CRISPRMED25 Final Programme

- CRISPRMED25 Programme digital version – click here
- Abstract Section – click here (*only visible for registrants*)
- Participant Section – click here (*only visible for registrants*)

Monday, 07 April 2025

15:00 - 17:15	**CRISPR Medicine Conference 2025 Virtual: Oral session – more details** **Transformative Gene Editing: From Rare Disease Models to Clinical Applications**	
	Fetal gene therapy in a mouse model of Krabbe disease using virus-like particles | **Asma Naseem**[1] [1]UCL Great Ormond Street Institute of Child Health, UK	ID 111
	Transforming cardiometabolic disease treatment paradigm: Advancing in vivo CRISPR-based therapies to target key dyslipidemia drivers | **Maria Mirotsou**[1] [1]Scribe Therapeutics, US	ID 143
	In vivo genome editing: Translating science from bench to bedside **Emma Wang**[1] [1]YolTech Therapeutics, China	ID 131
	Achieving non-viral high-fidelity gene editing and gene insertion: updates from Poseida Therapeutics | **Blair Madison**[1] [1]Poseida Therapeutics, US	ID 140
	Clinical progress of off-the-shelf CAR-T cell therapies engineered with CRISPR hybrid RNA-DNA (chRDNA) genome-editing technology | **Tina Albertson**[1] [1]Caribou Biosciences, Inc., US	ID 125
17:15 - 18:00	**CRISPR Medicine Conference 2025 Virtual: Poster session – more details**	
	Precise Gene Writing System for CAR-T cell therapy generation **Paolo Petazzi**[1] [1]Integra Therapeutics, Spain	ID 7
	Designing and cloning of single guide RNA for green fluorescent protein| **Mahla Sadat Hosseini**[1, 2] [1]Department of Stem Cells and Developmental Biology, Cell Science Research Centre, Royan Institute for Stem Cell Biology and Technology, ACECR, Tehran, Iran, [2]Department of Basic and Population Based Studies in NCD, Reproductive Epidemiology Research Center, Royan Institute, ACECR, Tehran, Iran	ID 14
	Engineering tripartite gene editing machinery for highly efficient non-viral targeted genome integration | **Hao Wu**[1] [1]Whitehead institute, US	ID 34
	Cas9 mRNA and its aggregate analysis on SEC HPLC | **Konstantin Musiychuk**[1] [1]Sepax Technologies, US	ID 102
	Genome-wide off-target assessment of adenine base editing: Establishing a WGS pipeline for safe gene correction **Aidin Kazemizadeh**[1] [1]King's College London, UK	ID 108

Tuesday, 08 April 2025

09:00 - 13:25	**CRISPRMED25 Workshops – more details**	
09:00 - 13:00	**Founders' Breakfast – more details**	
11:00 -	**CRISPRMED25 In-Person Conference Registration Opens**	
14:00 - 14:15	**CRISPRMED25 Opening Address by CRISPR Medicine News**	
14:15 - 15:00	**Patient Voice**	
	Scaling the mountain: Expanding gene therapy to underserved communities | **Jimi Olaghere**	ID 52
15:00 - 16:00	**Keynote Address**	
	CRISPR-Cas: From bacterial immunity towards genome editing and beyond | **Virginijus Šikšnys**[1] [1]Vilnius University Life Sciences Centre, Lithuania	ID 121
16:00 - 16:30	**Coffee Break**	
16:30 - 18:30	**Genome Editing: From Pioneering Foundations to Modern Applications**	
	Foundations of genome editing: Past, present and future | **Dana Carroll**[1] [1]University of Utah, US	ID 20
	Origins and applications of genome editing | **Srinivasan Chandrasegaran**[1] [1]Johns Hopkins School of Public Health, US	ID 9
	A universal CRISPR analytical platform for precision monitoring of CRISPR reagents and editing efficiency | **Kiana Aran**[1] [1]University of California San Diego, US	ID 133
	From linear synthesis to ligation: Comparative insights into long nucleic acid production (sponsored) | **Philipp Kamm**[1] [1]BioSpring GmbH	ID 130
18:30 - 21:00	**Poster and Networking Session 1**	

Wednesday, 09 April 2025

06:30 - 07:15	**Fun Run in Copenhagen (sponsored by Vivlion)**	
08:00 - 10:05	**Clinical Implementation of Gene-Editing Therapies: Progress and Solutions**	
	Refining tumor-infiltrating lymphocytes for adoptive cell therapy in solid tumors | **Özcan Met**[1, 2] [1]National Center for Cancer Immune Therapy (CCIT-DK), Department of Oncology, Copenhagen University Hospital, Herlev, Denmark, [2]Department of Health Technology, Technical University of Denmark, Lyngby, Denmark	ID 120
	Paving the way to a single source for gene editing with strategic expansions (sponsored) | **Amanda Haas**[1] [1]Agilent Technologies, US	ID 118
	CRISPR-directed gene editing for head and neck cancer, a patient centric approach | **Eric Kmiec**[1] [1]Gene Editing Institute at ChristianaCare, Delaware, US	ID 13
	Next-generation CRISPR genome editing to combat fatal genetic diseases and extend lifespan | **Alvin Luk**[2, 3] [2]HuidaGene Therapeutics, [3]Cholgene Therapeutics, China	ID 49
	Accelerating cell and gene therapy success with cGMP-compliant gene editing components (sponsored) | **Juliana Campo**[1] [1]GenScript Biotech, Netherlands	ID 123
	Large scale manufacturing of a hematopoietic stem cell gene editing-based protocol for Pyruvate kinase deficiency therapy (short talk) | **Jose-Carlos Segovia**[1] [1]Cell Technology Division, Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT) and Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER); Unidad Mixta de Terapias Avanzadas. Instituto de Investigación Sanitaria Fundación Jiménez Díaz (IIS-FJD, UAM), Madrid, Spain	ID 27
	PathCrisp and EdiCrisp: CRISPR-powered innovations for enhanced diagnostics and therapeutics (short talk) | **BS Kruthika**[1, 2] [1]Crisprbits Private limited, [2]Crisprbits laboratory	ID 54
10:05 - 10:30	**Coffee Break**	
10:30 - 12:00	**Beyond Conventional CRISPR-Based Genome Editing**	
	CRISPR/Cas transcriptional gene regulation in hematopoietic cells **Rasmus Bak**[1] [1]Department of Biomedicine, Aarhus University, Denmark	ID 114
	RNA base editing with endogenous ADAR | **Thorsten Stafforst**[1] [1]Interfaculty Institute of Biochemistry; University of Tübingen, Germany Gene and RNA Therapy Center, University Hospital, Faculty of Medicine, Tübingen, Germany	ID 11
	Decoding the molecular mechanisms of CRISPR-associated transposons to reset genome engineering | **Guillermo Montoya**[1] [1]University of Copenhagen, Denmark	ID 135
	Improving CRISPR base editing efficiency prediction through data generation and deep learning (short talk) | **Ying Sun**[3] [2]Center for non-coding RNA in Technology and Health, Department of Veterinary and Animal Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, Frederiksberg, Denmark	ID 76
	Efficient genome editing using 'NanoMEDIC' AsCas12a-VLPs produced with Pol II-transcribed crRNA (short talk) **Natalia Kruglova**[1] [1]Center for Precision Genome Editing and Genetic Technologies for Biomedicine, Institute of Gene Biology Russian Academy of Sciences, 119334 Moscow, Russia,	ID 32
12:00 - 13:00	**Panel Discussion: Patient Access to CRISPR Medicine – More details**	
13:00 - 13:45	**Lunch**	
13:45 - 15:45	**Understanding the Outcomes of Genome Editing**	
	Single-cell profiling of genome-editing alterations and functional outcomes in CRISPR-engineered cells | **Ayal Hendel**[1] [1]Bar Ilan University, Israel	ID 117
	Evolving solutions for effective genotoxicity assessment in CRISPR-based editing (sponsored) | **Ashley Jacobi**[1] [1]Integrated DNA Technologies, US	ID 97

	Genome editing with AZD7648 induces large-scale genomic alterations | **Gregoire Cullot**[3] [3]Department of Biology, Institute of Molecular Health Sciences, ETH Zurich, Zurich, Switzerland	ID 24
	Precision genotyping tools for gene editing analysis and characterization (sponsored) | **Iván Hernández-Neuta**[1] [1]Countagen AB, Sweden	ID 142
	Modelling CRISPR-Cas9 kinetics reveals recurrent cleavage, precise repair, and chromosomal aberration dynamics (short talk) **Alexander Chalk**[1] [1]AstraZaneca, Sweden	ID 81
	INDUCE-seq®: Ensuring the safe development of cell and gene therapies by gene editing (sponsored) | **Simon Reed**[1] [1]Broken String Biosciences, UK	ID 113
	Cell-type and time-resolved genotoxicity of base editing (short talk) **Sandra Ammann**[2] [2]Institute for Transfusion Medicine and Gene Therapy, Medical Center - University of Freiburg, Freiburg, Germany	ID 90
15:45 - 16:45	**Panel Discussion: Navigating Regulatory Pathways for CRISPR Medicine – More details**	
16:45 - 17:15	**Coffee Break**	
17:15 - 19:00	**Functional Genomics - In Vivo and In Vitro CRISPR Screens**	
	Dissecting intracellular signaling with base editor screens **Jakob Nilsson**[1] [1]Danish Cancer Institute, Denmark	ID 58
	Targeting tumor specific copy number alterations using CRISPR-Kill **Rob Wolthuis**[1] [1]Amsterdam UMC, Netherlands	ID 60
	Revealing neuronal vulnerabilities with direct in vivo AAV-mediated CRISPR screens | **Alessio Strano**[1] [1]Department of Biosystems Science and Engineering, ETH Zurich, 4056 Basel, Switzerland	ID 39
	The next frontier in functional genomics: design, execution and analysis of combinatorial CRISPR screens (sponsored) **Manuel Kaulich**[1] [1]Vivlion GmbH and Goethe University Frankfurt, Germany	ID 128
	CRISPR-based functional genomics for AAV production (short talk) **Alessandra Recchia**[1] [1]University of Modena and Reggio Emilia, Italy	ID 50
19:00 - 21:00	**Exhibitor Evening**	

Thursday, 10 April 2025

06:30 - 07:15	**Fun Run in Copenhagen**	
08:00 - 10:00	**Advances in Gene-Edited Cell Therapies**	
	Novel editing approaches to beta-hemoglobinopathies **Annarita Miccio**[1] [1]Imagine Institute, France	ID 62
	Genome editing by homology directed repair (HDR) to create stem cell based drugs | **Matthew Porteus MD, PhD**[1] [1]Sutardja Chuk Professor of Definitive and Curative Medicine Department of Pediatrics Institute of Stem Cell Biology and Regenerative Medicine Stanford University, US	ID 116
	Mechanistic insights to further advance gene and cell therapy applications | **Raffaella Di Micco**[1] [1]SR-TIGET, Italy	ID 46
	Fuelling cancer immunotherapy through gene editing **Karim Benabdellah**[1] [1]Genyo, Spain	ID 141
	Circularization of single-stranded DNA improves TALEN-mediated gene insertion in long term HSC and in primary T cells (short talk) **Julien Valton**[1] [1]Cellectis SA, France	ID 3
	Assessing the safety and applicability of transient p38 inhibition in genome editing protocols for hematopoietic stem and progenitor cells (short talk) | **Roberta Vacca**[1, 2] [1]San Raffaele Telethon Institute for Gene Therapy (SR-Tiget), IRCCS San Raffaele Scientific Institute, 20132, Milan, Italy, [2]Vita-Salute San Raffaele University, 20132, Milan, Italy, Italy	ID 71
10:00 - 10:25	**Coffee Break**	
10:25 - 12:15	**In Vivo Gene Editing For the Treatment of Rare Diseases**	
	In vivo gene editing for the treatment of metabolic diseases **Alessia Cavazza**[1, 2] [1]Molecular and Cellular Immunology section, Department of Infection, Immunity & Inflammation, UCL Great Ormond Street Institute of Child Health, University College London, 20 Guilford Street, WC1N 1DZ, London, UK, [2]Department of Medical and Surgical Sciences for Children and Adults, University of Modena and Reggio Emilia School of Medicine, Via del Pozzo 71, 41125, Modena, Italy	ID 122
	Correcting genetic diseases by in vivo base- and prime editing **Gerald Schwank**[1] [1]Institute of Pharmacology and Toxicology, University of Zurich, Switzerland	ID 138
	Dual precise repair of disease-causing mutations in compound heterozygous muscular dystrophy (short talk) | **Helena Escobar**[2] [2]Muscle Research Unit, Experimental and Clinical Research Center (ECRC), a joint cooperation between the Charité - Universitätsmedizin Berlin and the Max Delbrück Center for Molecular Medicine in the Helmholtz Association (MDC), Berlin, Germany	ID 105
	Lung targeting lipid nanoparticle (LNP) delivery for cystic fibrosis (short talk) | **Marco S. Weinberg**[1] [1]ReCode Therapeutics, US	ID 95
	EDSpliCE: AAV-deliverable enhanced deletion RNA-guided nucleases for therapeutic splicing modulation - applied to Usher syndrome (short talk) | **Salome Spaag**[1] [1]Institute for Ophthalmic Research, University Hospital Tübingen, Germany	ID 80
	Adenine base editors as a breakthrough in advanced genetic therapy for COL6-RD (short talk) | **Arístides López-Márquez**[1] [1]Institut de Recerca Sant Joan de Deu, Spain	ID 17
12:15 - 13:30	**Special Session: Democratising Genetic Medicine – More details**	
	Genome engineering education and capacity building in Africa **Thomas O. Auer**[1, 2] [1]University of Fribourg, Department of Biology, Switzerland, [2]TReND in Africa, UK Gene4all, Spain	ID 137
	Equity in health and diverse genomes: Unveiling Africa's potential **Segun Fatumo**[1] [1]Queen Mary University of London, UK	ID 136
	Panel discussion: Advancing equitable access to genetic technologies in research and healthcare **Vincenzo Di Donato**[1] [1]Gene4All	ID 144

13:30 - 14:15	**Lunch**	
14:15 - 16:00	**Innovations in Gene-Editing Delivery Systems**	
	Harnessing a diverse collection of CRISPR-associated RNA-guided nucleases and a proprietary nonviral delivery platform for precise gene editing | **Lilian Lamech**[1] [1]Life Edit Therapeutics, an ElevateBio Company, US	ID 77
	Development of SORT lipid nanoparticles (LNPs) for genome correction of disease-causing mutations | **Daniel Siegwart**[1] [1]University of Texas Southwestern Medical Center, US	ID 48
	Engineered lentivirus-derived particles for in vivo CRISPR RNP delivery and prime editing | **Jacob Giehm Mikkelsen**[1] [1]Aarhus University, Denmark	ID 115
	AI-designed protein binders for gene editor modulation and AAV retargeting | **Martin Pacesa**[1] [1]EPFL, Switzerland	ID 6
	Enabling production of next-generation genetic medicines through comprehensive CRISPR manufacturing solutions (sponsored) **Max Sellman**[1] [1]Aldevron, US	ID 127
16:00 - 17:00	**Special Session: The Path to the First Genome-Editing Trial – More details**	
17:00 - 17:30	**Coffee Break**	
17:30 - 19:00	**WeDoCRISPR Poster Flash Talks**	
19:00 - 22:00	**CRISPRMED25 Evening**	

Friday, 11 April 2025

06:30 - 07:15	**Fun Run in Copenhagen**	
08:50 - 11:00	**Technological Advances Within In Vivo Genome Editing**	
	ePsCas9: A robust Cas9 with SpOT-ON precision for therapeutic genome editing **Marcello Maresca**[1] [1]AstraZeneca, Sweden	ID 132
	Genome-wide activity of a CRISPR/Cas9 system that targets collagen VI mutations **Cecilia Jimenez-Mallebrera**[1] [1]Institut de Recerca Sant Joan de Déu. Hospital Sant Joan de Déu Barcelona, Spain	ID 18
	Engineering CRISPR technologies for cardiovascular medicine **Julian Grünewald**[1] [1]TUM, Germany	ID 66
	Long-circulating lipid nanoparticles (lcLNP) effectively deliver nucleic acids to hematopoietic stem and progenitor cells in the bone marrow (short talk) | **Jessica Silva**[2] [2]NanoVation Therapeutics	ID 85
	Optimisation of advanced gene editing techniques and their application in the treatment of cardiovascular diseases (short talk) **Sayari Bhunia**[1, 2, 3] [1]Institute of Pharmacology, Heidelberg University, Heidelberg, Germany, [2]DZHK (German Center for Cardiovascular Research), Partner Site Heidelberg/ Mannheim, Heidelberg University, Heidelberg, Germany, [3]Heidelberg Biosciences International Graduate School (HBIGS), Heidelberg, Germany	ID 36
	Harnessing bacteriophage vectors to deliver CRISPR tools for targeted microbiome therapies | **Antoine Decrulle**[1] [1]Eligo Bioscience, France	ID 139
11:00 - 11:25	**Coffee Break**	
11:25 - 13:15	**Functional Genomics - Discovery and Function Studies**	
	Systematic surveys of synthetic lethality with the CRISPR/Cas12a IN4MER platform | **Travor Hart PhD**[1] [1]Associate Professor, Dept of Systems Biology University of Texas MD Anderson Cancer Center, US	ID 12
	The effect of genetic perturbations on bioactivity across modalities **James Longden**[1] [1]Evolvus	ID 119
	A proteome-wide dependency map of protein interaction motifs (short talk) | **Sara M. Ambjørn**[1] [1]Novo Nordisk Foundation Center for Protein Research, University of Copenhagen, Denmark	ID 57
	Programmable genome disruption enables selective elimination of cancer cells using a novel CRISPR-Cas nuclease (short talk) **Michael Krohn**[1] [1]Akribion Therapeutics GmbH, Germany	ID 134
	Sensitive dissection of a genomic regulatory landscape using bulk and targeted single-cell activation (short talk) | **Dubravka Vučićević**[1] [1]Computational Regulatory Genomics, Berlin Institute for Medical Systems Biology of the Max Delbrück Center for Molecular Medicine in the Helmholtz Association, Germany	ID 74
	CRISPR/Cas-based approaches using iPSC-derived cardiomyocytes and heart spheroids for modelling of Duchenne muscular dystrophy (short talk) | **Józef Dulak**[1, 2] [1]Jagiellonian University, [2]Department of Medical Biotechnology, Faculty of Biochemistry, Biophysics and Biotechnoloy, Jagiellonian University, Kraków, Poland	ID 21
13:15 - 13:45	**Closing Address by CRISPR Medicine News**	
13:45 - 14:00	**Light Refreshments** **OBS: The Cph Canal Trip will be 16:00 – 17:00 for delegates signed up for this social activity**	