SATURDAY, DECEMBER 14, 2019

1:30 PM-3:30 PM  
Haleakala Ballroom Lobby  
Registration

3:30-5:30 PM  
Haleakala Ballroom  
Session Chair – Dan Wattendorf  
Bill and Melinda Gates Foundation  

AFTERNOON PANEL DISCUSSION  
Non-viral vector delivery methods to targeting immune cells  
Panelists: Dan Anderson (MIT); Kerry Benenato (Moderna); James Dahlman (GA Tech)

5:45 PM–6:55 PM  
Valley Isle Lounge and Terrace  
Welcome Reception

EVENING PLENARY SESSION

7:00 PM-7:05 PM- Introduction: Robert Langer and Yasuhiko Tabata

Discussion Leaders: Molly Stevens and Frank Szoka

7:05 PM-7:40 PM – Katsuto Tamai  
Osaka University Graduate School of Medicine  
_Systemic administration of synthesized HMGB1 peptide increases ectoderm-derived mesenchymal stem/progenitor cells in the blood for necrotic tissue repair_

7:40 PM-8:15 PM – Mark E. Davis  
California Institute of Technology  
_Designing nanoparticles to cross the blood-brain barrier_

8:15 PM-8:30 PM - Refreshment Break

8:30 PM-9:05 PM – Marsha Moses  
Boston Children’s Hospital/Harvard Medical School  
_Rationally designed precision theranostics for cancer and its metastases_

9:05 PM-9:40 PM– Hidetoshi Masumoto  
Kyoto University  
_Drug delivery system-based cardiovascular regenerative medicine: From bench to bedside_

9:40 PM-10:15 PM— Tony Voiers and William Daunch  
Advanced Chemotherapy Technologies  
_Active drug delivery of chemotherapeutics via iontophoresis: Bypassing the barriers to traditional pancreatic cancer treatment
SUNDAY, DECEMBER 15, 2019

MORNING PLENARY SESSION

Discussion Leaders: Ana Jaklenec and Steve Kern

8:00 AM-8:35 AM – Dan Hartman
Bill and Melinda Gates Foundation
CMC innovation for global health: Why high-tech solutions fit in the low income world

8:35 AM-9:10 AM – Philip Welkhoff
Bill and Melinda Gates Foundation
Pathway to eradication: An innovation agenda for achieving a malaria-free world

9:10-9:45 AM—Kei Katsuno
Global Health Innovative Technology Fund
Introduction to GHIT Fund

9:45 AM-10:15 AM – Refreshment Break (30 mins)

10:15AM-10:50 AM-- Mark Prausnitz
Georgia Institute of Technology
Microneedle technologies for drug delivery

10:50 AM-11:25 AM-- Samir Mitragotri
Harvard University
Ionic liquids for drug delivery

11:25 AM-12:00PM– Giovanni Traverso
Massachusetts Institute of Technology
Gastrointestinal device development in a few movements

AFTERNOON UNSCHEDULED

EVENING PLENARY SESSION

Discussion Leaders: Sung Wan Kim and Rami Suzuki

7:00 PM-7:35 PM— Chae-Ok Yun
Hanyang University
Reprogrammed oncolytic adenovirus as cancer immunotherapy

7:35 PM-8:10 PM – Takahiro Ochiya
Tokyo Medical University
EV as a novel DDS for cancer therapeutics

8:10 PM-8:35 PM - Refreshment Break

8:35 PM-9:10 PM — Christopher Loose
Frequency Therapeutics, Inc.
Progenitor cell activation: A potential disease modifying approach for hearing loss and other degenerative conditions

9:10 PM-9:45 PM --- James Hedrick
Azul 3D
Unlocking high area rapid 3D printing for manufacturing

9:45 PM-10:20 PM – Masaya Nakamura
Keio University School of Medicine
Regenerative medicine for spinal cord injury using iPS cells
MORNING PLENARY SESSION

Discussion Leader: Yosi Kost and Howie Rosen

8:00 AM-8:35 AM – Shinsuke Sando
University of Tokyo
*Artificial growth factors for controlling cellular functions and fates*

8:35 AM-9:10 AM – Joachim Kohn
Rutgers University
*Delivery of epigenetic modifiers as a promising alternative to the use of cytokines and growth factors in regenerative medicine*

9:10 AM-9:45 AM – Igor Feldman
Verseau Pharmaceuticals
*Completing the immunity cycle by developing myeloid immunotherapies*

9:45 AM-10:15 AM – Refreshment Break

10:15 AM-10:50 AM – Juinichi Kikuta
Osaka University Graduate School of Medicine
*Intravital imaging technology dissecting cellular dynamics in inflammation and cancers in vivo*

10:50 AM-11:25 AM – Joseph DeSimone
Carbon, Inc.
*Digital manufacturing for healthcare applications*

11:25 AM-12:00 PM – Hideyoshi Harashima
Hokkaido University
*Multifunctional envelope-type nano device for gene/nucleic acids delivery: Concept and application to nanomedicine*

AFTERNOON UNSCHEDULED

Discussion Leader: Nicholas Peppas and Sungho Han

EVENING POSTER SESSION 1

7:30 PM – 10:00 PM – Oral Presentation of Posters - Selected from Poster Session #1

Refreshment Break: 8:30 PM

Session ends at approximately 10:00 PM
THE 15TH US-JAPAN SYMPOSIUM ON DRUG DELIVERY SYSTEMS  
DECEMBER 14-18, 2019  

TUESDAY, DECEMBER 17, 2019  

MORNING PLENARY SESSION  

Discussion Leader: Shelley Weinstock and Bruce Zetter  

8:00 AM-8:35 AM – Rogerio Vivaldi  
Sigilon Therapeutics  
Correcting blood disorders by implementation of ex vivo gene-modified allogeneic (human) cells shielded with novel biomaterials  

8:35 AM-9:10 AM – Zhen Gu  
University of California, Los Angeles /Zenomics, Inc.  
Glucose-responsive smart insulin delivery  

9:10 AM-9:45 AM – Rosemary Kanasty  
Lyndra Therapeutics  
Making the most of each oral dose  

9:45 AM-10:15 AM - Refreshment Break  

10:15 AM-10:50AM – Henry Brem  
Johns Hopkins University  
Novel Therapeutics for Brain tumor therapy  

10:50 AM-11:25 AM – Patrick Anquetil  
Portal Instruments  
Connected, needle-free drug delivery—medical injections transformed  

11:25 AM-12:00 PM – Ryo Kojima  
Pharmaceutical Research and Technology Labs., Pharmaceutical Technology, Astellas Pharma Inc.  
Drug delivery application of exosome/extracellular vesicles  

AFTERNOON UNSCHEDULED  

EVENING PLENARY SESSION  

Discussion Leader: Hideyoshi Harashima and Paulina Hill  

7:00 PM-7:35 PM--- Yosuke Hiraoka  
Biomaterial group, R&D Center, Nitta Gelatin Inc.  
Unlocked potential of gelatin—old but new material  

7:35 PM-8:10 PM – Upma Sharma  
Arsenal Medical  
Name of presentation TBD  

8:10 PM-8:35 PM – Refreshment Break  

8:35 PM-9:10 PM – Sabrina M. Johnson  
Daré Bioscience, Inc.  
Personalizing drug delivery for women: A vaginal ring to rule them all  

9:10 PM-9:45 PM – Thomas von Erlach  
Vivtex  
Using the gastrointestinal organ robotic interface system for oral drug delivery applications  

9:45 PM-10:20 PM--Kaitlyn Sadtler  
National Institute of Biomedical Imaging and Bioengineering  
National Institutes of Health  
The immune system in tissue regeneration and medical device development
WEDNESDAY, DECEMBER 18, 2019

MORNING PLENARY SESSION

Discussion Leader: Susan Langer and Rodney Pearlman

8:00 AM-8:35 AM — Lloyd Johnston
Selecta Biosciences
Tolerogenic nanoparticles to enable repeat dosing of gene therapy

8:35 AM-9:10 AM — Chad Mirkin
Northwestern University
Opening the fields of digital medicine and rational vaccinology with spherical nucleic acids

9:10 AM-9:45 AM — Natalie Artzi
MIT/ HMS/ BWH
Combination cancer (immuno)therapy

9:45 AM-10:15 AM — Refreshment Break

10:15 AM-10:50 AM — Yasuhiro Matsumura
EPOC National Cancer Center
Cancer stromal targeting (CAST) therapy

10:50 AM-11:25 AM — Hiroshi Kikuchi
Shonan Research Laboratories, LTT Bio-Pharma
Species difference problem on DDS formulation design and the established commission for the solution

11:25 AM-12:00 PM — John Patton
Aerami Therapeutics
So, you want to do a drug delivery company? Some stuff I’ve learned – Yikes!

AFTERNOON UNSCHEDULED

EVENING POSTER SESSION 2

Discussion Leader: Aimee Hamilton and Hiroshi Kikuchi

7:30 PM Oral Presentation of Posters - Selected from Poster Session #2

Refreshment Break: 8:30 PM

Session ends at approximately 10:00 PM

THANK YOU FOR PARTICIPATING - WE HOPE TO SEE YOU AGAIN AT THE 16TH SYMPOSIUM IN 2021