ORGAN BANKING SUMMIT 2015



THE DEVELOPMENT OF LONG-TERM BANKING OF ORGANS AND OTHER COMPLEX TISSUES

TO CATALYZE A VITAL NEW INDUSTRY THAT PERFECTS THE ORGAN PRESERVATION PROCESS, SAVING AND ENRICHING MILLIONS OF LIVES



A STEP TOWARDS AN APOLLO PROGRAM IN ORGAN BANKING

February 26-28, 2015 - Silicon Valley, California

- OPENING DAY CONFERENCE AT STANFORD'S BIO-X CAMPUS, HOSTED BY THE BIOMEDICAL ENGINEERING SOCIETY AT STANFORD

- LAWRENCE BERKELEY NATIONAL LABORATORY SITE VISIT (WITH FOCUS ON BIOLOGICAL NANOSTRUCTURES FACILITY, THE MOLECULAR FOUNDRY)

- SIDE ACTIVITIES AT SU LABS AT NASA RESEARCH PARK IN MOUNTAIN VIEW

- THE REST OF THE SUMMIT WILL TAKE PLACE AT THE SHERATON PALO ALTO

SPEAKERS INCLUDE WORLD LEADING SCIENTISTS FROM:

HARVARD/MGH/MIT, STANFORD, BERKELEY, UOFM, CARNEGIE MELLON, 21ST CENTURY MEDICINE, CELL & TISSUE SYSTEMS AND OTHERS



Organ Banking Summit Host Professor

UTKAN DEMIRCI, Director of Bio-Acoustic MEMS in Medicine Labs at Stanford University

Creator of innovative high-throughput nanoliter cell manipulation technologies for cryopreservation



Co-founder of the Center for Engineering in Medicine and co-Author of 2014 rat liver preservation breakthroughs published in Nature Medicine



GREGORY FAHY, Chief Science Officer at 21st Century Medicine

Lead scientist behind the first successful transplant of a cryopreserved and vitrified mammalian organ (rabbit kidney)



JANET ELLIOTT, Canada Research Chair in Thermodynamics and Professor at University of Alberta

Inventor of engineering modeling derived protocols to vitrify human tissues; World expert on thermodynamics in cryobiology



MICHAEL TAYLOR, Adjunct Professor at Carnegie Mellon and VP for R&D at Cell & Tissue Systems

World leader in vitreous cryopreservation approaches of tissue systems



BORIS RUBINSKY, Professor at University of California, Berkeley

Discoverer of fish antifreeze proteins for cryopreservation solutions and innovative isochoric cryopreservation approach



JOHN BISCHOF, Director of Bioheat and Mass Transfer Lab at the University of Minnesota

Inventor of award-winning rewarming approach based on radio frequency heating of nanoparticles in cryoprotectant solutions



KELVIN BROCKBANK, President and Chief Science Officer of Cell & Tissue Systems

Inventor of clinical cryopreservation methods currently employed for viable meniscal allografts, allogeneic heart valves, ligaments, and vascular grafts.



KENNETH STOREY, Canada Research Chair in Molecular Physiology and Professor in Biochemistry at Carleton University

Creator of new approaches of gene activation that allow organisms to endure and flourish under extreme conditions, such as the frozen "frog-sicles"



ERIK WOODS, President of the International Society of Cryobiology and CEO of Cook General BioTechnology and Genesis Bank

Developed enhanced methods for the preservation and banking of umbilical cord blood-derived stem cells



IDO BRASLAVSKY, Director of the Food-Biophysics and Cryobiology Laboratory and Professor at The Hebrew University of Jerusalem

Pioneer in interaction between Antifreeze Proteins and ice, creator of devices that can monitor the fluorescently labeled proteins with high sensitivity



YOED RABIN, Director of the Biothermal Technology Laboratory and Professor at Carnegie Mellon University

World leader on thermo-mechanical stress and structural damage in cryopreservation; inventor of the cryomacroscope; developer of ultra-miniature, wireless, implantable "cryo sensors"



BARRY FULLER, Lead Global Professor at the UNESCO Chair in Cryobiology and Professor at UCL Medical School / Royal Free Hospital

Pioneer of bio artificial liver and preservation of the largest volume metric organoid bulk - 2 liters of liver spheroids



ALEXANDER PETRENKO, Head of the Biochemistry Department and Professor at the Institute for Problems of Cryobiology and Cryomedicine NAS of Ukraine (IPC&C) and Kharkov University

Creator of methods for the preservation of stem cells and bioartificial tissues



GLORIA ELLIOTT, Director of the Biostability Lab and Professor at University of North Carolina – Charlotte



Ottawa

Creator of next generation preservation agents for the stabilization of biologics and leader in applying molecular understanding to improve cryo processes

ROBERT N. BEN, Canada Research Chair in Medicinal Chemistry and Professor of Organic and Bioorganic Chemistry at the University of

Creator of novel small molecule ice recrystallization inhibitors as cryoprotectants for the long-term storage of biological samples and tissues



JOHN G. BAUST, UNESCO Professor, Chief Scientific Adviser at CPSI Biotech, Director of the Institute of Biomedical Technology at the State University of New York, Binghamton

Expert in the responses to low temperature exposure elicited by mammalian cells, tissues and organs with focus on cryopreservation, cancer biology and tissue engineering



JASON ACKER, President-Elect of the Society for Cryobiology and Professor at the University of Alberta

Creator of new methods for the long-term storage of a number of cell types and tissues



ADAM HIGGINS, Director of the Biotransport and Biomedical Process Engineering Lab and Professor at Oregon State University

Expert in mathematical modeling and optimization of cryopreservation procedures and high flow rate microfluidics for chemical processing



JAMES BENSON, Biomathematician predominantly focusing on cryobiology and Assistant Professor at Northern Illinois University

Expert biomathematician predominantly focusing on heat and mass transfer and cryoprotectant toxicity problems and optimization in cryobiology



DAYONG GAO, Director of the Center for Cryo-Biomedical Engineering and Artificial Organs and Professor at the University of Washington

World expert and inventor of novel technology and instruments for cryopreservation and biobanking



BRIAN WOWK, Cryobiologist and Senior Physicist at 21st Century Medicine

Discoverer and developer of synthetic ice-blockers; Leader in the solid organ cryopreservation field



JOHN MORRIS, Founder and CEO of Asymptote

Leading specialist in cryopreservation, with focus on liquid nitrogen-free and clean-room compatible storage of live biological samples



JOÃO PEDRO DE MAGALHÃES, Director of the Institute of Integrative Biology and Professor at the University of Liverpool

Currently using functional genomics to understand genomics of extreme species like the naked mole rat and the bowhead whale; Currently using function genomic to understand cryoprotectant toxicity



ROBERT SHMOOKLER-REIS, Professor of Geriatric Medicine, Molecular Biology and Pharmacology at the University of Arkansas

Expert in biochemical defense pathways in animals and discoverer of genes regulating longevity in the nematode



GANG ZHAO, Director of the Laboratory for Cryo-Biomedical Engineering and Professor at University of Science and Technology of China

Expert in modeling of heat and mass transfer in cryopreservation and inventor of a novel microfluidics-based microperfusion microscope for investigation of cell osmotic responses



KEVIN STRANGE, President and Professor at MDI biological laboratory and co-Founder and CEO of Novo Biosciences

Developer of small molecules that activate innate healing and regenerative processes of heart tissue



THOMAS E. JOHNSON, Professor of Integrative Physiology at Colorado Boulder and Fellow of Biofrontiers Program

Led the discovery of age-1, the first gene shown to extend longevity of a metazoan. Developing drugs for better organ cryopreservation



RAMON RISCO, Professor of Engineering at the University of Seville, CEO of SafePreservation and Senior Physicist at National Accelerator Centre (Spain)

Inventor of a technology based in sulphur detection by computer tomography for avoiding fractures, controlling ice and monitoring cryoprotectant concentration in organ cryopreservation

... AND MANY OTHER LEADING SPEAKERS FROM CRYOBIOLOGY AND RELATED SCIENTIFIC FIELDS AS WELL AS FROM BIOTECH, VC, GOVERNMENT, STAKEHOLDER ORGANIZATIONS AND TRANSPLANT, TRAUMA AND REGENERATIVE MEDICINE, INCLUDING:



ROBBIE BARBERO, Policy Entrepreneur at the White House Office of Science and Technology Policy

Thought leader for federal science research policy, with a focus on life sciences and grand challenge areas



LT. COL. LUIS M. ALVAREZ, Director of the DoD's three new organ and tissue banking grant programs

Former co-founding Deputy Director of the DoD's Tissue Injury and Regenerative Medicine Program and Deputy Director of AFIRM. Currently the Director of the Center for Molecular Science and Academy Professor at the United States Military Academy



ABBAS ARDEHALI, Chief of Cardiac Surgery at UCLA School of Medicine, Director of the Heart and Heart-Lung Transplant Program and Professor of Cardiothoracic Surgery

World-leading heart transplant surgeon and developer of state-of-the-art perfusion, revival and repair processes to make more hearts available



CHARITY TILLEMANN-DICK, Two-time Double Lung Transplant Recipient

World Class Opera Soprano and Top-Rated TED Speaker



GABOR FORGACS, Scientific Founder of Organovo, Inc.

Authority in bio-mechanics, tissue engineering and pioneer of bioprinting



RONALD ZUCKERMANN, Senior Scientist and Director of the Biological Nanostructures Facility at the Lawrence Berkeley National Laboratory

Pioneer in adapting the fundamental principles of protein folding to man-made polymers, to create novel nanoarchitectures capable of specific molecular functions



PASQUALE PATRIZIO, Professor of obstetrics, gynecology, and reproductive sciences and Director of the Fertility Preservation Program at Yale Medical School (Invited)

Pioneer in methods for cryopreserving intact, whole human ovaries for fertility and hormonal balance preservation



ROBERT STRONG, World-Class Facilitator and Award Winning Comedy Magician

Voted best magician, best comedian and best performer at numerous occasions, performed for two Presidents of the United States and awarded two Civilian Medallions of Distinction from the US Army

THE THIEL FOUNDATION

