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-11:25AM- Samir Mitragotri

Harvard University

Ionic liquids for drug delivery

11:25 AM-12:00 PM- 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

MONDAY, DECEMBER 16, 2019

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

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 Anguetil

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

TBD

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