical therapies using cells, tissues, molecules, genes, and biomaterials to treat diseases and injuries that currently lack effective treatments. Recent areas of investigation in MC3, which are funded by the Marcus Foundation, include the use of autologous cord blood in children with neonatal brain injury, cerebral palsy, and autism, as well as preclinical studies manufacturing microglial oligodendrocyte-like cells from cord blood to treat patients with acquired and genetic brain diseases. Studies of donor cord blood cells in adults with stroke and children with cerebral palsy and autism are also underway.



Dr. Kurtzberg's lab has developed novel chemotherapeutic drugs for T-cell Leukemias, assays enumerating ALDH bright cells to predict cord blood potency from segments attached to cryopreserved cord blood units, and is performing translational research testing cord blood expansion, cellular targeted therapies and tissue repair and regeneration. Dr. Kurtzberg currently holds several INDs for investigational clinical trials.

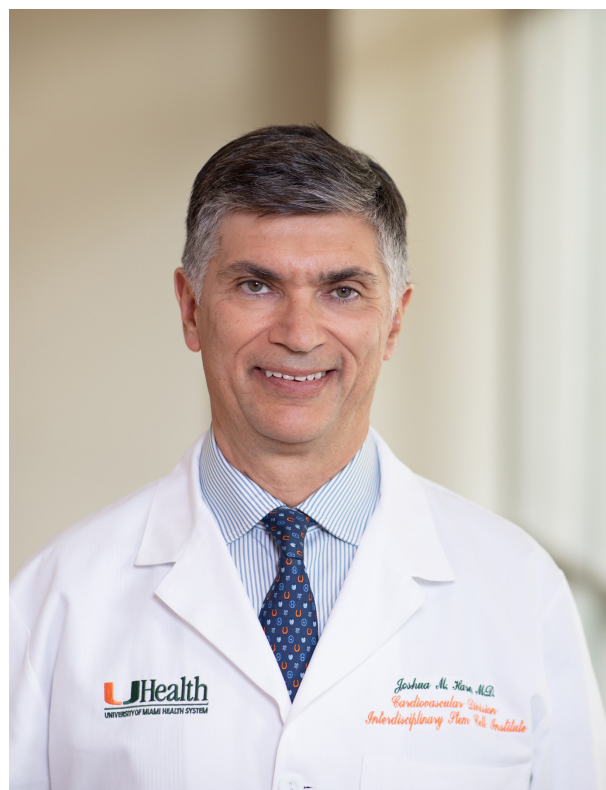
Joshua Hare, MD

Interdisciplinary Stem Cell Institute
University of Miami

Joshua Hare is Chief Sciences Officer, Senior Associate Dean for Experimental and Cellular Therapeutics, Director of the Interdisciplinary Stem Cell Institute (ISCI), and Louis Lemberg Professor of Medicine at the University of Miami Miller School of Medicine. Dr. Hare is a practicing cardiologist specializing in heart failure, and an internationally acknowledged pioneer in the field of stem cell therapeutics for human heart disease.

Dr. Hare led the first randomized allogeneic mesenchymal stromal cell (MSC) clinical trial for patients with myocardial infarction and has served as Principal Investigator of three major NHLBI programs in cell-based therapy. He holds 27 active INDs for cell-based therapy, and under his leadership ISCI has active programs in cancer biology, cardiology, aging, neonatology, skin diseases, bone diseases, neurologic diseases, ophthalmology, and a program devoted to the ethics of stem cell therapy.

Dr. Hare has published more than 350 original research articles, editorials, and review articles, and is the recipient of four active grants from the NIH. He has served in the past as chair of the Cardiac Contractility and Heart Failure study section of the NIH, and chaired Stem Cell Working Group and Basic Cardiovascular Science Council of the American Heart Association.



Educated at the University of Pennsylvania, Johns Hopkins, Brigham and Women's Hospital, and Harvard Medical School, Dr. Hare spent 12 years on the faculty at Johns Hopkins rising to the rank of Professor of Medicine and Biomedical Engineering, and Director of the Cardiac Transplant and Heart Failure program before joining the University of Miami in 2007. Dr. Hare is an elected member of the American Association of Physicians and the Association of University Cardiologists. He is the inventor of 15 United States patents, that have led to the founding of four biotechnology companies.

Edmund Waller, MD, PhD

Emory Regenerative Engineering and Medicine Center
Emory University

Dr. Waller completed his undergraduate degree at Harvard University in 1978, his MD-PhD degree at Cornell University Medical School and Rockefeller University in 1985, and his clinical training in Oncology at Stanford University in 1991. As a post-doctoral Fellow at Stanford from 1991 - 1993, he studied hematopoiesis with Dr. Irving Weissman. Dr. Waller was recruited to Emory University in 1994 and promoted to a tenured Professor of Hematology and Medical Oncology, Medicine, and Pathology at Emory University in 2005. He served as the Associate Director for Clinical Research for the Emory Winship Cancer Center from 2009-2012 and as the Director of the Bone Marrow and Stem Cell Transplant Program at Emory University from 1998 to 2019. He currently serves as the Emory Director for Regenerative Medicine and Engineering. Dr. Waller's research is funded by the National Cancer Institute, National Heart Lung and Blood Institute as well as the National Marrow Donor Program.

Dr. Waller is the author of over 330 peer-reviewed articles with an h-index of 56. Dr. Waller's research focuses on optimizing anti-cancer immunity. He has developed novel strategies of regulating immune responses by studying the interaction between T cells and dendritic cells in murine models and using clinical samples from patients. Current projects in his laboratory include graft



engineering to enhance graft versus leukemia activities and post-transplant immune reconstitution, novel drugs that target immune pathways to regulate graft-versus-host disease, and drugs that activate and expand cancer-specific T cells. He is the Principal Investigator of an IND-supported randomized placebo-controlled clinical trial of duvelisib, an immune-modulatory phosphatidyl inositol-3 kinase inhibitor in patients with severe COVID-19.

Steven Stice, PhD

Regenerative Bioscience Center
University of Georgia

Dr. Steve Stice is a Georgia Research Alliance Eminent Scholar endowed chair, Professor and Director of the Regenerative Bioscience Center at The University of Georgia and serves as Chief Scientific Officer for Aruna Biomedical Inc. Dr. Stice co-founded five biotechnology companies, including Advanced Cell Technology, and CytoGenesis, Inc., which was later purchased by BresaGen.

Dr. Stice helped BresaGen develop four of the human embryonic stem cell lines approved for NIH funding. He produced the first cloned rabbit in 1987 and the first cloned transgenic calves, George and Charlie, in 1988. In 1997, he produced the first genetically modified embryonic stem cell derived pigs and cattle. In 2001, he announced a breakthrough in the cloning process and the first cloned animal (calf) from an animal that was dead for 48 hours. Stice continues to add to his first-to-market innovations. Working in collaboration with his startup, Aruna and RBC researchers, he is currently developing a new Exosome treatment for stroke that has shown to reduce brain damage and accelerate the brain's natural healing tendencies, in two divergent animal species and two stroke types. Dr. Stice holds thirty-one patents, his most recent on neural stem cell-derived Exosome treatments to promote brain repair after stroke or TBI.

As an invited member, he sits on the Scientific Advisory Board for the Food and Drug Administration (FDA), and is serving on the Governing Committee of the first institute funded by the U.S. Department of Commerce (DOC); National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL).

Dr. Stice was named one of the 100 Most Influential Georgians in 2002 by Georgia Trend magazine. In 2000, he was named one of the top forty entrepreneurs under forty years old in



Georgia, and he received the AGR grand president's award for leadership in agriculture and the Outstanding Young Alumni Award from the University of Illinois. In 2015 he was presented as Academic Entrepreneur of the Year. Most recent honors include 2018 election Fellow status to The National Academy of Inventors® (NAI), the highest professional distinction accorded solely to academic inventors, and the 2017 Georgia Bio Industry Growth Award, the most recognized honor bestowed by Georgia Bio, the state's life science advocacy and business association.

Dr. Stice received a B.S. degree in Agricultural Science from the University of Illinois in 1983, an M.S. degree in 1985 from Iowa State University, and a Ph.D. in 1989 from the University of Massachusetts in Amherst.

Krish Roy, PhD

Wallace H. Coulter Dept. of Biomedical Engineering
Georgia Institute of Technology

Dr. Krishnendu (Krish) Roy is the Robert A. Milton Chaired Professor in Biomedical Engineering. At Georgia Tech, he also serves as the Director of the newly established NSF Engineering Research Center for Cell Manufacturing Technologies and The Marcus Center for Cell-Therapy Characterization and Manufacturing - as well as the Director of the Center for ImmunoEngineering. He is also the Technical Lead of the NIST/AMTech National Cell Manufacturing Consortium, a national public-private partnership, focused on addressing the challenges and solutions for large scale manufacturing of therapeutic cells. Dr. Roy's research interests are in the areas of scalable cell manufacturing, Immuno-engineering, stem-cell engineering and controlled drug and vaccine delivery technologies, with particular focus in biomedical materials.

In recognition of his seminal contributions to these fields, Dr. Roy is elected Fellow of the American Institute for Medical and Biological Engineering and the Biomedical Engineering Society. In addition, Dr. Roy has received numerous awards and honors including Young Investigator Awards from both the Controlled Release Society and The Society for Biomaterials, NSF CAREER award, Global Indus Technovator Award from MIT, the CRS Cygnus Award etc. He is also the recipient of Best Teacher Award given by the Biomedical Engineering Students at UT-Austin and the best advisor award given by bioengineering students at Georgia Tech.



He serves as a member of the Editorial Boards of the Journal of Controlled Release, the European Journal of Pharmaceutics and Biopharmaceutics, the Journal of Immunology and Regenerative Medicine, all from Elsevier, as well as the AIChE Journal of Advanced Biomanufacturing and Bioprocessing. He is a member of the Forum on Regenerative Medicine of the National Academies of Science, Engineering and Medicine (NASEM), and a Board Member of the Standards Coordinating Body (SCB) for Cell and Regenerative Therapies.

Fred Sanfilippo, MD, PhD

Emory-Georgia Tech Healthcare Innovation Program
Emory University

Fred Sanfilippo, MD, PhD directs the Emory-Georgia Tech Healthcare Innovation Program, which has a mission to accelerate innovation in healthcare research, education, and service. He also serves as Professor of Pathology and Laboratory Medicine and Health Policy and Management at Emory, and former Medical Director of the Marcus Foundation. For over 30 years he has been an academic leader at Duke, Johns Hopkins, Ohio State and Emory; serving as a division chief, department chair, program/center director, dean, medical center CEO, university senior/executive VP, health system board chair and academic health center CEO. During that time he has led organizational and cultural changes yielding improved academic, clinical, and financial performance at each institution. He also led the creation of the US Scientific Registry of Transplant Recipients; Johns Hopkins Medical Labs; a personalized health plan (YP4H) at OSU; and novel departments and centers in areas ranging from Biomedical Informatics to Personalized Health and Integrative Medicine. Sanfilippo received his BA and MS in physics from the University of Pennsylvania, and his MD and PhD in immunology from Duke, where he also did his residency training, receiving board certification in Anatomic & Clinical Pathology, and Immunopathology.



He has mentored more than 30 graduate student and fellows, served on 13 editorial boards, published over 250 articles, received three patents, and been awarded over \$30 million in sponsored research. He has been board chair of five non-profits, and president of seven academic and professional organizations including the American Society of Investigative Pathology and the American Society of Transplantation.

FOLLOW US ON SOCIAL MEDIA



Tweet your thoughts during the
symposium!
@HIP_Emory #HIPSymposium



Find us on Facebook!
Share your questions and
comments about the symposium!
<https://www.facebook.com/HIP.emory.edu>



Keep up with our latest stories on
Instagram!
@hip_emory