Day 1: Monday, April 22, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30-9:00 am</td>
<td>Registration and Continental Breakfast</td>
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<tr>
<td>9:00-9:10 am</td>
<td>Introduction: Joseph Wu, M.D., Ph.D.</td>
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<td></td>
<td>Director, Stanford Cardiovascular Institute</td>
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<td></td>
<td>Simon H. Stertzer, M.D., Professor of Medicine and Radiology</td>
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<td>Steven Artandi, M.D., Ph.D.</td>
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<td>Director, Stanford Cancer Institute</td>
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<td>Jerome and Daisy Low Gilbert Professor and Professor of Biochemistry</td>
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<tr>
<td>9:10-9:25 am</td>
<td>Welcome Address</td>
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<td></td>
<td>Lloyd Minor, M.D.</td>
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<td>Dean, Stanford School of Medicine</td>
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<td>David Entwistle, M.H.S.A.</td>
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<td>President and CEO, Stanford Health Care</td>
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<td>Paul King, M.H.A.</td>
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<td>President and CEO, Stanford Lucile Packard Children’s Hospital</td>
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Opening Keynote

9:25-9:55 am  Emerging Science and Technology in Health and Medicine: A Brave New World  
Victor Dzau, M.D.  
President, National Academy of Medicine  
9:55-10:05 am  Q&A Session

Session I: Government and Philanthropy

Moderated by Carla Shatz, Ph.D., and Joseph Wu, MD, PhD

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<tr>
<td></td>
<td>James H. Doroshow, M.D.</td>
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<td>NCI Deputy Director for Clinical and Translational Research, NIH</td>
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<tr>
<td>10:25-10:40 am</td>
<td>Big, Team, Open Science at the Allen Institute</td>
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<td>Allan Jones, Ph.D.</td>
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<td>President and CEO, Allen Institute</td>
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<tr>
<td>10:40-10:55 am</td>
<td>Collaboration, Partnerships, and Philanthropy</td>
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<td>Sandy Weill</td>
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<td>Chairman emeritus and former CEO, Citigroup</td>
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<tr>
<td>10:55-11:10 am</td>
<td>CIRM: How California’s Investment is Delivering Something Better than</td>
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<td></td>
<td>Hope</td>
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<td>Maria Millan, M.D.</td>
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<tr>
<td></td>
<td>President and CEO, CIRM</td>
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<tr>
<td>11:10-11:30 am</td>
<td>Panel Discussion</td>
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11:30-1:00 pm Networking Lunch and Poster Viewing

Session II: Publishing Drug Discoveries

Moderated by Sanjay Malhotra, Ph.D., FRSC, and Mark Mercola, Ph.D.

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<th>Time</th>
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<tbody>
<tr>
<td>1:00-1:15 pm</td>
<td>Pre-Print Servers, Data Sharing, and Drug Trials</td>
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Cytokinetics, Gilead Sciences, Khloris Biosciences, Merck  
Media Partner Keystone Symposia
## 4th Annual Stanford Drug Discovery Symposium

**Howard Bauchner, M.D.**  
Editor-in-Chief, JAMA

**1:15-1:30 pm**  
*Breaching Barriers in Translational Research*  
Orla Smith, Ph.D.  
Editor, Science Translational Medicine, Science (AAAS)

**1:30-1:40 pm**  
Panel Discussion

### Session III: Stanford Innovative Medicine

**1:40-2:10 pm**  
Marc Tessier-Lavigne, Ph.D., FRS, FRSC  
President and Bing Presidential Professor, Stanford University  
Lloyd Minor, M.D.  
Dean, Stanford School of Medicine

**2:10-2:30 pm**  
Coffee Break

### Session IV: Drug Therapeutics

**Moderated by Sanjay Malhotra, Ph.D., FRSC and Mark Mercola, Ph.D.**

**2:30-2:45 pm**  
*Pipeline in a Pill: Multiple Indications Treated by a Single Molecule*  
John Reed, M.D., Ph.D.  
Executive Vice President and Global Head of Research and Development, Sanofi

**2:45-3:00 pm**  
*Enabling Precision Medicine: Views from an Industry Perspective*  
Alan Sachs, M.D., Ph.D.  
CSO, Thermo Fisher

**3:00-3:15 pm**  
*Mission-Oriented R&D: Using Heart, Science & Ingenuity, Create Transformational Medicine to Improve the Health of Humanity*  
Mathai Mammen, M.D., Ph.D.  
Global Head of R&D at Janssen Pharmaceutical Company of J&J

**3:15-3:30 pm**  
*Takeda’s R&D Transformation: The Rebirth of a 238-Year-Old Healthcare Institution*  
Andrew Plump, M.D., Ph.D.  
CSO and CMO, Takeda

**3:30-3:45 pm**  
*Opportunities for Advancing R&D: Insights from Human Data*  
Sandra Horning, M.D.  
Head of Global Project Development and Chief Medical Officer, Genentech

**3:45-4:10 pm**  
Panel Discussion

### Presentation of Lifetime Achievement Award

**Moderated by Kuldev Singh, M.D.**

**4:15-4:20 pm**  
*Introduction of John Martin, Ph.D.*  
Paul Berg, Ph.D.  
Robert W. and Vivian K. Cahill Professor of Cancer Research, Emeritus, Stanford University School of Medicine  
Nobel Prize 1980

**4:20-4:40 pm**  
*Awardee Lecture: John Martin, Ph.D.*  
Former Chief Executive Officer, Gilead

**4:45-5:30 pm**  
Wine and Cheese Reception
# 4th Annual Stanford Drug Discovery Symposium

**Day 2:** Tuesday, April 23, 2019

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<tbody>
<tr>
<td>8:00-8:45 am</td>
<td>Registration and Continental Breakfast</td>
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</table>
| 8:45-9:15 am  | **Keynote Address**  
Moderated by Kuldev Singh, M.D.  
*How Exosomes are Made and Selectively Capture Small RNAs for Secretion from Human Cells*  
Randy Schekman, Ph.D.  
HHMI Investigator and Professor, UC Berkley  
Nobel Prize 2013 |
| 9:15-9:25 am  | Q&A Session                                                           |
| 9:25-9:45 am  | **Accelerating Progress in Translational Cancer Research Through Data Integration**  
Brian Druker, M.D.  
Jeld-Wen Chair of Leukemia Research and Director, Knight Cancer Institute, Oregon Health Science University |
| 9:45-9:55 am  | Q&A Session                                                           |

## Session VI: Immunotherapy

Moderated by Beverly Mitchell, M.D. and Sanjay Malhotra, Ph.D., FRSC

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| 10:00-10:15 am| **Immunotherapies: From Dupilumab in Allergic Disease to BiSpecifics in Cancer**  
George Yancopoulos, M.D., Ph.D.  
President and CSO, Regeneron Pharmaceuticals, Inc |
| 10:15-10:30 am| **Exploring Immunotherapy in Immune Diseases and Beyond**  
Jeffrey Bluestone, Ph.D.  
CEO and President, Parker Institute for Cancer Immunotherapy |
| 10:30-10:45 am| **Engineering T Cells for Cancer Therapy**  
Crystal Mackall, M.D.  
Director, Stanford Center for Cell Therapy and Parker Institute for Cancer Immunotherapy |
| 10:40-11:05 am| Panel Discussion                                                       |

11:05-11:25 am Coffee Break

## Stanford Drug Discovery Showcase

Moderated by Anthony Adamis, M.D., and Woodrow Myers, M.D., MBA

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<tr>
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| 11:25-11:35 am| **Next-Generation Gene Editing for Allogeneic Immune Cell Therapeutics**  
Steven Kanner, Ph.D.  
CSO, Caribou Biosciences |
| 11:35-11:45 am| **Small Trials Showing Large Differences – New Paradigms in Cancer**  
Sanjeev Redkar, Ph.D., M.B.A.  
President, Apollomics |
| 11:45-11:55 am| **Targeting Myeloid Cells for Cancer Immunotherapy**  
Charlene Liao, Ph.D.  
President and CEO, Immune-Onc Therapeutics |
| 11:55-12:05 pm| **VCs Encouraging Exploring?**  
Camille Samuels, M.B.A. |
4th Annual Stanford Drug Discovery Symposium

12:05-12:45 pm  
Panel discussion featuring: Anthony Adamis, M.D., Charlene Liao, Ph.D., Woodrow Myers, Jr., MD, MBA, Ram Shriram, Camille Samuels, M.B.A., Steven Kanner, Ph.D., Sanjeev Redkar, Ph.D., M.B.A.

12:45-2:15 pm  
**Networking Lunch and Poster Viewing**

**Session VII:**  
**Artificial Intelligence and Digital Health**  
Moderated by Joseph Wu, M.D., Ph.D.

2:15-2:45 pm  
**Young Sohn**  
President and CSO, Samsung Electronics

2:45-2:55 pm  
Q&A Session

2:55-3:15 pm  
**Future in Health: Drugs, Devices, and Data**  
Peter Fitzgerald, M.D., Ph.D.  
Professor Emeritus, Medicine (Cardiovascular), Stanford University

3:15-3:20 pm  
Q&A Session

**Session VIII:**  
**FDA**  
Moderated by Kuldev Singh, M.D.

3:25-3:40 pm  
**Advancing the Development of Advanced Therapy Medicinal Products**  
Peter Marks, M.D., Ph.D.  
Director, Center for Biologics Evaluation and Research, U.S. FDA

3:40-3:55 pm  
**Mismatch Between Need and Investment in Chronic Disease Drug Development**  
Robert Califf, M.D.  
Former FDA Commissioner; Professor of Cardiology, Duke University

3:55-4:15 pm  
Q&A Session

4:15-4:20 pm  
Closing Remarks, Poster Prize Announcement

4:20-5:30 pm  
**Poster Viewing and Wine and Cheese Reception**