

3rd ANNUAL

Re-writing Genomes: A New Era in Genome Engineering August 24, 2015

Organized by **Dirk Hockemeyer**, Assistant Professor, Molecular and Cell Biology, UC Berkeley,
and **Jennifer Doudna**, Professor, Molecular and Cell Biology, UC Berkeley, HHMI Investigator

8:30-9:00 Welcome/Introductions

SESSION 1: MOLECULAR MECHANISMS

9:00-9:30 **Jennifer Doudna**, Session Chair, Professor, UC Berkeley, HHMI, *Genome Surveillance by CRISPR-Cas 9*

9:30-9:50 **Eric A. Hendrickson**, Professor, University of Minnesota, *Two Mechanisms for Nick-induced Gene Targeting*

9:50-10:10 **Shengdar Tsai**, Postdoctoral Researcher, Massachusetts General Hospital, Harvard Medical School, *Title TBA*

10:10-10:30 **Pedro Mateos-Gomez**, Postdoctoral Researcher, New York University Medical Center, *Mammalian Polymerase Theta Promotes Alternative-NHEJ and Suppresses Recombination*

10:30-11:00 Break (refreshments & posters in the lobby)

SESSION 2: THE CAS9 REVOLUTION

11:00-11:30 **Emmanuelle Charpentier**, Session Chair, Professor, Helmholtz Centre for Infection Research, MIMS, Umeå University, *Title TBA*

11:30-11:50 **Luciano A. Marraffini**, Assistant Professor, The Rockefeller University, *Title TBA*

11:50-12:10 **Raj Chari**, Postdoctoral Fellow, Harvard University, *Title TBA*

12:10-1:45 Lunch Break (provided onsite for registered guests)

1:45-2:00 Afternoon Introduction

SESSION 3: GENOME EDITING IN STEM CELLS

2:00-2:30 **Rudolf Jaenisch**, Session Chair, Professor, Biology, MIT, *Gene Editing of Human Stem Cells and the Study of Complex Human Diseases*

2:30-2:50 **Danwei Huangfu**, Assistant Professor, Memorial Sloan Kettering Cancer Center, *Explore Complex Human Genetics through Genome Editing in Pluripotent Stem Cells*

2:50-3:10 **Brock Roberts**, Graduate Student, UC Berkeley, *Title TBA*

3:10-3:30 **Kunitoshi Chiba**, Graduate Student, UC Berkeley, *Title TBA*

3:30-4:00 Break (refreshments & posters in the lobby)

SESSION 4: CRISPR/CAS9 EXPLORATIONS

4:00-4:30 **Eric Lander**, Session Chair, Professor, Broad Institute, *Title TBA*

4:30-4:50 **Max Horlbeck**, Graduate Student, UCSF, HHMI, *Genome-scale control of gene repression and activation*

4:50-5:10 **Ophir Shalem**, Postdoctoral Fellow, Broad Institute, UC Berkeley, *Title TBA*

5:10-5:30 **Michael C. Holmes**, Vice President, Research—Genome Editing, Sangamo BioSciences, Inc., *Genome Editing in Primary Human Cells and Organs: Towards the Goal of Engineering Genetic Cures*

5:30-5:45 Closing Remarks