FESTIVAL OF BIOLOGICS

WORLD IMMUNOTHERAPY CONGRESS

Marriot Marquis
9th-11th March 2022

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Confirmed speakers

Andrei Ramirez-Valdez, PhD, MBA, NIH **Vaccine Research Centre** (CONFIRMED)
Avery Posey, Assistant Professor of Pharmacology, **University of Pennsylvania**
Brenda Hann, Director, Clinical Trials Operations, **Stanford University**
Brian Champion, Chief Scientific Officer, **PsiOxus**
Brian Safina, Vice President, **Bolt Biotherapeutics**
Bruce Keyt, CSO, **IGM Biosciences**
Christopher Robertson¸ Professor of Law, **Boston University**
Cokey Nguyen, Chief Scientific Officer, **Atara Biotherapeutics**
Dario Neri, CEO & CSO, **Philogen**
David Quach, Instructor**, Baylor College of Medicine**
Eric Halioua, President & CEO, **PDC*line Pharma**
Erika Stevens, Principal Scientist**, Recherche Transformation Rapide**
Felipe de Sousa e Melo, Scientist, **Genentech**
Haining Huang, CSO, **Cytimm Therapeutics**
Håkan Norell, Director and Head of Oncology Research, **Nykode trerapeutics**
Hans Keirstead, CEO, **Avita Biomedical**
Huan Cai, Scientist**, Teva Pharm**
Iulia Diaconu, VP Immunotherapy, **Elevate Bio**
Jae Sly, Chief Business Officer-**LigaTrap Technologies**
Jeffrey Miller, Deputy Director, **University of Minnesota Medical School**
Jeonghoon Han, Vice President, Chief Business Officer**, EUTILEX**
Kamal Puri, Chief Scientific Officer**, OncoResponse**
Karin Jooss, Chief Scientific Officer, **Gritstone Bio**
Ken Simon, Head of Protein Science, **Revitope Oncology**
Krzysztof Masternak, Director of Drug Discovery, **Light Chain Bioscience – A Brand of Novimmune SA**
Laszlo G. Radvanyi, PhD, President & Scientific Director**, Ontario Institute for Cancer Research**
Leah Sibener, Co-Founder, VP Therapeutic Discovery**, 3T BioSciences**
Lelia Delamarre, Principal Scientist, **Genentech**
Mark Mamula, Professor, **Yale University**
Marc Martinez-Llordella, Founder & Vice President, **Quell Therapeutics**
Mark Cragg, PhD, Professor, Experimental Cancer Biology, Antibody & Vaccine Group, School of Cancer Sciences, **University of Southampton**
Mark Mamula, Professor of Medicine**, Yale University**
Mark A. Wallet, VP, Head of Immunology**, Century Therapeutics**
Marya Chaney, Senior Executive Director, Oncology Clinical Development, Merck
Matteo Levisetti, M.D., Senior Vice President, Clinical Development, **Cue Biopharma Inc.**
Matthew Hewitt, Executive Director, Scientific Services **, Charles River**
Nicolas Poirier, Chief Scientific Officer, **OSE Immuno**
Ning Wang, Bioinformatics Scientist & Bioinformatics lead on Immuno-oncology, **Arcus Biosciences**
Oscar Segurado, Chief Medical Officer, **ASC Therapeutics**
Paul Parren, Head of R&D**, Lava Therapeutics**
Peter Yingxiao, Professor of Bioengineering, **Institute of Engineering in Medicine**
Philip Arlen, President & Chief Executive Officer, **Precision Biologics**
Rajkumar Ganesan, Director, Bispecific Antibodies & CAR T, **Janssen**
Rajarsi Gupta, Assistant Professor, Department of Biomedical Informatics at **Stony Brook Medicine**
Ravi Ramenani, Product Manager, Single Cell Immune Profiling, **10x Genomics**
Robert Wild, Chief Scientific Officer**, Dracen Pharmaceuticals**
Roy Baynes, Senior VP & Head of Global Clinical Development, CMO, **Merck**
Samantha Bucktrout, Senior Director of Research**, Parker Institute of Cancer Immunotherapy**
Sanjay Jain, PhD Director, Global Regulatory Affairs Strategy, Product Development Consultancy, **Labcorp Drug Development**
Stephen Beers, Professor of Immunology and Immunotherapy**, University of Southampton**
Theodore Roth, Managing Director, Phd Student**, University of California**
Tova Landström, Medical Science Director, **Alligator Biosciences**
Senior Representative, Isoplexis
Shaun Lippow, Senior Director, Protein Engineering**, Atreca**
Shruti Malu, Associate Director Drug Discovery & Biology**, Immunitas Therapeutics**
William Singleterry, Commercial Director Immuno-oncology**, Lumicks**
Yu Zhang, SVP & CSO**, VCanBio Cell & Gene Engineering**

Day 1 – Wednesday 9th March			
	Opening Keynotes		
9:00am	Welcome from Terrapinn		
9:05am	Chair's opening remarks **Jae Sly,** Chief Business Officer-**LigaTrap**		
9:10am	**A personalized, pan-antigenic immunotherapy** • A pan antigenic approach, protecting against mutation-associated loss of function • A personalized medicine, which minimizes adverse events and maximizes efficacy • A scalable and readily available platform **Hans Keirstead**, CEO, **Avita Biomedical** (CONFIRMED)		
9:35am	**Preclinical/Clinical Development of a Neo-epitope targeted Monoclonal Antibody for Cancer therapy** • Antibody/target identification • Mechanisms of action (MOA): ADCC and others • Clinical Trial Development based on MOA **Philip Arlen,** President & Chief Executive Officer, **Precision Biologics** (CONFIRMED)		
10:00am	**Engineered Induced pluripotent stem cells (iPSC) derived NK cells and immune engagers as off-the-shelf therapeutics to treat cancer** • Understand NK cell biology and current single donor allogeneic NK cell cancer therapy experience and limitations • Understand multidosing NK cell product design, NK-CARs and early clinical experience • Understand targeted delivery of IL-15 with immune engagers to increase NK cell specificity **Jeffrey Miller,** Deputy Director, **University of Minnesota Medical School** (CONFIRMED)		
10:40am	**Networking Break**		
11:30am	**Round Tables**		
	Round Table 1 **Technologies to Interrogate the Solid Tumor Microenvironment** **Hosted by Samantha Bucktrout, PICI**	**Round Table 2** **Title TBA** **Hosted by Mark Cragg, Professor of Experimental Cancer Biology, University of Southampton**	**Round Table 3** **Neoantigens and Biomarkers of Cancer and Autoimmunity** **Hosted by Mark Mamula, Professor of Medicine, Yale University**
	Round Table 4 **Host Cell Proteins in Bioprocessing**	**Round Table 5** **Title TBA**	**Round Table 6**

	Hosted by Jae Sly, Chief Business Officer-**LigaTrap Technologies**	**Hosted by Stephen Beers, Professor of Immunology and Immunotherapy, University of Southampton**	**Challenges in Immunotherapy Clinical Trial Design** **Open Discussion**
	Round Table 7 **Advances in allogenic cell therapy** **Open Discussion**	**Round Table 8** **Improving efficacy of cancer Immunotherapy and patient safety** **Open Discussion**	**Round Table 9** **Affordability of Immuno-oncology Treatments** **Open Discussion**
12:35pm	**Networking Lunch**		
	Antibodies for Immunotherapy *Shared track with the Antibody Congress*	**Cell & Gene Therapy**	**Checkpoint Inhibition & Tumor Microenvironment**
	Chair: Kamal Puri, Chief Scientific Officer**, OncoResponse** (CONFIRMED)	**Chair:**	**Chair: Stephen Beers,** Professor of Immunology and Immunotherapy**, University of Southampton**
2:00pm	**Repurposing E3 ubiquitin ligases as cell surface protein degraders using Proteolysis Targeting Antibodies** • Hyperactivation of oncogenic Wnt signaling in CRC leads to tumor specific expression of membrane bound E3 Ubiquitin ligases • Novel bispecific antibodies that bind and tether membrane E3 ligases to various receptors lead to tumor specific degradation of receptors • This technology, that we dubbed PROTABs (Proteolysis Targeting Antibodies) is generalizable to various targets and membrane E3 ligases **Felipe de Sousa e Melo**, Scientist, **Genentech** (CONFIRMED)	**T-SIGn vector-mediated reprogramming of the tumor microenvironment drives T-cell dependent immunotherapy for solid tumors** **Brian Champion,** Chief Scientific Officer, **PsiOxus** (CONFIRMED)	**Defining discrete resistance mechanisms to immune checkpoint therapy in hot and cold tumors** • T cell infiltrate can be increased in cold tumors with dual checkpoint inhibitor therapy. • Tumor inflammatory pathway gene expression differentially associates with clinical benefit to checkpoint inhibitor therapy in hot and cold tumor types. • Broad and specific engagement of innate and adaptive immune mechanisms associate with clinical benefit for discrete immunotherapeutics and tumor molecular landscapes. **Samantha Bucktrout,** Senior Director of Research, **Parker Institute of Cancer Immunotherapy** (CONFIRMED)
2:20pm	**Best Practices for Centralizing People, Processes, and Data to Accelerate Biologics R&D** The rate in which antibody treatments for Covid-19 reached the market has shifted public perception on how quickly biopharmaceutical organizations operate.	**Introduction of Eutilex's Innovative T cell Therapies (4-1BB based Autologous T cell Therapy) and CAR-T Development in HCC and B cell Malignancies** • Introduce cutting edge technique of 4-1BB based, cancer antigen specific, autologous adaptive T cell	**Sirpiglenastat (DRP-104), a broad acting glutamine antagonist, metabolically reprograms glutamine addicted cancer cells and significantly remodels the**

	To streamline operations and better meet these demands for increased speed, leadership across the industry must centralize the capture, processing, and sharing of data across the R&D lifecycle. This presentation will explore strategies on how to best organize your R&D IT infrastructure to adapt to the complex needs of biologics R&D in today's market. **Sean McGee,** Life Sciences Product Specialist**, Benchling**	therapy (Eutilex T cell Therapy) and application power of Eutilex T cell Therapy through TAST (Tumor Antigen Specific T cell Therapy) strategy in solid tumors • Differentiating features of novel CAR-T target, GPC-3, that empower global competitiveness against emerging CAR-T techniques **Jeonghoon Han,** Vice President, Chief Business Officer**, EUTILEX** (CONFIRMED)	**tumor microenvironment leading to anti-tumor immune responses** • Sirpiglenastat (DRP-104) is a novel broad-acting glutamine antagonist that has been shown to metabolically reprogram glutamine addicted cancer cells inducing a single agent anti-tumor response • Sirpiglenastat treatment results in remodeling of the tumor microenvironment leading to stimulation of both the innate and adaptive immune systems and strong therapeutic synergy with immune checkpoint inhibitors • Sirpiglenastat is currently in a first in human phase 1/phase 2a clinical trial in adult patients with advanced solid tumors **Robert Wild,** Chief Scientific Officer**, Dracen Pharmaceuticals** (CONFIRMED
2:40pm	**Guided Antibody Tumor Engagers (TwoGATE™), the Next Generation T cell redirecting therapeutics for solid tumors** Harnessing the Immune System has revolutionized cancer treatment. However, on-target off-tumor toxicities including Cytokine Release Syndrome limits the therapeutic potential of such treatments. Revitope is developing a new class of cancer therapeutics called precision GATEs (Guided Antibody Tumor Engagers). At the heart of the technology is the split anti-CD3 paratope that enables targeting each inactive half-paratope to a different antigen on the same tumor cell. The absolute requirement for the presence of two different solid-tumor antigens on the same cancer cell may enable greater tumor-specificity. TwoGATE™ demonstrate potent in vitro activity and in vivo, they direct T cells to tumors where they are activated, expanded, and induce potent tumor cell killing. TwoGATE™ are well-tolerated in non-human primates and have highly favorable developability properties. **Ken Simon,** Head of Protein Science, **Revitope Oncology** (CONFIRMED)	**Cellular avidity between tumor and effector cells, but not affinity, predicts downstream function of cellular immunotherapies** • Introduction of novel technology to measure cell avidity of immunotherapeutic products • What cell avidity adds to the fundamental understanding of the mode of action and efficacy • Proof points that show predictiveness and reproducibility of cell avidity as a new parameter **William Singleterry,** Commercial Director Immuno-oncology**, Lumicks**	**Immune environment and its impact on checkpoint blockade** • mAb classes have different requirements for FcγR engagement and mechanisms of action • Tumour microenvironments change the context for mAb therapy • Choice of isotype can be critical in dictating immune checkpoint blockade mAb efficacy and must understand the impact of the immune environment for successful application **Stephen Beers,** Professor of Immunology and Immunotherapy**, University of Southampton** (CONFIRMED)

3:00pm	**Enhancing immune response with signal 2 bispecifics and signal 3 cytokines** • A novel class of CD28 bispecific antibodies can enhance activity of anti-PD1 antibodies and CD3 bispecfic antibodies • Potency reduced cytokines (e.g. IL15, IL12) improve therapeutic index and duration of action **John Desjarlais**, CSO, **Xencor** (CONFIRMED)	**Pooled screening of next-generation cellular therapies** • Large scale pooled screening libraries of CAR and TCR cell therapies • Association of synthetic genotypes with high dimensional single cell phenotypes • Identification of novel knockin constructs that improve cellular fitness across exhaustion and target killing assays **Theodore Roth,** Managing Director, Phd Student, **University of California** (CONFIRMED)	**CTM101, Next Generation IL-2Rβγ Selective IL-2 Derivative for Cancer Therapy** • Site-specific PEGylation of IL2 without affecting its function • Complete abolished alpha activity led to better CD8 activation with minimum toxicity • CHO cell manufacturing gave good yield with high stability and low aggregation **Haining Huang**, Chief Scientific Officer, **Cytimm Therapeutics, Inc.** (CONFIRMED)
3:20pm			
3:40pm	**Networking Break**		
	Antibodies for Immunotherapy *Shared track with the Antibody Congress*		**Checkpoint Inhibition & Tumor Microenvironment**
	Chair: Caroline Barelle, CEO & Co-Founder, **Elasmogen** (CONFIRMED)		**Chair: Stephen Beers,** Professor of Immunology and Immunotherapy**, University of Southampton**
4:30pm	**Reprogramming human macrophages to relieve immunosuppression in the tumor microenvironment** • Using the human immune system to identify antibodies that can modulate the tumor microenvironment • Development of OR2805, a clinical stage anti-CD163 antibody derived from a cancer elite responder to checkpoint inhibitor therapy that relieves immunosuppression caused by macrophages and demonstrates anti-tumor activity in cancer xenograft models • Discovery and preclinical characterization of LILRB2/ILT4 antibodies that rescue T cells from macrophage-mediated suppression and induce anti-tumor responses in a humanized mouse model system **Kamal Puri,** Chief Scientific Officer**, OncoResponse** (CONFIRMED)		**Anti CD161 antibody IMT-009 is a novel immunotherapeutic molecule that blocks interaction of CD161 with its ligand CLEC2D leading to reinvigoration of T and NK cell function resulting in enhanced anti-tumor efficacy** • IMT-009 is a first-in-class, monoclonal, aglycosylated human IgG1 antibody directed against CD161 that is upregulated on NK cells and a subset of tumor-infiltrating T cells. • IMT-009 selectively and potently binds to CD161 and blo • cks its interaction with its ligand, CLEC2D (or LLT1) resulting in activation of both T and NK cells. • Using single cell RNA sequencing and multiplexed Immunofluorescence analyses, we have identified tumor indications where IMT-009 can be most effective. **Shruti Malu,** Associate Director Drug Discovery & Biology**, Immunitas Therapeutics** (CONFIRMED)
4:50pm	**Phase 1 study of ATOR-1017, a 4-1BB antibody, in patients with advanced solid malignancies** • ATOR-1017 is a tumor-directed 4-1BB agonistic antibody (IgG4) dependent on FcγR-mediated crosslinking for its activity. • ATOR-1017 is designed to activate tumor reactive CD8+ T cells infiltrating the tumor. • Pharmacodynamic biomarker data and an update on safety and efficacy from the first in human, multicenter, open-label, phase 1 study of ATOR-1017, in patients with advanced solid malignancies will be presented.		**CD47 Neutralizing Bispecific Antibodies** · Strategies of CD47 targeting to limit toxicities and impact on PK (sink effect) · Tumor-directed approach: TG-1801 (NI-1701) and NI-1801 development status · Dual immune checkpoint targeting: Two CD47/PD-L1 kl bodies with distinct modes of action

	Tova Landström, Medical Science Director, **Alligator Biosciences** (CONFIRMED)	**Krzysztof Masternak,** Director of Drug Discovery, **Light Chain Bioscience – A Brand of Novimmune SA** (CONFIRMED)
5:10pm	**Streamlining therapeutic antibody discovery for all targets** • Human antibodies generated from fully human antibody transgenic mice have a higher chance of clinical success due to the *in vivo* natural selection and affinity maturation of antibody-secreting B cells. • We have generated multiple strains of fully human antibody transgenic mice, including strains harboring a common light chain to streamline bispecific antibody discovery, and a strain expressing human HLA to facilitate discovery of antibodies that recognize HLA/peptide complexes. • Using optimized immunization methods and high-throughput screening, our antibody discovery platform generates fully human antibodies with cross-species reactivity to streamline the downstream validation process. **Li Hui MD,** Director, Antibody Discovery & RenMice Licensing, **Biocytogen** (CONFIRMED)	**Bispecific anti-PD1/IL7 preclinical evaluation** • Optimized format for improve PK/PD profile • Preclinical efficacy in syngeneic orthotopic tumor models and humanized mice • Selective activation of PD1+ CD127+ progenitor T cells **Nicolas Poirier,** Chief Scientific Officer, **OSE Immuno** (CONFIRMED)
5:30pm		
6:10pm	**Offsite Networking Drinks**	

Day 2 – Thursday 10th March			
	Keynotes: Combination Therapies		
9:00am	Chair's opening remarks **Anton Rosenbaum,** Head of Regulated Bioanalysis and OMICS by LC-MS, **AstraZeneca** (CONFIRMED)		
9:05am	**Advancing novel biologics into the R&D pipeline** • Leveraging the Nanobody™ platform: multispecifics, tailored pharmacology, drug conjugates • Recombinant protein design using synthetic biology: customized lymphokines • Novel antibody formats: trispecific antibody manufacturing and development strategies **Rebecca Sendak**, Head (SVP) Global Large Molecules Research Platform, **Sanofi** (CONFIRMED)		
9:30am	**Accelerating Novel Immunotherapeutic Modality Discovery Through Digitalization** • The advent of novel immunotherapeutic modalities, including next-generation antibodies, cell & gene therapies and RNAs, has resulted in massive amounts of complex R&D data needing to be systematically structured and interpreted. We present case studies showing how biopharma and biotech organizations digitalize and automate their bi- and multi-specific antibodies, AAV, CAR-T, and TCR-T workflows and how they leverage having full traceability and data integrity for data sciences and ML approaches **Jolyon Terragni**, Head of Project Management and Professional Services, Biologics, **Genedata US**		
9:55am	**Precision medicine enabled PD-1 based immunotherapy** • Precision medicine based clinical development has established PD-1 antibody treatment as foundational in cancer care • Precision medicine has informed on mechanisms of primary resistance to PD-1 therapy • Precision medicine directed combination therapies are further transforming cancer treatment **Roy Baynes,** Senior VP & Head of Global Clinical Development, CMO, **Merck**		
10:20am	**Tumor-mediated modulation of antibody effector functions** • Tumor: myeloid interactions underpinning antibody treatment efficacy • Factors regulating Fc gamma receptor expression • Fc gamma receptor requirements for agonistic versus direct targeting antibodies **Mark Cragg**, PhD, Professor, Experimental Cancer Biology, Antibody & Vaccine Group, School of Cancer Sciences, **University of Southampton** (CONFIRMED)		
10:40am	**Networking Break**		
	Antibodies for Immunotherapy *Shared track with the Antibody Congress*	**Cell & Gene Therapy**	**Neoantigens & Therapeutic Vaccines**
	Chair: Paul Parren, Head of R&D**, Lava Therapeutics** (CONFIRMED)	**Chair: Cokey Nguyen,** Chief Scientific Officer, **Atara Biotherapeutics**	**Chair: Andrei Ramirez-Valdez**, Lead for Tumor Vaccine Unit, **CIS, VRC, NIH**
11:40am	**Discovery of a CEA-targeting Immune-Stimulating Antibody Conjugates (ISACs) for Targeting Solid Tumors**	**Identification of Novel pHLA Targets for Solid Tumor Targeting with High Potency Modalities**	**Individualized Neoantigen-specific vaccines**

	Brian Safina, Vice President, **Bolt Biotherapeutics** (CONFIRMED)	• Advantages of intracellular targets (pHLAs) versus conventional cell surface antigens • Strategies to find the most prevalent and immunogenic targets in tumors of CPI responders • Selection of pHLA targets with highest tumor vs normal ratios to avoid off-tumor target toxicities **Leah Sibener,** Co-Founder, VP Therapeutic Discovery**, 3T BioSciences (CONFIRMED)**	• Towards better neoantigen prediction • Improved preclinical model for vaccines • Nucleic acid based platforms **Lelia Delamarre,** Principal Scientist, **Genentech** (CONFIRMED)
12:00pm	**Engineering EphA2 Bispecific Immunotherapies** • Novel anti-EphA2 antibody from a cancer patient's active B cell response • Multiple weaponization formats evaluated • Lead / preclinical data to be presented **Shaun Lippow**, Senior Director, Protein Engineering, **Atreca** (CONFIRMED)	**Engineering Remotely and Non-invasively Controllable CAR T Cells for Cancer Immunotherapy** • CAR T • Focused Ultrasound • Cell-based Immunotherapy **Peter Yingxiao,** Professor of Bioengineering, **Institute of Engineering in Medicine** (CONFIRMED)	**Targeting antigens to antigen presenting cells to create more efficacious vaccines** • Nykode's 3 modular format optimized for induction of rapid, strong and broad immune responses • Tailoring the immune response profile by targeting different receptors on antigen presenting cells • Combinations and applicability within personalized and off-the shelf cancer vaccines and beyond **Håkan Norell**, Director and Head of Oncology Research, **Nykode trerapeutics** (CONFIRMED)
12:20pm	**Multi-specific immune cell engagers for cancer immunotherapy** • T cell engager molecules beyond bi-specificity opens up opportunity for improved potency and efficacy • Tri-specific T cell engagers targeting multiple myeloma and HER2+ cancers are now in clinical development • Additional multi-specific formats and target combinations are being explored **Lily Pao,** Head of Immuno-oncology Research Cluster, **Sanofi** (CONFIRMED)	Antibody Discovery in the CGT Age: Teaching Old Dogs New Tricks • Overview of Charles River's antibody discovery platform • How antibodies are transformed into scFvs for CAR-T therapies • Target screening antibody/scFv/nanobody candidates for both desirable and undesirable pharmacology • Downstream workflows after arriving at a final antibody candidate	**Systems vaccinology with innovations in multiomic immune profiling solutions** • Monitoring vaccine response by placing single cells at the center of infectious disease research; using the 10x Genomics Single Cell Immune Profiling solution our R&D team generated data from almost 1.3 million individual cells in the span of one week. • How the 10x Genomics Barcode Enabled Antigen Mapping (BEAM) solutions can add an additional layer of information to T cell clonal expansion – the antigen specificity of each clonotype (BEAM-T),

		Matthew Hewitt, Executive Director, Scientific Services **, Charles River** (CONFIRMED)	and barcode any antigen of interest and identify antigen-specific BCR's (BEAM-Ab). **Ravi Ramenani**, Product Manager, Single Cell Immune Profiling, **10x Genomics** (CONFIRMED)
12:40pm	**Law and Ethics of Pre-Approval Patient Access** • What is allowed under Federal Expanded Access and Right to Try Laws? • Should you charge for pre-approval access, provide it for free, or not at all? • How do you communicate with patients while avoiding pre-approval marketing? **Christopher Robertson**¸ Professor of Law, **Boston University** (CONFIRMED)	**Off the shelf T cell Immunotherapies or OTS CAR T Theapeutics** • Challenges with off the shelf approach • How Atara thinks about this • Program highlights from the Atara pipeline **Cokey Nguyen,** Chief Scientific Officer, **Atara Biotherapeutics** (CONFIRMED)	**New class of cancer vaccine based on an off-the-shelf Antigen Presenting Cell line (PDC*line)** • PDC*line is a new potent and scalable therapeutic cancer vaccines based on a proprietary allogeneic cell line of Plasmacytoid Dendritic Cells • PDC*line is much more potent to prime and boost antitumor antigen, including neoantigens, specific cytotoxic T-cells than conventional vaccines and improves the response to checkpoint inhibitors • The technology can be applied for any cancer **Eric Halioua,** President & CEO, **PDC*line Pharma** (CONFIRMED)
1:00pm	**Networking Lunch**		
	Antibodies for Immunotherapy *Shared track with the Antibody Congress*	**Cell & Gene Therapy**	**Neoantigens & Therapeutic Vaccines**
	Chair: Shaun Lippow, Senior Director, Protein Engineering, **Atreca** (CONFIRMED)	**Chair: Cokey Nguyen,** Chief Scientific Officer, **Atara Biotherapeutics**	**Chair: Andrei Ramirez-Valdez**, Lead for Tumor Vaccine Unit, **CIS, VRC, NIH**
2:20pm	**Targeting IL-2 to tumor-specific T cells via novel biologic platforms** • CUE-100 Series Immuno-STATsTM are designed for selection of an IL-2 variant in context of TCR engagement, which ensures that the IL-2 can be selectively biased towards T cells that express TCRs specific for tumor antigens	**Elevate Bio technologies and Immunotherapeutic products** • Elevate Bio technologies and their translation to the GMP and clinic • Elevate inside: Our Core technology platforms that drive the industry • Therapeutic companies and their products	**Intravenous vaccination with SNAPvax™ boosted with virus (ChAdOx) enhances T cell mediated tumor killing** • Vaccines based on self-assembling nanoparticles (SNAPvax™) enable consistent multi-antigen formulations and improved efficiency for priming T cell immunity

	• Clinical data with the lead candidate CUE-101 demonstrates favorable safety and tolerability (no MTD when dosed up to 8.0 mg/kg), and anti-tumor activity as monotherapy in late-stage R/M HNSCC patients, which provides de-risking for the core technology platform and IL-2 • Platform expansion via Neo-STATTMand bi-specific RDI-STATTM allows for targeting multiple tumor antigens (including Neo antigens) and for harnessing the protective anti-viral T cell repertoire to destroy tumors, respectively **Matteo Levisetti,** M.D., Senior Vice President, Clinical Development, **Cue Biopharma Inc.** (CONFIRMED)	**Iulia Diaconu,** VP Immunotherapy, **Elevate Bio** (CONFIRMED)	• SNAPvax™ administered intravenously (IV) primes high quality T cells and activates innate immune cells in the tumor • SNAPvax™ prime boosted with ChAdOx virus by the intravenous route leads to superior T cell responses and improved efficacy **Andrei Ramirez-Valdez**, Lead for Tumor Vaccine Unit, **CIS, VRC, NIH** (CONFIRMED)
2:40pm	**A bispecific gamma-delta T cell engager targeting CD1d for the treatment of hematological cancers** • Bispecific antibodies recruiting gamma-delta T cells for tumor cell killing • High potency and specificity and mechanism of action • Clinical development progress **Paul Parren**, Head of R&D**, Lava Therapeutics** (CONFIRMED)	**Maximizing Analytical Assay Reliability for Regulatory Approval of Cell & Gene Therapy Products** • Identifying critical quality attributes (CQAs) • Key analytical assay challenges • Current regulations and progressive requirements • Overcoming analytical challenges and reducing the time and risk associated with analytical testing strategies for C&GT products **Sanjay Jain and Paul Byrne, Labcorp Drug Development,** (CONFIRMED)	**Development of Neoantigen Vaccines for Cancer Therapy** • Selection of neoantigens • Preclinical testing of neoantigen vaccines • Clinical development **Karin Jooss,** Chief Scientific Officer, **Gritstone Bio**(CONFIRMED)
3:00pm	**Title TBA** **Rajkumar Ganesan,** Senior Director, **Alector** (CONFIRMED)	**Engineered iPSC-derived CAR γδ T cells for cancer immunotherapy**	**Personalized Cancer Vaccine for Treating Patients with Hepatocellular Carcinoma**

		• γδ T cells provide a unique opportunity for allogenic T cell therapies without risk for GVHD • Century is building end-to-end capability to enable off-the-shelf γδ CAR-T cell therapies • iPSC-derived γδ CAR-iT cells exhibit robust anti-tumor activity in pre-clinical studies **Mark A. Wallet,** VP, Head of Immunology**, Century Therapeutics** (CONFIRMED)	**Alfredo Perales Puchalt,** Vice President, Research, **Geneos Therapeutics** (CONFIRMED)
3:20pm	**Title TBA** **Bruce Keyt,** CSO, **IGM Biosciences** (RESERVED)	**Targeting O-glycosylation with Precision Medicine** **Avery Posey**, Assistant Professor of Pharmacology, **University of Pennsylvania** (CONFIRMED)	**Therapeutic targeting of natural NeoAg** • We have developed a neoantigen identification platform that combines bioinformatic with functional immunology to discover targets of naturally-primed T cell responses against expressed tumor mutation • A phase 1b clinical trial of peptide-based vaccines against these targets shows evidence of clinical benefit and immune editing • Preclinical studies with this approach reveal a crucial role for neoantigen-specific CD4+ T cells in the success of vaccines and adoptive cellular therapy and may inform more effective strategies for both. **Stephen Schoenberger,** Professor**, La Jolla Institute for Allergy & Immunology**
3:40pm	**Affinity maturation of B7-H6 translates into enhanced NK cell-mediated tumor cell lysis and improved proinflammatory cytokine release of bispecific immunoligands via NKp30 engagement**	**Assay development and qualification of whole cell binding using high-throughput flow cytometry** • Challenges in high-throughput flow cytometry	

	Stefan Zielonka, Associate Director, Protein Engineering and Antibody Technologies, **Merck KGaA** (CONFIRMED)	• How to develop and qualify a flow cytometry-based assay to assess relative binding potency of therapeutic antibody to antigen on cell surface • Case study **Huan Cai,** Scientist**, Teva Pharm** (CONFIRMED)	
4:00pm	**Networking Break**		
	Precision medicine and Biomarkers		
	Chair: Mark Mamula, Professor, **Yale University**		
4:40pm	**Glycoproteomic Biomarkers as a Powerful New Tool to Predict Immune Checkpoint Inhibitor Response** **Klaus Lindpaintner,** Chief Strategy Officer and Chief Marketing Officer**, InterVenn Biosciences** (CONFIRMED)		
5:00pm	**Biomarkers of human autoimmune diseases that predict disease outcomes** • Learn how tissues and individual cell populations may be altered with inflammation associated with autoimmunity. • Define specific stresses to tissues causing chronic pathology. • Examine potential therapeutic strategies to preventing pathologic tissue damage **Mark Mamula**, Professor, **Yale University** (CONFIRMED)		
5:20pm	**Single Cell Functional phenotyping provides correlative clinical and preclinical immune biomarkers for advancing cancer immunology** • Unique utility of IsoPlexis' single-cell proteomic platform for predicting the potency of novel cell therapies • Data from a phase 2 clinical trial in which IsoPlexis' platform identified a blood-based biomarker that correlated with patient response and progression-free survival for metastatic melanoma patients who underwent checkpoint inhibitor and IL-2 agonist therapy **Senior Representative, Isoplexis** (RESERVED)		
5:40pm	**Biomarkers and Key Drivers of Drug Development in Gene Therapy** • Biomarkers are tools that can facilitate selection and monitoring of gene therapies, driving accurate, effective and safe treatment • Several biomarkers of disease, immune, cellular, and molecular responses to gene therapies are available • Selecting the right patient for the right therapy and monitoring that patient's response to the therapy is imperative for drug discovery		

	Oscar Segurado, Chief Medical Officer, **ASC Therapeutics** (CONFIRMED)
6:00pm	**Onsite Networking Drinks**

Day 3 – Friday 11th March	
	Keynotes
9:00am	**Chair's opening remarks** **Hans Keirstead**, CEO, **Avita Biomedical**
9:05am	**Trends and Challenges in the Development of Monoclonal Antibodies: A Regulator's Perspective** Well over 100 novel therapeutic monoclonal antibodies (mAbs) have been approved in the US since muromonab was approved in 1986. The pace of approvals significantly increased beginning in 2014, including several antibody-drug conjugates (ADCs), bispecific antibodies (BsAb), and the first antibody cocktail. Since 2013, 46% of approved mAbs had Breakthrough Therapy designation. Since 2020, the COVID-19 pandemic has impacted drug development, with some delays in approvals. However, there has been expedited development of neutralizing mAbs for Emergency Use Authorization. To date, 4 neutralizing mAb therapies and 1 mAb repurposed for the treatment of hospitalized patients receiving systemic corticosteroids and require supplemental oxygen received EUA However, neutralizing antibodies that don't work against currently circulating variants are no longer being distributed. This presentation will discuss trends in mAb approvals, ADC and BsAb submissions, expedited programs and challenges and lessons learned in the development of anti-SARS-CoV-2 neutralizing antibodies. **Marjorie Shapiro**, Chief, Laboratory of Molecular and Developmental Immunology, **FDA** (CONFIRMED)
9:30am	**Select better antibodies using high-throughput structural liability predictions** High-throughput sequencing data improves discovery of novel therapeutic antibodies. However, getting from millions of sequences to a diverse set of developable antibodies with the right therapeutic properties can be incredibly challenging, time-consuming, and requires significant software and computational resources. In this session, we will discuss how you can predict exposed liabilities for thousands of antibodies and integrate it to assay data to accelerate your candidate selection and de-risk antibody development. • How to parse through large pools of antibody candidates generated by high-throughput sequencing • How to integrate prediction of exposed liabilities into seamless workflows • How to use all assay data and *in-silico* predictions to select the best antibody candidates **Néstor Vázquez Bernat,** Application Scientist**, ENPICOM**
9:50am	**Keynote Panel Discussion: Digitizing the workflow – automation and AI in R&D and beyond** • Digitalization strategies – challenges & successes • Automation - instrument integration, workflow and process automation • Enabling collaboration & innovation through digitalization • Future trends and AI approaches

	Chair: Aude Tartiere, Sr. Scientific Consultant, **GeneData US (**CONFIRMED) **Vinodh Kurella,** Senior Scientist : Biologics Computational Modeler**, Takeda** (CONFIRMED) **Supratik Mukhopadhyay**, Associate Professor, **Louisiana State University** (CONFIRMED) **Ruo Steensma,** Sr. Director, Head of Research and Laboratory Platforms**, Janssens R&D Business Technology** (CONFIRMED) **Simon LeTarte,** Director, Extended Structural Characterization**, Gilead** (CONFIRMED) **Yan-Hui Liu,** Director, Analytical Development, Strategic External Development**, GSK** (CONFIRMED)		
10:20am	**Networking Break**		
	AI and computational discovery & development *Shared track with the Antibodies Congress*	**Clinical Trials and Case Studies** *Shared track with the Antibodies Congress*	**Non-Oncology** *Shared track with the Antibodies Congress*
	Chair: Philip Kim, Professor, **University of Toronto** (CONFIRMED)	**Chair: Brenda Hann,** Director, Clinical Trials Operations, **Stanford University**	**Chair: Ivan Mascanfroni**, Senior Director, Immunology, **Seismic Therapeutic**
11:10am	**Advance precision immuno-oncology with patient data centric approach** • Predicting patient response to immunotherapy is one of the central questions in the field. • Check point inhibitor treated patient data is becoming the major data asset for immuno-oncology drug development. • Examining of the tumor microenvironment could lead to the discovery of more predictive biomarkers **Ning Wang,** Bioinformatics Scientist & Bioinformatics lead on Immuno-oncology, **Arcus Biosciences** (CONFIRMED)	**Leveraging critical thinking and transformation management for ICH-E6 R3** • Describe and identify leading practice for transformation management • Analyze critical thinking approaches for ICH-E6 R3 **Erika Stevens,** Principal Scientist**, Recherche Transformation Rapide** (CONFIRMED)	**Next-generation regulatory T cell therapies** • Clinical experience with Treg directed therapies in transplantation • Characterization of engineered CAR-Tregs and Quell path to the clinic **Marc Martinez-Llordella,** Founder & Vice President, **Quell Therapeutics** (CONFIRMED)
11:30am	**Recent computational advances in biologics design and discovery** • Novel antibody discovery using diverse approaches • Sequence selection to lead generation (bioinformatics pipeline) • Review of latest computational tools for biologic design and optimizations	**Patient-centric bioanalysis at warp speed for Evusheld (AZD7442)** • Introduction to Evusheld, a long acting antibody combination in development for prevention and treatment of COVID19 • Challenges for bioanalysis AZD7442 antibody combination: how to do PK assays in the absence of specific capture reagents	**Stem Cell Therapy in Liver Disease** **Yu Zhang,** SVP & CSO**, VCanBio Cell & Gene Engineering** (CONFIRMED)

	Vinodh Kurella, Senior Scientist : Biologics Computational Modeler**, Takeda** (CONFIRMED)	• Nasal lining fluid sampling bioanalytical challenges and solutions **Anton Rosenbaum,** Head of Regulated Bioanalysis and OMICS by LC-MS, **AstraZeneca** (CONFIRMED)	
11:50am	**Global Digital Strategy for Biologics at Sanofi** • Building digital foundation for biologics in a global and diverse organization • Application of ML/AI to advance biologics discovery **Yves Fomekong-Nanfack**, Head of Digital Biologics Platform Operations, **Sanofi** (CONFIRMED)	**Immune profiling for allogeneic cell therapies** • Allogeneic cell therapies require rigorous inclusion and exclusion criteria for patients enrolling clinical trials • Monitoring of patients receiving cell therapies require pharmacokinetics of the drug product • Clinical trials of cell therapies should assess clinical outcomes and immune response parameters **Oscar Segurado,** Chief Medical Officer**, ASC Therapeutics** (CONFIRMED)	**CTM102, A Novel Treg Preferential IL-2 Derivative for Immune Suppression** • Site-specific PEGylation of IL2 without affecting its function • Enhanced alpha activity led to remarkable Treg amplification, as well as durable and antigen specific suppression of inflammation • Natural glycosylation reduces immunogenicity and better suited for long-term treatment **Haining Huang**, Chief Scientific Officer, **Cytimm Therapeutics, Inc.** (CONFIRMED)
12:10pm	**De novo design of epitope specific antibodies with machine learning methods** • AI-based de novo design. • Epitope specific binders • Nanomolar Fabs in proof of concept studies **Philip Kim**, Professor, **University of Toronto** (CONFIRMED)	**Sponsor Monitoring Changes During Covid-19** • Discuss remote monitoring process • Discuss sponsor continuous access • Discuss the future impact to clinical research **Brenda Hann,** Director, Clinical Trials Operations, **Stanford University** (CONFIRMED)	
12:30pm	**Characterizing Tumor-Infiltrating Lymphocytes in Cancer with Computational Pathology/Pathomics** **Rajarsi Gupta**, Assistant Professor, Department of Biomedical Informatics at **Stony Brook Medicine** (CONFIRMED)	**Next generation bioanalytics and impact on drug discovery/development: Microsampling & POC** **Sally Fischer**, Associate Director/Principal Scientist, **Genentech** (CONFIRMED)	
12:50pm	**Networking Lunch**		
	Closing Keynotes		
	Chair: Ning Wang, Bioinformatics Scientist & Bioinformatics lead on Immuno-oncology, **Arcus Biosciences**		
2:00pm	**Synergy is a four letter word: Lessons from the mathematics of Independent** • Rational drug combinations: why? • Observational results of drug combinations after checkpoint inhibitors • Independent action and collateral Sensitivity **Marya Chaney,** Distinguished Scientist, External Collaborations, Early Oncology Development **Merck** (CONFIRMED)		

2:20pm	**Current status and future prospects of cancer immunotherapy** • Types of biologics • How they can be more uniquely tested and deployed in the clinic **Laszlo G. Radvanyi,** PhD, President & Scientific Director**, Ontario Institute for Cancer Research** (CONFIRMED)
2:40pm	**Keynote panel discussion: Exploring clinical needs and novel indications** • Patient stratification and biomarkers • Applying the best antibody treatment from the start • Starting new programs based on patient needs **Panelists: Anton Rosenbaum,** Head of Regulated Bioanalysis and OMICS by LC-MS, **AstraZeneca** (CONFIRMED) **Oscar Segurado,** Chief Medical Officer**, ASC Therapeutics** **Ivan Mascanfroni**, Senior Director, Immunology, **Seismic Therapeutic** **Paul Parren**, Head of R&D**, Lava Therapeutics**
3:20pm	**End of Conference – see you next year!**