Personalized Medicine 9.0

Gene Therapy and Genome Editing

This Changes Everything!

South San Francisco Conference Center
Thursday 26 May 2016
8:00am - 7:30pm

http://personalizedmedicine.sfsu.edu

A San Francisco State University Biology Conference
Personalized medicine seeks to use genetic variation to develop new diagnostic tests and treatments and to identify the sub-groups of patients for whom they will work best. This approach can also help determine which groups of patients are more prone to developing some diseases and, ideally, help with the selection of lifestyle changes and/or treatments that can delay onset of disease or reduce its impact. This year, in our ninth annual conference on personalized medicine, we address the promise of technologies like genome editing for gene therapy and drug discovery. The correction of genetic disease has been elusive until very recently, but the process of genome editing through the CRISPR/Cas9 system has revolutionized the field with unprecedented speed, and unparalleled opportunities. CRISPR has also proved to be one of the most powerful tools in basic genetics and biology developed in the last century, and provides new ways to understand cellular function. We explore the science behind gene therapy and genome editing, the ethics of germline gene manipulation, and the implications for the future of the pharmaceutical industry and the human species.

An SF State Biology Conference
Michael A. Goldman | goldman@sfsu.edu
2016 Conference 26 May

Conference Program At-A-Glance

8:00  Breakfast & Networking
8:50  Introductory Remarks
   Michael A. Goldman, Ph.D., Chair, Department of Biology at SF State
   Host: Richard M. Lawn, Ph.D., Executive Director, Scientific Affairs, Audentes Therapeutics
9:00  Keynote: Gene therapy in action
   Barrie Carter, Ph.D., Vice President, Vector Biology, BioMarin Pharmaceutical Inc.
10:00 Break
10:30 Gene therapy: State of the science
   Fyodor Urnov, Ph.D., Vice President, Discovery and Translational Research, Sangamo BioScience
11:15 Technological advances in gene therapy and genome editing
   Eric Rhodes, Chief Technology Officer, Horizon Discovery
12:00 Lunch & Networking
1:10  Remarks:
   Keith J. Bowman, Ph.D., Dean, College of Science & Engineering, SF State
1:15  CRISPR – This changes everything!
   Andrew May, D.Phil., Chief Scientific Officer, Caribou Biosciences
2:00  A CRISPR approach to animal genome editing
   Soren Warming, Ph.D., Senior Scientist, Genentech, Inc.
2:45  Networking Break
3:15  CRISPR genome editing in stem cells to model human disease
   Kathryn N. Ivey, Ph.D., Assistant Professor of Pediatrics, University of California, San Francisco, and the Gladstone Institute
4:00  Panel: The state of clinical gene therapy
   Session Leader: Richard M. Lawn, Ph.D., Executive Director, Scientific Affairs, Audentes Therapeutics
   Barrie Carter, Ph.D., Vice President, Vector Biology, BioMarin Pharmaceutical Inc.
   Kathryn N. Ivey, Ph.D., Assistant Professor of Pediatrics, University of California, San Francisco, and the Gladstone Institute
   Andrew May, D.Phil., Chief Scientific Officer, Caribou Biosciences
   Eric Rhodes, Chief Technology Officer, Horizon Discovery
   Fyodor Urnov, Ph.D., Vice President, Discovery and Translational Research, Sangamo BioScience
   Soren Warming, Ph.D., Senior Scientist, Genentech, Inc.
   Chong Wing Yung, Ph.D., Advanced Research Scientist, Agilent Technologies
5:00  Ethical and regulatory aspects of genome editing & gene therapy: This could be dangerous!
   Janet D. Stemwedel, Ph.D., Professor & Chair, Department of Philosophy, San Jose State University
5:45  Closing Remarks
   Kevin Mullin, Speaker Pro Tempore & Chair, Select Committee on Biotechnology, California State Assembly
   Michael A. Goldman, Ph.D., Chair, Department of Biology at SF State
5:55  Reception, Student Posters & Awards
7:00  Close of conference
Thank you to our 2016 Sponsors

Platinum Partner

Biomarin

Partners

Genentech

A Member of the Roche Group

Gilead

Advancing Therapeutics. Improving Lives.

Sponsors

ACT Oncology

Supporters

Agilent Technologies

KENSON VENTURES, LLC

Media Partners

CCIS

Center for Computing in the Life Sciences

CALIFORNIA LIFE SCIENCES ASSOCIATION

Professional Science Masters

BioQuick News