

SYSTEMS BIOLOGY  
BIOINFORMATICS  
BIG DATA

システムバイオロジー  
バイオインフォマティクス  
ビッグデータ

LINK-J will be hosting a symposium on "Systems biology, bioinformatics and big data in medicine and drug development" with Professor Dr. Trey Ideker and Dr. Nathan E. Lewis from the University of California, San Diego (UC San Diego).

We will also bring together Japanese speakers, Dr. Jun Seita from RIKEN and Dr. Hiroaki Kitano from Sony Computer Science Laboratories/the Systems Biology Institute.

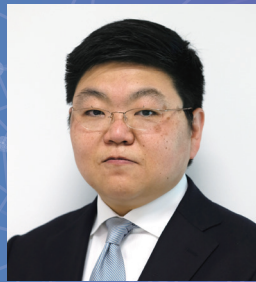
医療と創薬  
medicine and drug development  
における



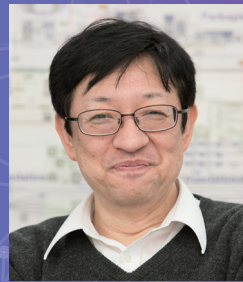
Dr. Trey Ideker



Dr. Nathan E. Lewis



Dr. Jun Seita



Dr. Hiroaki Kitano

2019

2.22

Friday

Nihonbashi Life Science Building 2F Room 201

1:30pm - 7:00pm Doors open at 1:00

6:00 - 7:00 Networking & Reception

Registration LINK-J member ¥1,000 / Non-members ¥5,000 / Free for Students

Hosted by Life Science Innovation Network Japan

Co-hosted by University of California, San Diego

## Biography



### Dr. Trey Ideker

Dr. Trey Ideker is a Professor in the Departments of Medicine, Bioengineering and Computer Science at UC San Diego, and Director or co-Director of three NIH-supported research centers: The NCI Cancer Cell Map Initiative, the NIGMS San Diego Center for Systems Biology, and the NIGMS National Resource for Network Biology. Dr. Ideker received Bachelor's and Master's degrees from MIT in Electrical Engineering and Computer Science and his Ph.D. from the University of Washington in Molecular Biology under the supervision of Dr. Leroy Hood. The long-term objective of the Ideker Laboratory is to create artificially intelligent models of cancer and other diseases for translation of patient data to precision diagnosis and treatment. They seek to advance this goal by addressing fundamental questions in systems biology and bioinformatics.



### Dr. Nathan E. Lewis

Dr. Nathan E. Lewis is an Associate Professor of Pediatrics and Bioengineering and Co-Director of the Jacobs School of Engineering CHO Systems Biology Center at the University of California San Diego. The Lewis lab currently deploys machine learning and systems biology techniques to develop diagnostics for complex childhood disorders such as necrotizing enterocolitis and autism. He further uses similar techniques to unravel the etiology of such diseases and identify how specific molecular pathways are involved in the development of these pathologies. Dr. Lewis helped lead efforts to sequence the Chinese hamster ovary cells. Based on this, he currently leads researchers as they develop complex computational models of cell growth and drug production to guide efforts to engineer CHO cells to increase the quantity, quality, safety, and affordability of recombinant protein drugs.



### Dr. Jun Seita

Dr. Jun Seita is a Unit Leader of RIKEN Medical Sciences Innovation Hub Program. Furthermore, he is a Senior Research Scientist of RIKEN Center for Integrative Medical Sciences, a Research Scientist of RIKEN Center for Advanced Intelligence Program, a Visiting Scholar of Stanford University Institute for Stem Cell Biology & Regenerative Medicine. He received a M.D. from the School of Medicine, University of Tsukuba, Japan and a Ph.D. in Medicine from University of Tokyo, Japan. He made his career at Stanford University as a Postdoctoral Research Fellow, Instructor and Research Associate, also a CIRM Research Scholar at California Institute for Regenerative Medicine.



### Dr. Hiroaki Kitano

Dr. Hiroaki Kitano is a President & CEO at Sony Computer Science Laboratories, Inc.. Moreover, he is a Senior Vice President at Sony Corporation, a President at The Systems Biology Institute, Tokyo, and a Professor at Okinawa Institute of Science and Technology Graduate University. He received a B.A. in physics from the International Christian University, Tokyo, and a Ph.D. in computer science from Kyoto University. He has been a visiting researcher at the Center for Machine Translation at Carnegie Mellon University from 1988 to 1994. From 1998, he worked as a Project Director at Kitano Symbiotic Systems Project & ERATO and the continuous reaserches until 2008. He is also an Editor-in-Chief of npj Systems Biology and Applications, and a Founding President of The RoboCup Federation. He engages in the studies such as calculation biology, artificial intelligence, massively parallel computer, an autonomy robot, systems biology, and the open energy system.

## Program (English-Japanese simultaneous Interpretation is available)

1:00pm	Doors open
1:30- 1:35	Opening Remarks Ms. Miwako Waga (UCSD)
1:35 - 1:40	Opening Remarks & Introducing LINK-J Akihiko Soyama (LINK-J)
1:40 - 2:40	Dr. Trey Ideker "Decoding genomes through the hierarchical architecture of the cell"
2:40 - 3:20	Dr. Nathan Lewis "Engineering mammalian cell factories with big data and systems analyses"
3:20 - 3:35	Break
3:35 - 4:15	Dr. Jun Seita "System-level understanding of gene expression profile based on global-scale meta-analysis "
4:15 - 4:55	Dr. Hiroaki Kitano "AI-Driven Systems Biology "
4:55 - 5:55	Panel Discussion
5:55 - 6:00	Closing Remarks
6:00 - 7:00	Networking Reception

## Registration

Register here

<https://systemsbiology-linkj.peatix.com>



## Participation fee

LINKJ members ¥1,000/ Non-members ¥5,000/  
Free for Students

\*For LINKJ Supporters and members contact us for discount code.

## Venue

Nihonbashi Life Science Building 2F Room 201  
2-3-11,Nihonbashi-honcho, Chuou-ku, Tokyo 103-0023

