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PRECISION CRISPR

NEXT GENERATION GENOME EDITING APPLICATIONS

Deliver More Precise, Efficient & Safer Genome Editing to Optimize Drug Discovery, Functional Screening & CRISPR-based Cell & Gene Therapies

Expert speakers include:

TJ Cradick
Head of Genome Editing
CRISPR Therapeutics

Lucas Harrington
Co-founder, Chief Discovery Officer
Mammoth Biosciences

Beeke Wienert
Postdoctoral Researcher,
Innovative Genomics Institute, Conklin & Corn labs, Gladstone Institutes, San Francisco

George M. Church, PhD.
Professor of Genetics
Department of Genetics, Blavatnik Institute,
Harvard Medical School

Samantha Maragh
Leader, Genome Editing Program
NIST

PJ Brooks
Program Coordinator
NIH Common Fund Program on Somatic Cell Genome Editing

Neville Sanjana
Core Faculty Member at the **New York Genome Center** and Assistant Professor in the **Departments of Biology and of Neuroscience**

Namjin Chung
Head of Functional Genomics
AbbVie

Ultan McDermott MB PhD
Chief Scientist
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5th Precision CRISPR Genome Editing Congress

Engineering the Next Generation of Drug Discovery, Cell & Gene Therapy Applications

Designed with CRISPR experts from the likes of **CRISPR Therapeutics**, **Astrazeneca, AbbVie, Broad Institute, Casebia, Merck, Amgen** and academic key opinion leaders, this year's meeting encapsulates the critical scientific challenges and opportunities of CRISPR applications.

Tackling delivery, safety, precision and efficiency best practice, further optimize your drug discovery, functional screening and translation of CRISPR-based cell and gene therapy into the clinic.

With the first wave of CRISPR based therapeutic clinical trials firmly underway, the **5th Precision CRISPR Genome Editing Congress** is perfectly timed to demonstrate the growing applications of CRISPR and unique approaches to gene therapy.

With 100+ thought-leaders converging at the **Precision CRISPR Genome Editing Congress**, this will surely be an unrivalled opportunity for you to access the latest clinical data, define protocol best practice and gain insight on the future trends of CRISPR as the genetic engineering landscape rapidly continues to evolve.

Hear what previous attendees have to say

"Last year's event was a thought provoking mix of speakers, panels and lively discussion. I left energized, better informed and better connected and I'm counting on the same this year"

Past attendee, Precision CRISPR Congress 2018

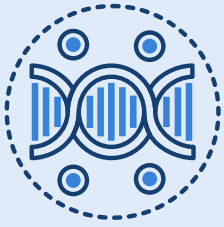
"I greatly enjoyed the diversity and topic coverage of the talks, thanks for putting together an excellent program!"

Christina Kolodzy, Syros Pharmaceuticals, Past attendee, Precision CRISPR Congress 2018

"A high-quality worthwhile conference, attended by first rate professionals. I learned more than I anticipated I would"

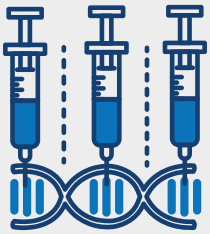
Past attendee, Precision CRISPR Congress 2018

Precision CRISPR Genome Editing Congress will allow you to:

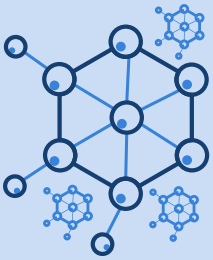


Learn how CRISPR is working in a **clinical setting** and unique approaches to **gene therapy** from **CRISPR therapeutics**

Hear how **Amgen** is designing a pipeline using CRISPR and **iPSC disease modelling** and how artificial intelligence can improve iPSC cultures



Explore how we are **engineering CRISPR enzymes** to have superior properties and how **base editing** is set to revolutionize the industry with **Harvard Medical School**



Discover the wealth of **CRISPR screening techniques** available and how to implement them into your own drug discovery pipeline with **Astrazeneca**

Hear how **Mammoth Biosciences** are developing the next-generation CRISPR platforms for **diagnostics**

"Thank you for having me. I have attended all CRISPR Congresses and they keep getting better"

John Sundman, Past attendee, Precision CRISPR Congress 2018

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EXPERT SPEAKERS

TJ Cradick
Head of Genome Editing
CRISPR Therapeutics

Jesper Gromada
CSO
Exonics Therapeutics

Beeke Wienert
Postdoctoral Researcher
Innovative Genomics Institute, Conklin & Corn labs, Gladstone Institutes, San Francisco

George M. Church, PhD.
Professor of Genetics
Department of Genetics, Blavatnik Institute
Harvard Medical School

Niren Murthy
Professor
UC Berkeley

PJ Brooks
Program Coordinator
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Neville Sanjana
Core Faculty Member at the **New York Genome Center** and Assistant Professor in the **Departments of Biology and of Neuroscience**

Namjin Chung
Head of Functional Genomics
AbbVie

Leire Escudero-Ibarz
Senior Scientist, Gene editing and iPSC technology, Functional Genomics
GSK

Ben Kleinstiver
PhD, Principal Investigator Massachusetts General Hospital Instructor,
Harvard Medical School

Jonathan Gootenberg
PhD
McGovern Fellow
MIT

Omar Abudayyeh
Independent MIT McGovern Fellow at the **McGovern Institute for Brain Research at MIT**

David Alvarado
Associate Principal Scientist
Merck

Guru Channabasavaiah
Associate Professor-Genetics, Director- Mouse Genome Engineering Core Facility
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Stuart Chambers
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Garrett Rettig
Director of Molecular Genetics Product Development
IDT

Eric Paul Bennett
Associate Professor
University of Copenhagen

Abraham Scaria
VP, Head of Ophthalmology
Casebia Therapeutics

CARIBOU BIOSCIENCES

Megan van Overbeek
Associate Director of Functional Genomics
Caribou Biosciences, Inc.

Dan Tierno
Associate Director, Global Clinical Data Sciences and Analytics
Bayer

Lucas Harrington
Co-founder, Chief Discovery Officer
Mammoth Biosciences

Samantha Maragh
Leader, Genome Editing Program
NIST

Kevin Holden
Head of Synthetic Biology
Synthego

Wojtek Auerbach
ISTT President, Senior Director Emeritus, Embryonic Stem Cells Technologies
Regeneron Pharmaceuticals Inc

"Precision CRISPR was a great opportunity to learn from outstanding speakers and to network with industry leaders"

Past Attendee, Precision CRISPR Genome Editing Congress 2018

CONFERENCE DAY ONE
WEDNESDAY MAY 22 2019

8.00 **Breakfast & Registration**

8.30 **Chair's Opening Remarks and State of Address**

Points to consider throughout the meeting with respect to current affairs surrounding CRISPR:

- Where are we with this technology and have we gone too far? What's in store for the future?
- Where do we stand in terms of gene drive, public health and the resulting ethical considerations of genome editing?
- Ultimately, can we marry scientific ambition with ethical constraint?

Pre-clinical and Clinical Insights from Ground Breaking Therapeutic Companies

Faster than we expected, CRISPR translated to the clinic. Through demanding discussions, CRISPR therapeutics have paved the way but what challenges did these ground-breaking therapeutic companies have to overcome, what slowed them down and how did they settle regulatory fears in pioneering this space? In this session we learn about how CRISPR is working in a clinical setting, pre-clinical validation studies and clinical candidates for CRISPR based cell and gene therapy.

TJ Cradick
Head of Genome Editing
CRISPR Therapeutics

8.40 **CRISPR Therapeutics Provides Clinical Insights into CTX001 for the Treatment of Sickle Cell Disease**

- High percentage of gene editing and no detectable off-target modifications in human primary CD34+ cells
- Clinically relevant pharmacodynamic effect in edited cells
- Similar rates of editing and effects in patient cells
- Progress on Beta-Thalassemia clinical trial

Jesper Gromada
CSO
Exonics Therapeutics

9.10 **How Gene Editing Therapies Can Treat Genetic Neuromuscular Diseases**

- Explanation on how Exonics' novel SingleCut CRISPR gene editing technology works
- How this technology aims to repair the most frequent mutations causing Duchenne muscular dystrophy

Megan van Overbeek
Associate Director of Functional Genomics
Caribou Biosciences, Inc.

9.40 **Next-generation Gene Editing Technology for Allogeneic T Cell Therapeutics**

- Next-generation CRISPR-Cas9 technology with enhanced editing specificity
- Development of CB-010 to treat hematological malignancies

10.10 **Morning Refreshments & Speed Networking**

Tools for On and Off-target Characterization and Validation

What's new in the development of the bioinformatics pipeline? How can we precisely predict genome editing outcomes? The steps involved in elucidating the validity of the desired edit is crucial to progression of the industry. This session aims to decipher where the industry stands with regards to off-target effects and reiterates the importance of researching DNA repair mechanisms in understanding the effects of CRISPR.

Eric Paul Bennett
Associate Professor
University of Copenhagen

11.10 **Fast and Accurate Quantification of On and Off-target CRISPR Genome Editing Outcomes**

- A comparative review of the different methodologies for indel identification
- gRNA dependent non-random indel formation
- gRNA design determined indel outcomes
- Fast and quantitative in vitro, *ex vivo* and *in vivo* indel profiling

BIO-RAD

11.40 Session details to be confirmed. Please check back for speaker and presentation information

Beeke Wienert
Postdoctoral Researcher
Innovative Genomics Institute, Conklin & Corn Labs, Gladstone Institutes, San Francisco

12.10 Unbiased Detection of CRISPR Off-targets in Vivo Using Discover-Seq

- ChIP-Seq for DNA repair proteins provides information on CRISPR-Cas cleavage at a molecular level
- We developed this approach into an unbiased method to detect off-targets after CRISPR-Cas9 editing that we termed DISCOVER-Seq
- DISCOVER-Seq is applicable to cultured cells, primary cells and even allows off-target discovery in animal models (during adenoviral editing)
- DISCOVER-Seq gives novel insight into DNA repair dynamics after CRISPR-Cas9 editing

Leire Escudero-Ibarz
Senior Scientist, Gene editing and iPSC technology, Functional Genomics
GSK

12.40 Precision Gene Editing in iPSC-derived Macrophages for Early Drug Discovery

- Generation of a robust cellular platform to generate human macrophages from differentiated induced pluripotent stem cells (iPSCs) for disease modelling and target validation
- Implementation of precision gene editing in both iPSC and iPSC-macrophages by using CRISPR
- Optimization of single cell deposition of iPSCs to increase throughput and automation in cell line generation

13.10 Networking Lunch

Novel Technological Developments That Lead to Increased Safety and Specificity of CRISPR

It's been demonstrated, optimized and proven –what's the value of researching beyond Cas9? This session focuses on further optimising Cas9, whilst showcasing what other variants we now have available and introducing base editing: the technique that sets to revolutionalize precision gene editing.

George M. Church, PhD.
Professor of Genetics Department of Genetics, Blavatnik Institute
Harvard Medical School

14.10 Multiplex Editing & Differentiation

- An increasing number of applications need multiplex precise mutations
- These include universal allogeneic cell therapies, CAR-T, xenotransplantation, virus-resistant recoding
- Alternatives to CRISPR for this include Integrases, Deaminases, HDR and Lambda Red
- Synthetic tissues for therapies or pre-clinical or individualized trials need differentiation of multiplex cell types in a shared medium

Garrett Rettig
Director of Molecular Genetics Product Development
IDT

14.40 Development of Novel Cas9 and Cas12a Mutants: Defining Editing Efficiency and Specificity

- HiFi Cas9 RNP delivery maintains on-target activity and dramatically reduces off-target editing
- Conversely, novel Cas12a variants markedly increase on-target editing activity while maintaining the minimal off-target profile
- Multi-plexed amplification via rhAmpSeq is used for target enrichment of genomic loci to provide quantitative NGS assessment of insertions/deletions

Ben Kleinstiver
PhD, Principal Investigator
Massachusetts General Hospital
Instructor, **Harvard Medical School**

15.10 Engineering CRISPR Enzymes to have Superior Properties

- Inherent properties of CRISPR nucleases can be suboptimal, leading to insufficient activity, specificity, and targeting range
- We have used directed evolution and rational protein engineering strategies to enhance each of these properties
- Our engineered CRISPR-Cas9 and -Cas12a nucleases improve gene, epigenome, and base editing

15.40 Networking Break and Poster Session

Jonathan Gootenberg
PhD McGovern Fellow
MIT

Omar Abudayyeh
Independent MIT McGovern Fellow at the **McGovern Institute for Brain Research at MIT**

16.20 Harnessing Novel CRISPR Systems for Genome Engineering and Human Health

- Discovery of new CRISPR systems expands the molecular toolbox
- RNA editing allows for specific and transient modifications to nucleic acid information
- Evolution of new RNA editing enzymes enables new functionality

PJ Brooks
Program Coordinator
NIH Common Fund Program on Somatic Cell Genome Editing

16.50 The NIH Common Fund Somatic Cell Genome Editing (SCGE) Program: Tools for Translation into the Clinic

- Overview and goals of the NIH SCGE program
- What do we do for diseases that could benefit from genome editing but are so rare that there is no plausible business model?
- Thoughts on developing a CRISPR based platform as a solution for those rare diseases that have no business model

17.20 Chair's Closing Remarks

17.30 End of Day One

"Extremely valuable – worth the investment of time. Definitely will attend again"

Past attendee, Precision CRISPR Congress 2018

"A high-quality worthwhile conference led by an outstanding faculty and attended by first rate professionals. I learned more than I anticipated I would"

Past attendee, Precision CRISPR Congress 2018

CONFERENCE DAY TWO
THURSDAY 23RD MAY 2019

Namjin Chung
Head of Functional Genomics
AbbVie

8.30 Chair's Opening Remarks:
Review of yesterday, and introduce the theme of the day:
Expanding the CRISPR toolbox and overcoming the current limitations within functional genomics

How Functional Genomics and Screening Applications of CRISPR have Revolutionized the Drug Discovery Pipeline

How can optimizing screening techniques ensure greater clinical success? Technological innovations within screening and improved target identification are allowing CRISPR to span in a multitude of promising directions and the amalgamation of CRISPR screening with artificial intelligence sets to transform the road towards precision personalized medicine.

David Alvarado
Associate Principal Scientist
Merck

8.40 How CRISPR Based Screening Systems can be used in Parallel for Target Identification and Validation
- Description of types of genome-wide screens used for drug discovery
- Interpreting data and determining mechanisms of disease pathology from pooled CRISPR screens
- High-throughput validation of druggable targets

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9.10 CRISPR Screening on Primary T cells
- Successful demonstration of pooled lentiviral screening in primary human T cells
- Drug-gene interaction confirms anticipated responses and identifies novel targets
- Donor hit calling is evident, but key hit calling is very consistent

Neville Sanjana
Core Faculty Member at the **New York Genome Center** and Assistant Professor in the **Departments of Biology and of Neuroscience**

9.40 New Frontiers for Pooled Screens: Finding Regulatory Elements in the Noncoding Genome and Capturing Multi-Cell Interactions
- High-throughput methods to perturb genes and noncoding elements in the genome
- Interpreting the data from designing and introducing a pooled CRISPR library
- Identifying novel genetic mechanisms for cancer immunotherapy

Paul Diehl
Chief Operating Officer
Cellecta

10.10 Combining CRISPR Editing and Cell Barcoding to Elucidate Gene Function and Advance Target Discovery
- Labeling individual cells with unique barcodes detectable by both NGS and RNA sequencing provides a way to identify cell subpopulations and track fractions of cells experiencing phenotypic changes such as activation, differentiation, etc
- Cellular barcoding with genetic effector libraries, such as CRISPR sgRNA libraries, can be used to tease out the phenotypic changes and response from biological perturbations in cell subpopulations
- Robust gene expression profiling of many thousands of cells requires a targeted RNA sequencing approach compatible with barcoding techniques

10.25 Morning Refreshments

Namjin Chung
Head of Functional Genomics
AbbVie

10.55 Synergy between CRISPR Functional Genomics and Human Genetics to Enhance Biopharmaceutical R&D Pipeline Success
- Building CRISPR functional genomics infrastructure at AbbVie
- Use of in vitro and in vivo CRISPR screens to drive novel target discovery and translational research
- CRISPR approaches to functional validation of human genetics data

Ultan McDermott
MB PhD
Chief Scientist
AstraZeneca, Honorary Faculty
and Former Group Leader, **Wellcome Sanger Institute**

11.25 How to Build a Streamlined Approach to CRISPR Screening

- Using different screening libraries to build high quality combined datasets
- Strategies for the analysis of genome-scale CRISPR data, from classical statistics to artificial intelligence
- How to create a 'useful' computational pipeline – finding needles in haystacks
- Efficient validation protocols post genome-wide CRISPR screens

Lucas Harrington
Co-founder, Chief Discovery Officer
Mammoth Biosciences

11.55 Discovering and developing next-generation CRISPR platforms for diagnostics

- Newly discovered CRISPR systems contain unique properties that improve the CRISPR toolbox
- How we translate pioneering research to build a CRISPR platform
- Exploration of the initial platform, how it makes use of an aresenal of unique CRISPR proteins and how they allow us to sense virtually any type of nucleic acid

12.25 Networking Lunch

Progression within the Vexing Dilemma of In-Vivo Delivery

Delivery is the limiting factor for the progression of CRISPR-based genetic engineering. What's the point in having all these precision tools if we can't yet confidently utilize them for in-vivo applications? Historically, adeno-associated virus vectors have been the adopted delivery method, but long expression of Cas9 and complicated targeting issues has led to a shift in focus. Here, we explore innovative methods for in-vivo delivery including the use of nanoparticles.

Abraham Scaria
VP, Head of Ophthalmology
Casebia Therapeutics

13.25 Viral Engineering Strategies to Alleviate Barriers Towards Successful Delivery: A Specific Focus on the Retina

- The use of AAV vectors for gene delivery
- Gene therapy & gene editing in retina
- Engineering a way to reduce the temporal expression of Cas9

Niren Murthy
Professor
UC Berkeley

13.55 Exploring Innovative Methods for Non-Viral In-Vivo Delivery

- How to use nanoparticles for more effective delivery
- How this delivery technique overcomes previous in-vivo hurdles
- Potential applications for advanced therapy
- Update as to where we are in the field currently

Generating More Predictable Disease Models with CRISPR

As we aim to understand the backbone of genetic diseases and seek to discover treatments, the use of genetic models for diseases is vital. Here we aim to extrapolate shared learnings when it comes to CRISPR editing on different cell types and how to design a pipeline for CRISPR editing and iPSC disease modeling

Guru Channabasavaiah
Associate Professor-Genetics, Director-Mouse Genome Engineering Core Facility
University of Nebraska Medical Center

14.25 CRISPRing Made Easier to Create Animal Models for Basic and Drug Discovery Research

- Introduction to decades-old traditional transgenic technologies to create animal models
- Discussion of technological breakthroughs such as Easi (Efficient additions with ssDNA inserts)-CRISPR and Genome editing via Oviductal Nucleic Acids Delivery (GONAD)
- Discussion of how the latest technological advances have redefined the traditional transgenic methods in CRISPRing animal genomes

Wojtek Auerbach
ISTT President, Senior Director Emeritus, Embryonic Stem Cells Technologies
Regeneron Pharmaceuticals Inc

14.55 Generation of humanized mouse models

- To test drug candidates we produce mice expressing a gene for human target
- We replace entire mouse gene loci with their human orthologue
- Our approach consists of simultaneous electroporation of ES cells with RNPs targeting a mouse gene to be deleted with a human BAC-based targeting vectors

Stuart Chambers
Senior Scientist
Amgen

15.25 Industrializing iPSC CRISPR Editing and Disease Modeling

- An industry perspective of using CRISPR and iPSCs
- How to design a pipeline for CRISPR editing and iPSC disease modeling
- How Artificial Intelligence can improve iPSC cultures

Thinking ahead: Standardization of CRISPR Protocols and Commercialization

Eliminating reproducibility issues by introducing CRISPR protocols. Discussions based on the commercialization of CRISPR seem rapid, but it's worth looking forward considering the short period of time taken to race CRISPR to the clinic.

Dan Tierno
Associate Director, Global Clinical Data Sciences and Analytics
Bayer

Samantha Maragh
Leader, Genome Editing Program
NIST

Kevin Holden
Head of Synthetic Biology
Synthego

15.55 Panel Discussion: Standardization and Reproducibility of CRISPR Protocols Across the Industry

- What standards should be set to efficiently drive the translation of genome editing to the clinic
- How can we endeavour to co-create protocols for best practice with normalized data
- Clarifying expectations across global regulatory bodies

Namjin Chung
Head of Functional Genomics
AbbVie

16.40 Chair's Closing Remarks

16.50 End of Day Two & Close of 5th Precision Genome Editing Congress 2019

PRE-CONFERENCE WORKSHOPS

Workshop A — May 21 — 10:00-13:00

From CRISPR Basics to the Practical Aspects of Designing and Developing Gene Edited Animals and Cell Lines

Designing and developing cell lines using CRISPR method, although is a very popular method, it can be challenging for beginners as well as for experienced researchers when handling some difficult cell lines, particularly primary cells. This session aims to provide basics of CRISPR gene editing to create cell lines and provide practical insights and consideration to optimize editing in commonly-used and difficult-to-handle cell lines.

- Basics and practical considerations of designing CRISPR experiments for creating knockout/knock-in animals and cell lines
- Available tools for CRISPR KO/KI experiments
- Single cell cloning techniques and confirmation of clones

This workshop aims to help enhance editing in cell lines that are demanding to manipulate and will involve informative advice on best practices complemented by group discussions.

Workshop Leader:

Guru Channabasavaiah
Associate Professor-Genetics, Director- Mouse Genome Engineering Core Facility
University of Nebraska Medical Center

Guru (CB Gurumurthy) is an Associate Professor of Developmental Neuroscience, Munroe Meyer Institute for Genetics and Rehabilitation at the University of Nebraska Medical Center. He is also the Director of the UNMC's Mouse Genome Engineering Core Facility. His research interests are improving and development of novel genome engineering technologies. He is a co-developer of popular technologies such as Easi (Efficient additions with ssDNA-inserts)-CRISPR, CRISPR-first: PITT-next and GONAD (Genome Editing via Oviductal Nucleic Acids Delivery). Some of these technologies have already been adapted in many labs worldwide.

Workshop B — May 21 — 14:00-17:00

How to Design and Implement a CRISPR Library for Internal Use

CRISPR libraries are becoming increasingly critical to help improve the efficiency of your processes, be it drug discovery, disease modelling, or target identification. There are many different approaches for designing a library and this workshop helps you evaluate which library will suit your processes best.

- Defining your exact library needs to build an effective and tailored roadmap towards implementation
- Comparative analysis on the types of libraries available to identify which one best matches your needs
- Development of easy, time- and cost-effective methods enabling large-scale screening approaches
- What should a useful computational pipeline deliver?

This workshop provides you with a 360° view on all the techniques and technologies currently being used to get the most out of CRISPR libraries. The aim is to leave this session with the information you need to ensure you can go back to the lab and set up the most up to date, efficient, accurate and reliable CRISPR library that complements and helps drive your current research to success.

Workshop Leader:

Ultan McDermott
MB PhD Chief Scientist
AstraZeneca, Honorary Faculty and Former Group Leader, Wellcome Sanger Institute

Ultan continues to maintain strong working relationships with colleagues in the Cancer, Ageing and Somatic Mutation program at the Sanger as a member of Honorary Faculty. He also holds an Honorary Consultant post in the Oncology department at Addenbrooke's Hospital in Cambridge, where he treats colorectal cancer patients. Ultan joined the Sanger Institute in 2009 as a clinical research fellow and was appointed to the faculty as a Group Leader in 2010 with the award of a Cancer Research UK Clinician Scientist Fellowship. Previously he worked as a postdoctoral fellow with Jeff Settleman at Massachusetts General Hospital Cancer Center, Boston on high-throughput cancer cell line drug screens and resistance mechanisms. He is a Fellow of the Royal College of Physicians

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Synthego is the genome engineering innovation company. The company's automated, full stack genome engineering platform enables broader access to CRISPR to accelerate basic scientific discovery, uncover cures for diseases and develop novel synthetic biology applications. Headquartered in Silicon Valley, Synthego is used by scientists from the largest global biotechnology companies and global biology universities to unlock the potential of gene editing.

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Harriet Menzel
Partnership Director
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www.aldevron.com

Solentim

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Solentim® has established itself over the past 7 years as the world leader and innovator of new instruments for streamlining the cell line development workflow. We will feature the VIPS™ platform for high throughput, automated Single Cell Cloning which is a key step in any gene editing and cell engineering workflow. This system has many advantages over a FACS-based approach and additionally provides image documentation of clonality. To find out more information and watch the VIPS video visit production, and quality assurance.

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Harriet Menzel
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1. Network with CRISPR thought leaders to share, learn and collaborate in a joint effort to safely translate *in vivo* & *ex vivo* gene therapies into the clinic
2. Overcome the critical delivery & off target effect challenges of implementing CRISPR and examples of some of the most pioneering work to date
3. Discover new and innovative methods of optimizing CRISPR systems, beyond Cas9, and be part of the conversations transforming the field

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- **10% discount – 3 delegates**
- **15% discount – 4 delegates**
- **20% discount – 5 or more delegates**

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Standard/Industry Rate	Register Before April 12 2019	Standard Pricing
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Conference + 1 Workshop	$3298 **(save $300)**	$3498 **(save $100)**
Conference Only	$2699 **(save $200)**	$2899
Workshop Only	$699	

Academic/Non Profit Rate	Register Before April 12 2019	Standard Pricing
Conference + 2 Workshops	$2297 **(save $400)**	$2497 **(save $200)**
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Conference Only	$1699 **(save $200)**	$1899
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VENUE

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