Advisory board

David Sourdive, Co-founder, Executive Vice President - Technical Operations, **Cellectis**
Stephen Schoenberger, Professor, **La Jolla Institute for Immunology**
Roy Baynes, Senior Vice President and Head Global Clinical Development, Chief Medical Officer, **Merck**

Confirmed Speakers:

Roy Baynes, Senior Vice President and Head Global Clinical Development, Chief Medical Officer, **Merck**
Karin Jooss, CSO, **Gritstone Therapeutics**
Ira Mellman, Vice President, Cancer Immunology**, Genentech**
Rich Murray, CEO, **Jounce Therapeutics**
Bob Valamehr, Chief Development Officer, **Fate Therapeutics**
Kelly Thornburg, Executive Director, Quality Site Head, **Kite Pharma**
David Fontana, Head Strategic Alliance & JCAR017 Program Lead, **Juno Therapeutics**
Pascal Touchon, President and CEO, **Atara Biotherapeutics**
Alan K. Smith, Executive Vice President, Technical Operations, **Bellicum**
Gary Starling, Associate Vice President, Discovery Biologics, **Merck**
Douglas Jolly, Executive Vice President, Research and Pharmaceutical Development, **Tocagen**
Christine Brown, Professor and Deputy Director, T Cell Therapeutics Research Laboratories, **City of Hope**
Shahram Salek-Ardakani, Senior Director, Cancer Immunology, **Pfizer**
Jeffrey Miller, Professor of Medicine, **University of Minnesota,** Deputy Director, **University of Minnesota Masonic Comprehensive Cancer Center**
Oladapo Yeku, Assistant Clinical Attending, **Massachusetts General Hospital**
Michael Yellin, VP, Clinical Science, **Celldex Therapeutics**
Larry Lum, Professor, Director of Cellular Therapy, Scientific Director of Bone Marrow Transplant, **University of Virginia**
James Legg, SVP Research and Development, **Crescendo Biologics**

Stephen Schoenberger, Professor, La **Jolla Institute for Immunology**
Ezra Cohen, Associate Director, **U.C. San Diego Moores Cancer Center**
Nicolas Poirier, Chief Scientific Officer, **OSE Immunotherapeutics**
Denise Steckel, Head, Clinical Collaborations Management, **Genentech**
Jay Mandrekar, Professor of Biostatistics and Neurology, **Mayo Clinic**
Ron Seidel, Executive Vice President, Head of Research and Development, **Cue Biopharma**
Sari Pesonen, VP, Scientific and Clinical Development, Co-Founder, **Valo Therapeutics**
Jeffrey Skolnik, Vice President, Clinical Development**, Inovio Pharmaceuticals**
Kate Broderick, Vice President, **Inovio Pharmaceuticals**
Giedre Krenciute Assistant Member, **St. Jude Children's Research Hospital**
Steven Feldman, Director of Manufacturing and Process Development, **Stanford Center for Cell Therapy**
Jim Heath, President and Professor, **Institute for Systems Biology**
Nate Root, Associate Director, Clinical Disclosure & Transparency, **Ionis Pharmaceuticals**
Keri Schadler, Assistant Professor**, MD Anderson Cancer Center**
Christina Yi, Chief Operations Officer, **Dendreon**
Loui Madakamutil, SVP, Head of Biology and Preclinical Development, **Nektar Therapeutics**
Steven Jonas, Researcher, **UCLA**
Justin Eyquem, Principal Investigator - Parker Fellow**, UCSF**
Kelly Coulbourne, Associate Director, Clinical Trial Data Registries, **Allergan**
Brian Champion, CSO**, PsiOxus Therapeutics**
Dan Kaufman, Professor of Medicine, Director of Cell Therapy, **UCSD**
Laura Hix Glickman, Vice President, Research and Cofounder, **Actym Therapeutics**
Jonathan Pachter, CSO, **Verastem Oncology**
Christophe Quéva, CSO, **Oncorus**
Mohamed Ladha, Vice President and Group Head, Commercial, Operations and Medical Affairs, **Tocagen**
Robert Wild, Chief Scientific Officer, **Dracen pharmaceuticals**
Kanti Thirumoorthy, Executive Director, Operations Team Lead, Process Development, **Kite Pharma**
Caroline Breitbach, VP R&D Programs and Strategy, **Turnstone Biologics**
Joanne Tan, Research Fellow/Associate Director, **Arcus Biosciences**
Theodore Roth, Research Fellow, **UCSF**
C. Russell Cruz, Director, Translational Research Laboratories, Centre for Emerging Technologies in Immune Cell Therapy, **Children's National Hospital**
David Dornan, Senior Vice President of Research, **Bolt Biotherapeutics**
Javier Chaparro-Riggers, Executive Director, **Pfizer**
Greg Babcock, Vice President, Research, **Visterra Inc**
Werner Meier, CSO, **Revitope Oncology**
Bruce Keyt, CSO, **IGM Biosciences**
Karsten Sauer, Vice President, Immunology**, Torque Therapeutics**
Robert Coffin, CEO, **Replimmune**
Miguel Garcia-Guzman, Chief Scientific Officer, **Rakuten Medical**
John Bell, Professor of Medicine, **Ottawa Health Research Institute**
Farshad Guirakhoo, CSO, **GeoVax**
Sharareh (Sherri) Gholamin, Researcher, **Caltech**
Nathan Trinklein, Chief Technology Officer, **Teneobio**
Cliona Rooney, Professor, Department of Pediatrics, Section of Hematology-Oncology**, Baylor College of Medicine**
Care - Blood and Marrow Transplant Unit
Anne Cunniffe Marcy, Clinical Research Coordinator**, Stanford University School of Medicine - Cancer Clinical Trials Office**
Scott Carmer, CEO, **NexImmune**
Maksim Mamonkin, Assistant Professor, **Baylor College of Medicine**
RJ Tesi, CEO/CMO, **InMune Bio**
M**ark Lowdell,** CSO, **InMune Bio**
Linda Liu, SVP, Research, **NextCure**
Darya Alizadeh, Assistant Research Professor, **City of Hope**
Alfredo Perales-Puchalt, Vice President, Research & Development**, Geneos Therapeutics**
Agnete Fredriksen, Co-Founder, President and CSO, **Vaccibody**
David Reardon, Clinical Director, Center for Neuro-Oncology, **Dana-Farber Cancer Institute**
Philip Arlen, President & CEO, **Precision Biologics**
Shawn Fahl, Director, Flow Cytometry Services, **Discovery Life Sciences**

Vassiliki Papadimitrakopoulou, Professor of Medicine in the Department of Thoracic/Head and Neck Medical Oncology, **MD Anderson Cancer Center**
Joann Peters, Vice President Clinical Operations**, Geneos Therapeutics**
Cathy Carfagno, Associate Director, **Merck**
Jessica Baker Flechtner, CSO, **Genocea**
Christina Annunziata, Head, Translational Genomics Section, **NIH**
Sujith Joseph, Senior Scientist, **Baylor College of Medicine**
Corey Carter, CEO, **EpicentRx INC**
AJ Joshi, SVP, Chief Medical Officer, **Atara Biotherapeutics**
Massimo Fantini, Senior Scientist, **Precision Biologics**
Krzysztof Masternak, Head of Discovery, **Light Chain Bioscience – a brand of Novimmune SA**
Brent Rice, Vice President, Global Market Access**, Autolus**
Amrik Basran, Chief Scientific Officer, **Avacta**
Marina Udier, CEO, **Nouscon**
Matteo Levisetti, Chief Development Officer, **DNAtrix**
Wenfeng Xu, Vice President of Research, **Hengenix**
Sandhya Girish, Senior Director, Global head Oncology, **Genentech**
Barbara Hickingbottom, Vice President, Clinical Development, **Xencor**
Kefeng (Kevin) Hua, Senior Manager, AI/Machine Learning Development, **Bayer**
Alvin Luk, Senior Vice President & Chief Medical Officer, **Shanghai Henlius Biotech**
Rajesh Krishnan, Senior Vice President, Process Development and Manufacturing, **Oncternal Therapeutics**
Tam Soden, Senior Director**, Kite Pharma**
Rajita Pappu, Senior Scientist, **Genentech**
Fabiana Zappala, PhD Student, **University of Pennsylvania**
Shannon Turley, Staff Scientist and Group Leader in Cancer Immunology Discovery, **Genentech**
Angelica Loskog, CEO, **Lokon Pharma**
Alfonso Quintas, Chief Medical Officer, **TCR2 Therapeutics**
Ethan Laudermilch, Post-Doc, **Albert Einstein College of Medicine**
Martin Naradikian, Postdoctoral Fellow, **La Jolla Institute for Immunology**
Denise Haslwanter, PostDoc, **Albert Einstein College of Medicine**
Ariel Wirchnianski, PostDoc, **Albert Einstein College of Medicine**
Steven Kelly, CEO, **Carisma Therapeutics**
James Riley, Associate Professor of Microbiology, **University of Pennsylvania**
Hanspeter Gerber, SVP & CSO, **3T Biosciences**
Senior Representative, **Applied BioMath**
Simon Lacey, Director, The Center for Cellular Immunotherapies, **University of Pennsylvania**
James Sun, Senior Director, Head of Bioinformatics**, Gritstone Oncology**
Kathryn Austgen, Associate Director**, BlueRock Therapeutics**
John M. Burke, Co-Founder, President and CEO, **Applied Biomath**
Steve Thorne, Chief Scientific Officer, **Western Oncolytics**
Shiaw-Yih (Phoebus) Lin, Professor and Deputy Chair, **MD Anderson Cancer Center**
Michael J. LaBarre, Senior Vice President, Chief Technology Officer, **Halozyme**
Jae-Kyung (Jamise) Lee, Assistant Professor, **The University of Georgia**
Lelia Delamarre, Senior Scientist in Cancer Immunology, **Genentech**
Shihao Xu, Postdoc Fellow, **Salk Institute for Biologics Sciences**
David Liu, Instructor in Medicine, **Dana-Farber Cancer Institute**
Teng Peng, Application Support Manager, **Acrobiosystems**
Jennifer Felger, Associate Professor**, Emory University**
Kader Thiam, VP of Transgenic Technologies, **Genoway**
Peter Yingxiao Wang, Professor of Bioengineering, **UCSD**
Margaux Stack Babich, Program Manager, **Immunotherapy Foundation**
Laura Richman, Senior Vice President, **Arcellx**
Ho Cho, SVP, **Bristol Myers Squibb**
James Barlow, Vice-President, Operations & BD, **Geneos Therapeutics**
Amrit Takhar, GP Partner and Clinical Lead, **Wansford surgery – NHS**
Chris Heery, Chief Medical Officer, **Precision BioSciences, Inc.**
Marjorie Shapiro, Supervisory Biologics Office of Biotechnology Products, **CDER, FDA**
Sonia Sharma, Associate Professor, Director Center for Functional Genomics, **La Jolla Insitute for Immunology**
Shawn Kim, M.D Candidate, **UCSD**

Workshop hosts:

Julie Gerberding, Executive Vice President, Communications, Global Policy, and Population Health & Chief Patient Officer**, Merck**
Hillary Theakston, Executive Director, **The Clearity Foundation**
Brenda Hann, Director, Clinical Trials Operations, **Stanford Medicine**
Janet McDowell, Clinical Research Manager, **Stanford University School of Medicine - Cancer Clinical Trials Office**
Theresa Latchford, Oncology Clinical Nurse Specialist, **Stanford Health**

Day 1 – Monday March 2nd 2020	
8:00am	Registration opens
	Opening keynotes
9:00am	Opening remarks from Terrapinn
9:05am	Chair's opening remarks **Ira Mellman,** Vice President, Cancer Immunology, **Genentech**
9:10am	**Mechanistic basis of cancer immunotherapy: checkpoints@10** • Checkpoint inhibition has revolutionized both cancer biology and cancer care • However, only a minority of patients receive substantial benefit, and no new immunomodulators have been approved outside of the PD-l1/PD-1 axis. Why? • Progress can be made, but will require a deeper and more accurate understanding of the mechanisms of tumor immunity, even our understanding of how checkpoint inhibitors work may be fundamentally flawed **Ira Mellman,** Vice President, Cancer Immunology, **Genentech** (CONFIRMED)
9:35am	**Translational Immunotherapy** • Translating preclinical science to biology in the clinic • The critical role of mechanism specific pharmacodynamic and predictive biomarkers • Can we achieve a precision medicine state for immunotherapy? **Rich Murray,** CEO, **Jounce Therapeutics** (CONFIRMED)
10:00am	**NK cell Therapy: individualized products to off-the-shelf strategies** • Understand the biologic concept of adaptive NK cells with properties of immune memory • Understand how the CD16 activating receptor can be repurposed to make NK cells antigen specific • Understand concepts of off-the-shelf induced pluripotent derived NK cells **Jeffrey Miller,** Professor of Medicine, Division of Hematology, Oncology and Transplantation, **University of Minnesota** (CONFIRMED)
10:25am	**Morning networking break**
11:25am	**Plenary roundtable session**

	15 senior level tables hosted by thought leaders on key challenges and opportunities in antibody drug discovery and development. Participants are invited to join the group discussions on a topic of importance to them. The round table session will have two rotations, each lasting 35 minutes.			
	TABLE 1 **Novel modalities in immunotherapy** **Gary Starling,** Associate Vice President, Discovery Biologics, **Merck** (CONFIRMED)	TABLE 2 **Product management models** **Kanti Thirumoorthy,** Executive Director, Operations Team Lead, Process Development, **Kite Pharma** (CONFIRMED)	TABLE 3 **Change management** **Cathy Carfagno,** Associate Director, **Merck** (CONFIRMED)	
	TABLE 4 **Current and future reimbursement challenges for CAR-T cell therapies** **Brent Rice,** Vice President, Global Market Access, **Autolus** (CONFIRMED)	TABLE 5 **Challenges facing bispecific antibodies for immunotherapy** **Wenfeng Xu,** Vice President of Research, **Hengenix**(CONFIRMED)	TABLE 6 **Immune checkpoints inhibitors in combination with targeted biosimilars** **Alvin Luk,** Senior Vice President & Chief Medical Officer, **Shanghai Henlius Biotech** (CONFIRMED)	
	TABLE 7 **Evolving immuno-oncology landscape** **Roy Baynes,** Senior Vice President and Head Global Clinical Development, Chief Medical Officer, **Merck** (CONFIRMED)	TABLE 8 **ADC vs. Tcell engager vs. CAR-T. Which is best for your Target of interest?** **Ho Cho,** SVP, **Bristol Myers Squibb**		
12:40pm	**Networking lunch**			
12:45-1:20pm	**WORKSHOP: Comparing strategies and challenges of bispecific antibody infusion** • What is an ideal bispecific antibody for different approaches? • What's the pathophysiology of side effects related to different routes of delivery of bispecific antibody infusions? • What are the advantages and disadvantages of different approaches using bispecific antibodies? • What are the challenges preventing clinical effectiveness using the various platforms? **Larry Lum,** Professor, Director of Cellular Therapy, Scientific Director of Bone Marrow Transplant, **University of Virginia** (CONFIRMED)			
	Cell Therapy	**Cancer Vaccines**	**Tumor Microenvironment**	**Solid Tumours**
	Chair: Bob Valamehr, Chief Development Officer, **Fate Therapeutics**	**Chair: Lelia Delamarre,** Senior Scientist in Cancer Immunology, **Genentech**	**Chair: RJ Tesi,** CEO/CMO, **InMune Bio**	**Chair: Cliona Rooney,** Professor, Department of Pediatrics, Section of Hematology-Oncology**, Baylor College of Medicine**
2:00pm	**Off-the-shelf cell-based cancer immunotherapy: a master pluripotent cell platform for mass production of allogeneic CAR-T and -NK cell products** • Using iPSCs to create single cell derived engineered master cell lines with multiplexed functionality	**Tumor neoantigens delivered as solid tumor immunotherapeutics – what are the early clinical data telling us?** • Mutation-derived neoantigens are key tumor cell targets for the adaptive immune system, but are rare, and their accurate	**Immunologic effects of Duvelisib (PI3K-delta/gamma inhibitor) and Defactinib (FAK inhibitor)** • Effects of PI3K-delta and PI3K-gamma inhibition on immune cells in the tumor microenvironment	**Promoting the survival of adoptively transferred tumor-specific T-cells in the solid tumor environment** • T-cells require 3 signals for expansion and survival; lacking in the TME

	• Creating renewable master cell banks to achieve continuous production of engineered NK and T cells • Delivering cost effective, consistent and homogenous cell therapeutics on demand and off-the-shelf **Bob Valamehr,** Chief Development Officer, **Fate Therapeutics** (CONFIRMED)	identification is challenging but necessary • Delivered within potent vaccine vectors, neoantigens may be able to drive therapeutic immune responses • Clinical trials of neoantigen immunotherapies are underway and early data will be instructive as to how they may be best deployed in the solid tumor immunotherapy context **Karin Jooss,** CSO, **Gritstone Therapeutics** (CONFIRMED)	• Effects of FAK inhibition on immunosuppressive cells and stromal density in the tumor microenvironment • Efficacy in combination with checkpoint or co-stimulatory antibodies **Jonathan Pachter,** CSO, **Verastem Oncology** (CONFIRMED)	• Tumor-specific T-cells must survive multiple inhibitory signals • Can T-cells be modified to thrive in this environment? **Cliona Rooney,** Professor, Department of Pediatrics, Section of Hematology-Oncology**, Baylor College of Medicine** (CONFIRMED)
2:20pm	**Our commitment to providing excellence to CAR T-cell therapeutics** • Antigen-based CAR surface expression detection • Antibody-based CAR surface expression detection • Case studies **Teng Peng,** Application Support Manager, **Acrobiosystems** (CONFIRMED)	**Harnessing neoantigens for Cancer Immunotherapy** • Evaluate rules defining immunogenic neoepitopes • Learnings from preclinical studies with the RNA-LPX vaccine • Define mechanistic drivers of efficacy following vaccination **Lelia Delamarre,** Senior Scientist in Cancer Immunology, **Genentech** (CONFIRMED)	**Exercise as a novel method to improve tumor vascular function** • Moderate aerobic exercise remodels solid tumor vasculature, improving blood delivery and decreasing blood flow • In mice, exercise increases efficacy of chemotherapy by enhancing drug delivery • Reduced tumor hypoxia due to exercise-induced vascular remodeling has implications for radiation therapy and immunotherapy **Keri Schadler,** Assistant Professor**, MD Anderson Cancer Center** (CONFIRMED)	**Novel, cleaner targets for solid tumor targeting with high potency modalities** • Conventional cell surface antigens with high expression across tumors are commonly expressed on normal tissues, creating potential for on-target, off-tumor toxicities when targeted by high-potency oncology compounds. • Recent clinical trial data from patients with solid tumors that were treated with immune checkpoint inhibitors demonstrate that CD8+ T cells can mediate deep and durable responses in solid tumors. • How to identify TCRs and pMHC targets involved in mediating complete responses following ICI treatment ?

				• The most promising approaches to identify pMHC targets and their corresponding TCRs will be discussed **Hanspeter Gerber,** SVP & CSO, **3T Biosciences** (CONFIRMED)
2:40pm	**TRuCs, a novel engineered T cell approach to the treatment of solid tumors** **Alfonso Quintas,** Chief Medical Officer, **TCR2 Therapeutics** (CONFIRMED)	**Synthetic DNA-based immunotherapies for cancer treatments** • Synthetic DNA with Active Adaptive Electroporation have come of age as a leading immunotherapy platform • Inovio's immunotherapies function exclusively in vivo, generating antigen-specific cellular responses against targeted diseases demonstrated in clinical trials • Versatility of the platform allows for complex formulations co-delivering Synthetic DNA encoding for TAAs, genetic adjuvants, mAb and bispecifics **Jeffrey Skolnik,** Vice President, Clinical Development, **Inovio Pharmaceuticals** (CONFIRMED)	**Precision engineering to advance adoptive T cell therapies** • Advantages of targeting CAR and TCR transgene into the TRAC locus • Scaling up the TRAC-CAR T cells GMP manufacturing • An Immunocompetent mouse model to study Allogeneic CAR T cells **Justin Eyquem,** Principal Investigator - Parker Fellow**, UCSF** (CONFIRMED)	**Checkpoint inhibitors in head and neck squamous cell carcinoma** • review current data for anti-PD1 therapy in HNSCC • define current research approaches to improve efficacy • determine strategies to treat anti-PD1 refractory patients **Ezra Cohen,** Associate Director, **U.C. San Diego Moores Cancer Center** (CONFIRMED)
3:00pm	**Improved cancer therapy using engineered human pluripotent stem cells** • xiEfficient Development of natural killer (NK) cells from human pluripotent stem cells • Strategies to use human pluripotent stem cells as a platform to produce	**Supercharging the tumor microenvironment with the engineered cytokines NKTR-214 and NKTR-255** • Cytokines are powerful agents that can provide expansion and differentiation for effector cells. In	**Role of endogenous immune cells in glioma microenvironment during CAR T cell therapy** • Our team is clinically evaluating IL13Rα2-targeted CAR-T cells for the treatment of recurrent	**Engineered CAR macrophages for the treatment of solid tumors** • Macrophages naturally accumulate in solid tumors along a chemokine gradient

	human NK cells with improved anti-tumor activity • Clinical translation of human pluripotent stem cell-derived NK cells **Dan Kaufman,** Professor of Medicine, Director of Cell Therapy, **UCSD** (CONFIRMED)	their native state they are poor medicines. • Engineered cytokines can more effectively stimulate cytokine receptor pathways, while controlling adverse events. • The combination of NKTR-214 with Opdivo has demonstrated powerful anti-tumor effects and profoundly alters the tumor microenvironment, increasing effector T-cell counts, increasing PD-1 expression on tumor T-cells, and converting PD-L1 negative tumors to positive, while maintaining a more tolerable AE profile than traditional cytokine therapies • NKTR-255 is an immune cytokine that can selectively grow NK cells and CD8 memory T cells in the patient's body. This allows for the potential to combine NKTR-255 with ADCC mabs and to induce long term survival of CAR-Ts **Loui Madakamutil,** SVP, Head of Biology and Preclinical Development, **Nektar Therapeutics** (COFIRMED)	IL13Rα2-positive MGs [NCT02208362] • We have established a syngeneic immunocompetent glioma model, which recapitulates the tumor microenvironment (TME) of patients • Murine IL13Rα2-CAR-T cells mediate potent antitumor activity against IL13Rα2-engineered KR158, a highly invasive murine glioma model • Characterization of the tumor microenvironment post-CAR-T therapy indicates activation of endogenous cytotoxic CD8 T and myeloid cells, and decrease in the frequency of T regulatory cells. Further analyses reveal that tumor-associated macrophages (TAMs) may be reprogrammed during CAR-T therapy to exhibit tumoricidal activity and may promote the activation of endogenous T cells (CD4/CD8 T cells) resulting in enhanced antitumor activity. • Our data strongly suggest that CAR-T therapy has the potential to reshape the glioma microenvironment creating a context permissible to elicit effective endogenous antitumor immunity. **Darya Alizadeh,** Assistant Research Professor, **City of Hope** (CONFIRMED)	• Direct cell killing through CAR-mediated target engagement and phagocytosis • M1 locked CAR-M modulate the TME and generate an adaptive immune response **Steven Kelly**, CEO, **Carisma Therapeutics** (CONFIRMED)

3:20pm	Networking break			
	Cell Therapy	**Cancer Vaccines**	**Tumor Microenvironment**	**Solid Tumours**
	Chair: Bob Valamehr, Chief Development Officer, **Fate Therapeutics**	**Chair: Lelia Delamarre,** Senior Scientist in Cancer Immunology, **Genentech**	**Chair: RJ Tesi,** CEO/CMO, **InMune Bio**	**Chair: Cliona Rooney,** Professor, Department of Pediatrics, **Baylor College of Medicine**
4:10pm	**Arming T cells to target solid tumors** • Arming ex vivo expanded T cells with bispecific antibodies creates an army of anti-tumor CTLs • Infusions have produced encouraging clinical results in breast and pancreatic cancer • Infusion of targeted T cells leads to in situ immunization of the patients endogenous immune system to produce a long-term anti-tumor effect **Larry Lum,** Professor, Director of Cellular Therapy, Scientific Director of Bone Marrow Transplant, **University of Virginia** (CONFIRMED)	**Tedopi: neo-epitope cancer vaccine to tackle resistance to immune checkpoint inhibitors** • Tedopi®is a mature multiple neoepitope cancer vaccine with ongoing phase III clinical trial in NSCLC after anti-PD(L)1 failure and phase II in PDAC in combination with the anti-PD1 Opdivo • A precision medicine cancer vaccine for HLA-A2+ patients fighting tumor antigens heterogeneity by covering different tumor antigens • An Off-the-Shelf and Ready-to-Use emulsion of a proprietary combination of 10 neoepitopes • Breaking self-tolerance by rational design of fixed-anchor and heteroclitic neoepitopes increasing MHC/TCR affinities and inducing antigen-specific cytotoxicity **Nicolas Poirier,** Chief Scientific Officer, **OSE Immunotherapeutics** (CONFIRMED)	**Targeting sTNF to manipulate the TME in Breast Cancer** • Local mechanisms of resistance to immunotherapy • Role of MUC4 in resistance to trastuzumab in HER2+ breast cancer • Targeting soluble TNF to prevent MUC4 expression and reverse resistance to trastuzumab **RJ Tesi,** CEO/CMO, **InMune Bio** (CONFIRMED)	**STACT: a novel therapeutic Platform that delivers combination immunotherapy to tumor-resident myeloid cells after IV dosing and demonstrates potent anti-tumor efficacy in preclinical studies** • In a metastatic setting, systemically administered immunotherapies will be required to promote proper T-cell infiltration in immune-excluded tumors • Many agents are in development to properly inflame these tumors, including STING agonists, co-stimulatory receptor agonists, and type I/II cytokines, but are too toxic to be systemically administered • We describe a microbial-based immunotherapy platform, STACT (S.Typhimurium Attenuated Cancer Therapy), that enables IV dosing of multiplexed immunomodulatory payloads in a single therapeutic composition and induces durable anti-tumor immunity in preclinical models of T-cell excluded, checkpoint refractory tumors

				Laura Hix Glickman, Vice President, Research and Cofounder, **Actym Therapeutics** (CONFIRMED)
4:30pm	**Deep Primed™ T cell therapy leverages natural biology for superior efficacy against solid tumors** • Success of T cell therapies against solid tumors has been limited • Torque has developed its Deep Primed™ T Cell Immunotherapy platform. Here, the patient's own T cells are first primed and expanded by autologous dendritic cells presenting multiple shared or viral tumor antigens. Next, the resulting multi-targeted T cells (MTC) are loaded with nanoparticles whose payloads are designed to overcome the above bottlenecks to efficacy. Finally, these Deep Primed™ MTC are infused back into the patient in a multi-dosing regimen. They home to TME and tumor draining lymph nodes, where they release their payloads in a controlled manner. This maximizes efficacy at the target organs and limits systemic exposure. • Deep Primed™ T cell therapy leverages broad and natural repertoires of antigens and T cells for superior efficacy, does not require T cell genetic engineering, and utilizes powerful immunomodulating payloads whose systemic administration is toxic. These benefits are produced at a fraction of the cost of CAR-T and TCR-T cell therapies.	**Utilizing a live modified Vaccinia Ankara virus to deliver tumor associated antigen MUC1 on the surface of virus like particles** • Design of a MVA-MUC1 VLP • In vitro characterization of production of hypo glycosylated MUC1 in infected cells • Therapeutic Efficacy of MVA-VLP-MUC1 vaccine in Human MUC1 transgenic mice **Farshad Guirakhoo,** CSO, **GeoVax** (CONFIRMED)	**Checkpoint blockade immunotherapy and radiation therapy activate B-cells and promote B-cell differentiation** • Tumor-infiltrating B-cells are associated with significantly improved overall survival in squamous cell carcinomas • Presence of tumor increases germinal center differentiation in the draining lymph node • Checkpoint blockade immunotherapy and radiation synergistically promote germinal center differentiation **Shawn Kim,** M.D Candidate, **UCSD** (CONFIRMED)	**Cell-based therapies for solid tumors** • Brief historical overview of cell therapies for solid tumors • CNMC experience: NK cell based approaches for solid tumors • CNMC experience: T cell based approaches for solid tumors **C. Russell Cruz,** Director, Translational Research Laboratories, Centre for Emerging Technologies in Immune Cell Therapy, **Children's National Hospital** (CONFIRMED)

	• In my talk, I will introduce this groundbreaking technology, present key data demonstrating its extraordinary safety and efficacy, and highlight underlying mechanisms **Karsten Sauer,** Vice President, Immunology, **Torque Therapeutics** (CONFIRMED)			
4:50pm	**Multi-antigen specific endogenous T cell therapy consisting of stem cell and central memory T cells with potent anti-tumor activity for the treatment of hematologic malignancies** • Company sponsored P1/2 trials in AML and MM • NexImmune's AIM expanded T cell products include populations of primed antigen-specific CD8+ T cells directed at multiple tumor relevant antigen targets • T cell products with high proportion of stem cell and central memory T cell subtypes are associated with long-term T cell persistence and durable anti-tumor activity • NexImmune's proprietary T cell products may address key limitations observed with genttically modified T cell products; specifically, tumor escape through single target down-regulation and tumor relapse due to diminished T cell persistence **Scott Carmer,** CEO, **NexImmune** (CONFIRMED)	**Panel discussion: exploring applications of vaccines in immuno-oncology** **Moderator: Lelia Delamarre,** Senior Scientist in Cancer Immunology, **Genentech** **Jeffrey Skolnik,** Vice President, Clinical Development, **Inovio Pharmaceuticals** (CONFIRMED) **More speakers TBA**	**Metabolism** **Targeting immunometabolism as a novel strategy to fight cancer** • Metabolism and function of cancer cells and immune cells are altered in the context of a tumor and tumor microenvironment leading to tumor immune evasion • Altered immunometabolism pathways provide a rich opportunity for pharmacological intervention • Targeting glutamine metabolism has been identified as a promising approach and a potential new treatment paradigm with broad application for many cancer types **Robert Wild,** Chief Scientific Officer, **Dracen pharmaceuticals** (CONFIRMED)	**CAR T cell therapy for Glioblastoma: progress and challenges** • Lessons learned from on-going clinical trials • Interplay between CAR T cells and the endogenous immune system • Addressing the challenge of glioblastoma heterogeneity • Combining CAR T cells with anti-PD-1 checkpoint inhibition **Christine Brown,** Professor and Deputy Director, T Cell Therapeutics Research Laboratories, **City of Hope** (CONFIRMED)
5:10pm	**Development of off-the-shelf therapeutic T-cells resistant to host immune rejection and superior anti-tumor activity**		**CD36-dependent lipid peroxidation promotes intratumoral CD8 T cell dysfunction**	**Differential response of mouse glioma models to immunotherapeutics:**

	• Alloimmune defense receptors (ADRs) enable T-cells to recognize and eliminate activated pathogenic T- and NK-cells • ADR T-cells resist immune rejection by allogeneic T- and NK-cells in vitro and in vivo • T-cells co-expressing ADR and CAR evade immune rejection and promote long-term anti-tumor activity in mouse models of "off-the-shelf" cell therapy **Maksim Mamonkin,** Assistant Professor, **Baylor College of Medicine** (CONFIRMED)		• TILs adapt to altered lipid homeostasis in TME by increasing lipid uptake • Functionally exhausted TILs up-regulate CD36 expression and lipid peroxidation • Oxidized phospholipids induce lipid peroxidation and suppress CD8 T cell function **Shihao Xu,** Postdoc Fellow, **Salk Institute for Biological Studies** (CONFIRMED)	**understanding the underlying mechanism** • CAR T cell therapy and PD1-blockade in treatment of "hot" and "cold" mouse GBMs • Propose strategies to overcome tumor resistance **Sharareh (Sherri) Gholamin,** Researcher, **Caltech** (CONFIRMED)
5:30pm	**Drinks reception**			

Day 2 – Tuesday March 3rd 2020	
8:00am	Registration opens
8:30am	Doors open
	Day 2 opening keynotes **Combination Therapies in Antibodies and Immunotherapy**
9:00am	Chair's opening remarks **Roy Baynes,** Senior Vice President and Head Global Clinical Development, Chief Medical Officer, **Merck**
9:05am	**PD-1 antibodies are transforming cancer treatment both as monotherapy and in combination** • Monotherapy activity has been established and is transforming treatment across a number of major cancers • Precision medicine has been deployed to identify patients most likely to respond and those for whom a combination approach might be preferred • Precision medicine has enabled prediction of potentially important combination therapies • Combination therapies are now beginning to transform treatment across a number of cancers • PD-1 antibodies have become foundational in cancer therapy **Roy Baynes,** Senior Vice President and Head Global Clinical Development, Chief Medical Officer, **Merck** (CONFIRMED)
9:25am	**Building a leading off-the-shelf, allogeneic T-Cell immunotherapy company** • Epstein-Barr virus (EBV) is associated with a wide range of cancers and multiple sclerosis (MS) • Tab-cel® (tabelecleucel) is an off-the-shelf, allogeneic EBV T-cell immunotherapy in Phase 3 development for patients with EBV+ post-transplant lymphoma as well as other serious EBV-associated ultra-rare diseases • Tab-cel® is in combination with Keytruda/PD-1 • MSK's results of a meso-CAR T in combination with Keytruda/PD-1 • ATA188 is an off-the-shelf, allogeneic T-cell immunotherapy that targets EBV-infected B cells believed to play a role in the pathogenesis of MS • EBV T cells also have potential application as an off-the-shelf, allogeneic CAR T platform • ATA2271/ATA3271 are novel mesothelin-targeted CAR T programs incorporating next-generation technologies for patients with advanced solid tumors • Atara's platform is supported by state-of-the-art T-cell manufacturing that is commissioned and qualified to support clinical development **Pascal Touchon,** President and CEO, **Atara Biotherapeutics** (CONFIRMED)
9:45am	**Strategies for combination therapies with CD19 CARTs in NHL - lessons learned and future directions** • CD19 CAR Ts have demonstrated notable activity in DLBCL, CLL, FL, pALL and other hematological malignancies with high overall response rates and durable CRs • However, a portion of patients either do not respond or their responses are not durable • Learnings from non-responders or CAR-T relapses are providing data into the multitude of potential resistance/suppression mechanisms • This presentation will review combination approaches being evaluated to overcoming resistance in CAR T to improve outcomes in NHL and provide insights for solid tumor approaches and the next wave of targets **David Fontana,** Head Strategic Alliance & JCAR017 Program Lead, **Juno Therapeutics** (CONFIRMED)
10:05am	**Quantitative modelling and simulation approaches: Driving critical decisions from research through clinical trials**

	• Quantitative Systems Pharmacology (QSP) is a mathematical modeling and engineering approach to translational medicine that aims to quantitatively integrate knowledge about therapeutics with an understanding of its mechanism of action in the context of human disease mechanisms • Several examples will be shown which highlight QSP efforts to accelerate the discovery and development of best-in-class therapeutics and impact critical decisions, in the continuum from preclinical exploration to clinical research • Examples will include providing biological understanding, impact on new target proposals, lead generation, clinical candidate selection, IND support, and clinical trial go/no go decisions from industry **John M. Burke,** Co-Founder, President and CEO, **Applied Biomath** (CONFIRMED)				
10:25am	**Morning networking break**				
10:30-11:15am	**CLINICAL TRIALS: WORKSHOP: Operationalizing pediatric and adult cell therapy trials at an academic center** **Focus on challenges and lessons learned** • Trial Onboarding • Product collection, manufacturing and handling • Product infusion and patient management **Brenda Hann,** Director, Clinical Trials Operations, **Stanford Medicine** (CONFIRMED) **Janet McDowell,** Clinical Research Manager, **Stanford University School of Medicine - Cancer Clinical Trials Office** (CONFIRMED) **Theresa Latchford,** Oncology Clinical Nurse Specialist, **Stanford Health Care - Blood and Marrow Transplant Unit** (CONFIRMED) **Anne Cunniffe Marcy,** Clinical Research Coordinator, **Stanford University School of Medicine - Cancer Clinical Trials Office** (CONFIRMED)				
	Checkpoint Inhibitors	**Commercialization, Manufacturing & Market Access**	**Gene Therapy and CRISPR**	**Clinical Trials: Collaboration and Design**	**Antibodies in Immunotherapy**
	Chair: Aaron Miller, Assistant Clinical Professor, UC San Diego Moores Cancer Center	**Chair: Kelly Thornburg**, Executive Director, Quality Site Head, **Kite Pharma**	**Chair: Karsten Sauer,** Vice President, Immunology, **Torque Therapeutics**	**Chair: Brenda Hann,** Director, Clinical Trials Operations, **Stanford Medicine**	**Chair: C. Russell Cruz,** Director, **Children's National Hospital**
11:25am	**Therapeutic targeting of cancer neoantigens with personalized cancer vaccines** • A functional approach to NeoAg discovery can identify and validate targets for therapeutic vaccines • This approach is HLA agnostic and identifies naturally processed and presented neoepitopes • A personalized vaccine trial combining peptide	**Kite Pharma experience in the global commercial launch of a CAR-T product** • Preparation for commercial launch in the US and globally • Special considerations for qualification of medical centers • Rapid manufacturing, release and distribution present challenges	**Tumor-specific immunogene therapy with T-SIGn viruses** • T-SIGn is a broad cancer-targeted gene therapy platform for delivery and local expression of combinations of genes for the treatment of solid tumors. • T-SIGn viruses are administered intravenously to reach both primary and metastatic tumor tissue.	**Being the collaborator of choice for combination studies** • Reviewing how this all started • Exploring how work has evolved and what does that mean • Working with collaborators in order to optimize performance	**Title TBA** **Bruce Keyt,** CSO, **IGM Biosciences** (CONFIRMED)

	vaccines with pembrolizumab is underway at UCSD **Aaron Miller**, Assistant Clinical Professor, **UC San Diego Moores Cancer Center,** Associate Director, **San Diego Center for Precision Immunotherapy (**CONFIRMED)	**Kelly Thornburg**, Executive Director, Quality Site Head, **Kite Pharma** (CONFIRMED)	The transgenes are encoded under the control of the virus major late promoter such that during selective virus replication in tumors the payload biotherapeutic proteins are produced to fight the cancer locally • Properties of the T-SIGn platform, including clinical experience with the unarmed parental EnAd virus, and activity data from specific virus candidates will be discussed **Brian Champion**, CSO, **PsiOxus Therapeutics** (CONFRMED)	• Highlighting key factors in making all collaborations successful • Presenting advantages, challenges & lessons learned **Denise Steckel,** Head, Clinical Collaborations Management, **Genentech** (CONFIRMED)	
11:45am	**CUE-101, a novel Fc fusion protein for selective targeting and expansion of anti-tumor T cells for treatment of HPV-driven malignancies** • CUE BioPharma's ImmunoSTATs are proprietary biologics that incorporate, in a single molecular framework, the key signals needed to selectively modulate antigen-specific T cells: namely, the HLA-peptide complex to target the TCR along with relevant co-stimulatory/co-inhibitory	**Launch and commercialization insights for gene and cellular therapy products** • How should you think about the market: traditional GTM strategy versus Customized GTM • How to think about market access strategy • LCM is key component to this lifeline of the product in this space **Mohamed Ladha,** Vice President and Group Head, Commercial, Operations and Medical Affairs, **Tocagen** (CONFIRMED)	**Engineering remotely controllable CAR T cells for cancer immunotherapy** • ultrasound guided remote control of engineered cells • CAR T cancer immunotherapy • synthetic biology and genetic engineering of T cells **Peter Yingxiao Wang,** Professor of Bioengineering, **UCSD** (CONFIRMED)	**Early phase development of biomarker-specific agents** • Balancing inclusion criteria, safety monitoring, biomarker expression • Incorporating companion diagnostics, dose escalation or expansion phase? • Strategies for moving from first-in-human study to accelerated approval **Christina Annunziata,** Head, Translational Genomics Section, **NIH** (CONFIRMED)	**CDX-1140, a unique Agonist Anti-CD40 mAb for cancer Immunotherapy** • CD40 plays key roles in innate and adaptive immune responses, and targeting CD40 can promote tumor regression via multiple mechanisms • CDX-1140 is a fully human IgG2 agonist anti-CD40 mAb selected based on a linear dose response and hypothesized to achieve good systemic exposure and tumor penetration without dose-limiting toxicity observed with

	signals, dependent upon the disease indication. • The protein framework of ImmunoSTATs is based on an Ab Fc backbone and is extremely modular and flexible, which permits for targeting of diverse patient populations and different diseases. • The lead clinical candidate CUE-101 is comprised of HLA-A*0201 bound to a peptide epitope derived from the HPV16 E7 protein (amino acid residues 11-20) along with affinity-attenuated human interleukin-2 (IL-2) to selectively activate and expand HPV16 $E7_{11-20}$-specific $CD8^+$ T cells for HPV-driven malignancies, such as head and neck cancer and cervical cancer **Ron Seidel,** Executive Vice President, Head of Research and Development, **Cue Biopharma** (CONFIRMED)				other potent agonist anti-CD40 mAbs • CDX1140-01 is a Phase 1 dose-escalation study with tumor specific expansion cohorts of CDX-1140 alone or in combination with CDX-301, a potent dendritic cell growth factor, in patients with advanced cancer; preliminary data from the study will be presented **Michael Yellin**, VP, Clinical Science, **Celldex Therapeutics** (CONFIRMED)
12:05pm	**Targeting Siglec-15 for cancer immunotherapy**	**Panel discussion: from clinical trials to commercial manufacturing**	**Engineering T cells for the immunotherapy of pediatric brain tumors**	**Panel discussion: clinical trial opportunities and designs for cell therapies**	**T cell redirecting antibody circuits: Bispecifics with a unique "AND" gate to enhance tumor specificity**

	• The development and characterization of NC318, a novel therapeutic antibody targeting Siglec-15 • Brief updates on NC318 Phase I clinical trial • The case study will describe the approach taken to select novel targets derived from NextCure's FIND-IO™ platform **Linda Liu,** SVP, Research, **NextCure** (CONFIRMED)	• How to achieve commercial capacity • Overcoming the lack of mature CROs • Technical operations – scaling up • Engaging with regulators • Supply chain challenges • Cost and resources **Moderator: Kelly Thornburg**, Executive Director, Quality Site Head, **Kite Pharma** (CONFIRMED) **Christina Yi,** Chief Operations Officer, **Dendreon** (CONFIRMED) **Alan K. Smith**, Executive Vice President, Technical Operations, **Bellicum** (CONFIRMED) **Marjorie Shapiro,** Supervisory Biologics Office of Biotechnology Products, **CDER, FDA** (CONFIRMED)	• Immunotherapy challenges for brain tumors • Genetic engineering approaches to improve CAR T cells **Giedre Krenciute**, Assistant Member, **St. Jude Children's Research Hospital** (CONFIRMED)	• What's the definition of personalised medicine? • Ethical considerations • Keeping the patient engaged during long manufacturing times **Moderator: Brenda Hann,** Director, Clinical Trials Operations, **Stanford Medicine** **Joann Peters,** Vice President Clinical Operations, **Geneos Therapeutics** (CONFIRMED) **Barbara Hickingbottom,** Vice President, Clinical Development, **Xencor** (CONFIRMED) **Christina Annunziata,** Head, Translational Genomics Section, **NIH** (CONFIRMED)	• Harnessing the Immune System, in particular redirected T-cells to kill tumor cells has revolutionized cancer treatment. However, on and off-target toxicity limit the therapeutic potential of these approaches • Revitope is developing T cell redirecting antibody circuits that use dual-targeting to deliver split anti-CD3 paratopes to the tumor. Reconstitution is only permitted after protease cleavage in the tumor microenvironment to remove the stabilizing dummy domain. This approach is designed to initiate and focus T cell mediated cytotoxic immunity accurately on the tumor sparing normal tissues • We will discuss protein engineering considerations, in vitro and in vivo activity measurements, half-life and the use of quantitative systems pharmacology modelling approaches to aid mechanistic understanding **Werner Meier,** CSO, **Revitope Oncology** (CONFIRMED)

12:25pm	**Small molecule metabolites predict outcomes to immune checkpoint blockade** **Sonia Sharma,** Associate Professor, Director Center for Functional Genomics, **La Jolla Insitute for Immunology** (CONFIRMED)	**PANEL DISCUSSION CONTINUED**	**Safety and efficacy results from large-scale gene Therapy trial in patients with Leber's Hereditary Optic Neuropathy (LHON)** • Reported are two Investigator-Initiated rAAV2-ND4 gene therapy Trials conducted in 2011 and 2018. Combined are largest-scale and longest-term gene therapy study for LHON patients. • Eight-year follow-up data on 9 patients from IIT#1 demonstrated long-term safety and durability of gene therapy. • In IIT#2, 63.21% of 106 patients who reached 12 month follow-up had significant BCVA improvement and there were no SAEs. **Alvin Luk**, CMO and SVP Global Clinical and Medical	**PANEL DISCUSSION CONTINUED**	**Engineered antibody-secreting T cells** • Brief historical overview of antibody-secreting T cell technology • Antibodies engineered to mediate ADCC can be secreted by T cells • Results in HIV suggest platform linking innate and adaptive components via antibodies is feasible **C. Russell Cruz,** Director, Translational Research Laboratories, **Centre for Emerging Technologies in Immune Cell Therapy, Children's National Hospital** (CONFIRMED)

			Affairs, **Shanghai Henlius** (CONFIRMED)		
12:45pm	**Networking lunch**				
12:50-1:30PM	**WORKSHOP: Panel discussion - patients as partners in clinical development** • How can we collaborate more with patients? • Improving transparency • Public awareness of clinical trials **Moderator: Julie Gerberding,** Executive Vice President, Communications, Global Policy, and Population Health & Chief Patient Officer**, Merck** (CONFIRMED) **Hillary Theakston,** Executive Director, **The Clearity Foundation** (CONFIRMED) **Joann Peters,** Vice President Clinical Operations, **Geneos Therapeutics** (CONFIRMED) **Amrit Takhar,** GP Partner and Clinical Lead, **Wansford surgery – NHS** (CONFIRMED)				
	Checkpoint Inhibitors	**Commercialization, Manufacturing & Market Access**	**Gene Therapy and CRISPR**	**Clinical Trials: Data and Transparency**	**Antibodies in Immunotherapy**
	Chair: Karsten Sauer, Vice President, Immunology**, Torque Therapeutics**	**Chair: Rajesh Krishnan,** Senior Vice President, CMC and Manufacturing Operations, **Oncternal Therapeutics**	**Chair: Steven Jonas,** Researcher, **UCLA**	**Chair: Amrit Takhar,** GP Partner and Clinical Lead, **Wansford surgery – NHS**	**Chair: Greg Babcock,** Vice President, Research, **Visterra Inc**
2:00pm	**CB213: A second generation checkpoint inhibitor optimally configured for therapeutic efficacy** • The identification and characterisation of CB213 a tetravalent trispecific therapeutic delivering dual checkpoint blockade through dual inhibition of PD-1 and Lag3 • The case study will describe the approach taken to select a novel asymmetric format on the basis of optimal target engagement and activity using the modular Humabody format	**Cellular immunotherapy supply chain management, logistics and scale-out** • Vendor qualification • Maintaining chain of custody for starting material and product • Shipper suitability, features and options • Material sourcing, receipt and testing • Supply chain sustainability and scale-out considerations **Alan K. Smith**, Executive Vice President, Technical Operations, **Bellicum** (CONFIRMED)	**Nanotechnology-enabled assembly Lines for gene and stem cell-based therapies** • The capability to mass produce populations of engineered cells to serve as cellular therapies remains a considerable translational challenge. New intracellular delivery technologies that can simultaneously satisfy universal cargo delivery economically with high efficiency, high processing throughputs, scalability, and minimal cell toxicity are needed	**What are the opportunities of undertaking commercial trials in UK primary care?** • We are involved in studies in which patients have consented to EHR data extraction as the main method of follow up • This allows study designs using real world data and greatly reduces data collection burden and hence costs • Examples • Study 1 - genomic study – DiscoverME • Study 2 SAFER study • More long-term studies and registries are needed	**Structure-guided design of an IL-2-based therapeutic that selectively activates regulatory T cells** • Several novel IL-2 mutations that enhance selectivity of IL-2 for Tregs will be discussed • Enhanced half-life of the IL-2 muteins in vivo • Selective expansion of Tregs in vivo, with modest to no activation of NK cells or Th cells • Efficacy in disease models of autoimmunity **Greg Babcock,** Vice President, Research, **Visterra Inc** (CONFIRMED)

	• Data will be presented showing that this molecule is able to reverse the dysfunctional phenotype of patient derived human T-cells which are non-responsive to clinical PD1 antibodies **James Legg,** SVP Research and Development, **Crescendo Biologics** (CONFIRMED)		• Ideas inspired by microfluidics, nanolithography, and nanorobotics are combined with gene editing to generate broadly applicable and translatable methods to enable rapid, safe, cost effective, and efficient delivery of biomolecular cargo • Solutions that enable the controlled and temporary permeabilization of the processed cells *via* either i) physical penetration of cellular membranes by precision-engineered nanostructures or ii) mechanical manipulation of cellular membranes are promising alternative strategies to existing viral and non-viral vector-based approaches **Steven Jonas,** Researcher, **UCLA** (CONFIRMED)	of patients who had immunotherapy **Amrit Takhar,** GP Partner and Clinical Lead, **Wansford surgery – NHS** (CONFIRMED)	
2:20pm	**Assessment of biologics' efficacy using preclinical models featuring humanized Immune Checkpoint or Human Immune System** • The breakthrough of immunotherapy has unleashed new hope and new success for cancer therapy. However, they	**Halozyme's ENHANZE drug delivery technology with rHuPH20 Hyaluronidase is clinically and commercially proven to facilitate subcutaneous administration** • SC is typically preferred over IV administration but applicability is often limited due to	**Novel CAR-T Cell therapy can be activated, silenced, and reprogrammed *in vivo*** • Novel CAR-T cells, known **as** ARC-T cells, are readily activated, silenced, and reprogrammed *in vivo* by sparX, which is a novel non-scFv tumor-targeting soluble protein.	**Using data analytics to overcome challenges with clinical trials data** • Conducting clinical trials can be challenging • Challenges can include setting up databases, recruitment of participants, missing data	**T cell engaging bispecific antibodies: Comparing Pfizer's platforms** • T-cell engaging bispecific antibodies are a promising therapeutic approach for the treatment of multiple cancer types. • Pfizer has developed several Fc-containing T-cell

	are still subsets of patients, which do not show robust response to immunotherapy. • One of the main limitations in immuno-oncology is the lack of faithful preclinical models recapitulating the complexity of the etiology of tumors, the interaction with the stroma and the micro-environment and the proper priming of the immune system. The quality of predictive preclinical models is key to interrogate and model anti-tumor immune response. • The use of Humanized Immune Checkpoint models as well as immunodeficient mice reconstituted with human immune system in preclinical studies will be discussed during this talk **Kader Thiam,** VP of Transgenic Technologies, **Genoway** (CONFIRMED)	volume/dose limitations restricting the number of biologic drugs suitable for SC delivery. Clinical and commercial experience demonstrate that ENHANZE technology (rHuPH20 hyaluronidase) can successfully facilitate large volume SC delivery of co-administered drugs while maintaining their therapeutic efficacy and safety • ENHANZE technology facilitates and optimizes SC drug delivery of co-administered drugs by locally and transiently reducing hyaluronan (HA) in the SC space, enabling rapid administration of large volumes of the co-administered therapeutic agent **Michael J. LaBarre,** Senior Vice President, Chief Technology Officer, **Halozyme** (CONFIRMED)	• ARC-T cells bind exclusively to sparX; the formation of the ARC-T, sparX, and tumor complex is required for the ARC-T to kill the targeted cell. • A library of sparX has been created that bind different cell surface targets **Laura Richman**, Senior Vice President, **Arcellx** (CONFIRMED)	issues on key variables of interest etc. • Ideas for overcoming these challenges using novel data analytic techniques will be discussed from a Data Scientist's perspective **Jay Mandrekar,** Professor of Biostatistics and Neurology, **Mayo Clinic** (CONFIRMED)	engaging bispecific antibody platforms, which increase the half-life and allows for conventional dosing. These platforms are currently evaluated in the clinic. • We will compare these platforms and the challenges and opportunities of each platform will be highlighted **Javier Chaparro-Riggers,** Executive Director, **Pfizer** (CONFIRMED)
2:40pm	**Defining T Cell states associated with response to combination immunotherapy** **Shahram Salek-Ardakani**, Senior Director, Cancer	**Automated CAR T cell manufacturing platform for hematologic and solid cancers** • Manufacture of CAR T cells in support of Phase I	**Engineered T cells for sarcoma** • Autologous T cells engineered to express chimeric antigen receptors (CARs) are safe	**Clinical trial disclosure and transparency – managing the ever-changing global regulations and requirements**	**Immune responses induced by Bispecific Antibody Targeted T cells in solid and liquid tumors** **Larry Lum,** Professor, Director of Cellular Therapy, Scientific

	Immunology, **Pfizer** (CONFIRMED)	clinical trials using anti-CD19/22 bispecific CAR • Development of an automated closed retroviral vector transduction process for solid cancer **Steven Feldman,** Director of Manufacturing and Process Development, **Stanford Center for Cell Therapy** (CONFIRMED)	and may provide clinical benefits in patients with metastatic sarcoma • Responses following CAR T cell therapy may include involvement of endogenous immune system resulting in tumor clearance. • Introducing engineered signal receptors or gene knockouts can improve CAR T cell function and persistence **Sujith Joseph,** Senior Scientist, **Baylor College of Medicine** (CONFIRMED)	• Global Clinical Trial Registration and Results Disclosure • Public Release of Clinical Information (Health Canada, EMA, FDA) • Drafting documents with the "end" in mind **Nate Root,** Associate Director, Clinical Disclosure & Transparency, **Ionis Pharmaceuticals** (CONFIRMED) **Kelly Coulbourne,** Associate Director, Clinical Trial Data Registries, **Allergan** (CONFIRMED)	Director of Bone Marrow Transplant, **University of Virginia** (CONFIRMED)
3:00pm	**Bispecific anti-PD1 checkpoint inhibitors to address cancer immunotherapy resistance mechanisms** • Second generation of PD-x inhibitors will extend the spectrum of patients responding to immunotherapies by addressing untapped immune evasion mechanisms. • BiCKI® is a proprietary bispefic fusion protein platform built on an engineered key backbone anti-PD1 and targeting innovative targets.	**A regulatory perspective on CMC challenges for accelerated product development programs** **Marjorie Shapiro,** Supervisory Biologics Office of Biotechnology Products, **CDER, FDA** (CONFIRMED)	**Toca 511 and Toca FC - a retroviral prodrug cancer immunotherapy: learnings from preclinical, phase 1, and phase 3 trials** **Douglas Jolly,** Executive Vice President, Research and Pharmaceutical Development, **Tocagen** (CONFIRMED)		**Tumor-targeted immune-stimulating antibody conjugates** • 3-4 bullet points covering the scope of your talk • Immune-stimulating antibody conjugates (ISACs) are tumor-targeting antibodies conjugated with powerful innate immune stimulants • ISACs are capable of invoking potent myeloid cell activation and the production of pro-inflammatory cytokines that favor a productive anti-tumor immune response

	• The BiCKI® platform strives to inhibit key immune checkpoints while simultaneously delivering intratumoral cytokines with Treg modulating function and/or increasing exhausted T cells responses. • The BiCKI® platform can also delivers costimulatory signals to rewire anti-tumoral T-cell activities or other modalities reinstating, among others, macrophage polarization and phagocytic functions **Nicolas Poirier,** Chief Scientific Officer, **OSE Immuno Therapeutics** (CONFIRMED)				• ISACs are active in preclinical in vivo models of cancer and are highly efficacious by enhancing ADCP, promoting antigen presentation, immunological memory, and epitope spreading **David Dornan,** Senior Vice President of Research, **Bolt Biotherapeutics** (CONFIRMED)
3:20pm	Afternoon networking break				
3:25-3:55pm	**CORONAVIRUS: Latest updates in the development of novel vaccines for COVID-19** • Scientists are racing to develop a vaccine – will it come in time? • An interactive discussion on the llenges, what's being done, how quickly a vaccination can be made **Kate Broderick,** Vice President, **Inovio Pharmaceuticals** (CONFIRMED) **Other speakers TBA**				
	Checkpoint Inhibitors	**Gene Therapy and CRISPR**	**Clinical Trials: Dose Optimization**	**Antibodies in Immunotherapy**	
	Karsten Sauer, Vice President, Immunology**, Torque Therapeutics**	**Chair: Steven Jonas,** Researcher, **UCLA**	**Chair: Denise Steckel,** Head, Clinical Collaborations Management, **Genentech**	**Chair: C. Russell Cruz,** Director, **Children's National Hospital**	
4:00pm	**Evolving field of Eat Me and Don't Eat Me Science**	**Non-viral engineering of immune cell specificity and function**	**Challenges and opportunities in dose-finding in immuno-oncology**	**Mechanisms of action of a neoantigen-targeting antibody NEO-201**	

	• Review of Macrophage Interactions with Tumors • Review of Therapies targeting CD-47 and SIRP alpha • Current clinical trials targeting CD-47 and SIRP alpha **Corey Carter,** CEO, **EpicentRx INC** (CONFIRMED)	• Non-viral genome targeting is a new, simple method for targeted integration of new genetic information in primary human T cells • Targeted replacement of the endogenous T cell receptor with a cancer antigen targeting TCR showed specific anti-tumor function *in vitro* and *in vivo* • Pooled knock-in screening based on non-viral genome targeting enabled rapid discovery of synthetic DNA sequences that along with a new TCR specificity enhanced T cell function *in vivo*. **Theodore Roth,** Research Fellow, **UCSF** (CONFIRMED)	• Difficulties of identifying best dose and regimen for immunologically directed therapeutics: • Indirect method of action vs. cytoxic chemotherapy or radiation • Complex safety profiles • Opportunities for meeting the challenge through: • Adaptive trial design • Biomarker assessment • Flexibility in development strategy **Barbara Hickingbottom,** Vice President, Clinical Development, **Xencor** (CONFIRMED)	• This study demonstrates that NEO-201 has several mechanisms of action. NEO-201 is able to mediate both ADCC and CDC. • In addition, NEO-201 can block the interaction between tumor cell CEACAM5 and NK cell CEACAM1 to reverse CEACAM1-dependent inhibition of NK cytotoxicity. • These results suggest that NEO-201 may potentially reverse CEACAM1-dependent immunosuppression of NK cells in patients whose tumors express the NEO-201-reactive variant of CEACAM5. • NEO-201 can also target and eliminate human immunosuppressive regulatory T cells (Tregs). • Additional mechanisms are under investigation **Massimo Fantini,** Senior Scientist, **Precision Biologics** (CONFIRMED)
4:20pm	**Exploration of customizable workflows to evaluate next-generation IO candidates: a case study in multi-assay immunomodulatory receptor evaluation across matched biospecimens** • Discussion of the limitations of IHC and sequencing for IMR discovery that can be alleviated	**Clinical experience with T cells expressing NY-ESO-1 TCR and CRISPR edited to eliminate endogenous TCR and PD-1** • NY-ESO-1 is a cancer testis antigen with aberrant expression in myelomas, sarcomas, and melanomas. • This talk will present updated data from a phase 1 pilot clinical trial (	**The importance of dose optimization in the development and approval of immunooncology drugs** **Sandhya Girish,** Senior Director, Global head Oncology, **Genentech** (CONFIRMED)	**Bispecific antibodies for guided inhibition of CD47** • CD47-SIRPa axis, a phagocytosis checkpoint, is a promising target for cancer immunotherapy. Yet, therapeutic inhibition of CD47 on tumor cells is hindered by ubiquitous expression of the target in healthy tissue

	by multiparametric flow cytometry analysis • Discussion of the optimization of flow cytometer instrument • settings and gating analysis strategies for dissociate tumours vs blood samples • Exploration of IMR expression at the single-cell level across cellular subsets present in matched tumour and blood samples • Advanced analysis using high dimensional flow cytometry data **Shawn Fahl,** Director, Flow Cytometry Services, **Discovery Life Sciences** (CONFIRMED)	NCT03399448) enrolling patients with advanced MM and sarcoma. • This trial evaluates a first-in-human engineered cell therapy of T cells expressing a TCR recognizing a HLA-A201 restricted NY-ESO-1/LAGE-1 epitope (SLLMWITQC), and with CRISPR/Cas9 edited TCRα, TCRβ, and PDCD1 genes **Simon Lacey**, Director, The Center for Cellular Immunotherapies, **University of Pennsylvania** (CONFIRMED)		• Undesirable on-target/off-tumor effects typically observed with CD47 blocking monoclonal antibodies can be largely mitigated with a bispecific antibody, which enable guided (i.e., selective) inhibition of CD47 on cancer cells • Such CD47-blocking bispecific antibodies show potent anti-tumor activity associated with favorable pharmacokinetics and safety profiles **Krzysztof Masternak,** Head of Discovery, **Light Chain Bioscience – a brand of Novimmune SA** (CONFIRMED)
4:40pm	**Affimer therapeutics: generation of checkpoint inhibitor antagonists with broad applications** • The Affimer platform is based on the human protease inhibitor, Stefin A, where we have introduced 2x9 aa loops into the backbone to generate large phage display libraries. Using phage display we have generated a range of antagonists and agonists with nM affinities to targets that are central to the modulation of the immune system in the tumour microenvironmenT	**Title TBA** **Matthew Spear**, Chief Medical Officer, **Poseida** (CONFIRMED)	**Concepts in cell therapy dose optimization** • Off the shelf cell therapy offers the opportunity to apply pharmacology principles • Cell expansion is directly related to toxicity • Dosing should focus on achieving maximal CAR-T to tumor cell ratio at intervals that prevent extremely high serum cytokine levels **Chris Heery,** Chief Medical Officer, **Precision BioSciences, Inc.** (CONFIRMED)	**A novel platform for T-cell redirection that elicits efficient tumour lysis with minimal cytokine release in multiple tumour types** • Discovery of novel CD3 binding antibodies • Unique functional activity based on novel epitope and affinity • T-cell redirecting bispecific antibodies that efficiently lyse tumors with low levels of cytokine release • TNB-383B lead molecule currently in phase 1 clinical development **Nathan Trinklein,** Chief Technology Officer, **Teneobio** (CONFIRMED)

	• With our anti-PDL1 Affimer Fc we have demonstrated total tumour regression in mouse syngeneic models in combination with an iDASH inhibitor and immunity to rechallenge with tumour cells, showing that we have achieved an immune memory response • We have expanded the use of our anti-PDL1 Affimer therapeutics by encoding them into DNA and have shown that they can be expressed at high levels as function proteins from primary human cells **Amrik Basran,** Chief Scientific Officer, **Avacta** (CONFIRMED)			
5:00pm	**Photoimmunotherapy, a new tumor targeted approach that activates immune anti-cancer responses and reduces cellular tumor immunosuppression** • Photoimmunotherapy is a new cancer platform that enables the rapid destruction of cellular components within the tumor • Photoimmunotherapy targeting of cancer cells induces innate and adaptive immune responses that are synergistic with immune checkpoint inhibitors • Targeted depletion of tumor immunosuppressive components with Photoimmunotherapy, such as T-regs, induces rapid and	**Audience Q&A**	**Audience Q&A**	**Mucin (MUC)16-directed Immunotherapeutic strategies for ovarian cancer** • Use of bi-specific T-cell engagers, which could potentially induce antigen spreading beyond the targeted tumor-associated antigen **Oladapo Yeku,** Assistant Clinical Attending, **Massachusetts General Hospital** (CONFIRMED)

	sustained anti-cancer immune responses with strong synergy with immune checkpoint inhibitors **Miguel Garcia-Guzman,** Chief Scientific Officer, **Rakuten Medical** (CONFIRMED)			
5:20pm	Networking drinks and poster presentation session			

Day 3 – Wednesday March 4th 2020				
8:30am	Registration opens			
9:00am	Doors open			
	Neoantigens	**Oncolytic Viruses**	**Non-Oncology Immunotherapy**	**Research Hub**
	Chair: James Barlow, Vice-President, Operations & BD, **Geneos Therapeutics**	**Chair: Christophe Quéva, CSO, Oncorus**	**Chair: RJ Tesi,** CEO/CMO, **InMune Bio**	**Chair: Martin Naradikian,** Postdoctoral Fellow, **La Jolla Institute for Immunology**
9:00am	**Panel discussion: Addressing the challenges of neoantigen vaccines** • Cost of producing personalized products • Time from biopsy to treatment • Testing immune response before selecting neoantigens or selecting a larger neoantigen payload which speeds the biopsy to treatment time • Having the right vaccine platform to drive CD-8/CD-4 responses • Tracking patient samples through the production process • Optimally designing combination trials taking into account the lag time for drug to be manufactured • Adjuvant vs. Advanced usage – Adjuvant better setting but longer, larger and more expensive trials **Moderator: James Barlow,** Vice-President, Operations & BD, **Geneos Therapeutics** (CONFIRMED)	**ONCR-177, a Novel Micro-RNA Attenuated Oncolytic HSV Virus with Combinatorial Immune Payloads for the Treatment of Metastatic Cancer** • Oncolytic virus with a dual mode of action, cancer cell killing and stimulation of antitumor immunity are promising therapeutic approaches for checkpoint irresponsive tumors • ONCR-177 expresses five transgenes (IL-12, CCL4, FLT3L and PD-1 and CTLA-4 antagonists) for potent immune stimulation • ONCR-177 tumor selectivity is enabled by the differential expression of microRNA **Christophe Quéva,** CSO, **Oncorus** (CONFIRMED)	**Synthetic DNA-based immunotherapies for emerging infectious diseases** **Kate Broderick,** Vice President, **Inovio Pharmaceuticals** (CONFIRMED)	**Personalized T cell recruiting bispecific autoantibodies for treating cancer** • Strategy to overcome tumor antigen loss and heterogeneity • Tumor-specific targeting for tumors without validated antigens • Antibody conjugation method for site-specific, covalent modification with nearly any antibody • T cell recruiting bispecific autoantibodies using our production method function as expected in vitro and in vivo **Fabiana Zappala,** PhD Student, **University of Pennsylvania** (CONFIRMED)
9:20am		**Development of RIVAL-01, a novel oncolytic vaccinia virus expressing immunomodulatory therapeutic transgenes** **Caroline Breitbach,** VP R&D Programs and Strategy, **Turnstone Biologics** (CONFIRMED)	**Development of single dose vaccines for emerging infection diseases using a novel MVA plug and Play platform** • Design of MVA-VLP and non-VLP vaccines for Zika, Ebola, Marburg and Lassa fever viruses • In vitro characterizations of production of Research Viruses • Efficacy studies in rodent and non-human primate challenge models	**Dissecting virus-antibody interactions with a vaccinia virus-based display platform** • We display full-length hantavirus glycoproteins on the surface of vaccinia virus particles • We generate vaccinia-displayed libraries of mutant glycoproteins using deep mutational scanning
	Stephen Schoenberger, Professor, **La Jolla Institute for Immunology** (CONFIRMED) **Agnete Fredriksen**, Co-Founder, President and CSO, **Vaccibody** (CONFIRMED)			

	Jessica Baker Flechtner, CSO, **Genocea** (CONFIRMED) **Alfredo Perales-Puchalt,** Vice President, Research & Development**, Geneos Therapeutics** (CONFIRMED)		**Farshad Guirakhoo,** CSO, **GeoVax** (CONFIRMED)	• The libraries can be used to define the molecular basis of neutralizing antibodies **Ethan Laudermilch**, Post-Doc, **Albert Einstein College of Medicine** (CONFIRMED)
9:40am	**Going natural with Neoantigens** • The success of neoantigen vaccination will rely of accurately target natural ligands that appear on tumor cells/APC, and coordination of both CD4+ and CD8 T cell subsets • We have developed a novel HLA-agnostic platform that functionally identifies CD4+ and CD8+ T cell neoantigens across all tumor types analyzed, regardless of mutational burden • Vaccination with a single peptide comprising CD4+ and CD8+ target neoantigens identified by our method can lead to eradication of large established tumors in a preclinical model **Stephen Schoenberger,** Professor, **La Jolla Institute for Immunology** (CONFIRMED)	**Oncolytic adenovirus and Anti-PD-1 combination therapy for glioblastoma** • Phase 2 trial update • Mechanisms of immune activation **Matteo Levisetti,** Chief Development Officer, **DNAtrix** (CONFIRMED)	**Approaching Alzheimer's disease as an immunological disease: role of biomarkers** • Innate immune dysregulation causes chronic inflammation and development of Alzheimer's disease • Approaching AD as an immunologic disease changes the clinical strategy in many ways but perhaps none more important than access to biomarkers • We have developed a suite of biomarkers (both invasive and non-invasive) that extent beyond classical blood inflammatory measures to identify the right patients and track target engagement and treatment response **RJ Tesi,** CEO/CMO, **InMune Bio on behalf of Christopher (CJ) Barnum,** Director of Neuroscience and Translational Medicine, **INmune Bio** (CONFIRMED)	**Identification and characterization of KRAS G12V-specific CD4 T cells from the blood of a pancreatic cancer patient** • We have developed a novel HLA-agnostic approach to neoantigen identification which combines genomic sequencing, bioinformatic analysis, and functional assays • We identified eleven dominant CD4 T clones from the blood of a pancreatic cancer patient and confirmed specificity, restriction, minimal epitopes, and avidity • These KRAS G12V-specific CD4 TCRs could be of therapeutic value to patients with the same driver mutation and HLA haplotype **Martin Naradikian,** Postdoctoral Fellow, **La Jolla Institute for Immunology** (CONFIRMED)
10:00am	**Harnessing the power of patient T cell responses: ATLAS™ platform** • Personalized immune response profiling drives validation of antigens of proven and pre-	**Replimune's oncolytic immuno-gene therapy: A potent and versatile approach to patient-specific anti-tumor vaccination and therapy**	**Neuroprotective role of NK cells in Synucleinopathies** • The pathological hallmark of PD, Lewy body dementia (LBD) and other synucleinopathies is Lewy	**Inhibition of filovirus infection by host-targeted Trojan horse bispecific antibodies** • Antibodies can inhibit filovirus entry by blocking viral surface

	existing CD4+ and CD8+ T cell responses • Anti-tumor and inhibitory (pro-tumor) neoantigens are identified • Comprehensive and flexible system: For any patient, any antigen type, any cancer and both CD8+ and CD4+ T cells • Generating unprecedented clinical immune response through novel neoantigen vaccine **Jessica Baker Flechtner,** CSO, **Genocea** (CONFIRMED)	• Replimune is developing its Imulytic family of oncolytic immuno-gene therapy agents (RP1-RP3), each of which is in or being prepared for clinical trials alone in combination PD1 blockade • The core backbone virus (RP1) has been designed to maximize tumor killing, the amount of tumor antigen released for vaccination purposes, and the immunogenicity of tumor cell death • This is then further armed to deliver potent immune stimulatory protein encoding genes directly to the sites of immune response generation, intended to further augment the systemic anti-tumor immune response generated **Robert Coffin,** CEO, **Replimmune** (CONFIRMED)	bodies (LBs), which are primarily composed of the deposits of alpha-synuclein (α-syn) • We demonstrated that NK cells efficiently scavenge alpha-synuclein and display a neuroprotective role in a mouse model of PD • Our study provided evidence of the potential usefulness of NK cells as a potential therapeutics for PD and LBD **Jae-Kyung (Jamise) Lee**, Assistant Professor, **The University of Georgia (**CONFIRMED)	glycoprotein and host cell receptor engagement. • Lysosomal targeting tags increase uptake of antibodies into cells • Engineered anti-filoviral antibodies with lysosomal targeting tags inhibit filovirus entry **Ariel Wirchnianski,** PhD Candidate, **Albert Einstein College of Medicine** (CONFIRMED)
10:20am	**Expanded neoantigenic payloads and rapid biopsy to treatment personalized immunotherapy** • DNA based GT-EPIC™ platform addresses the three key needs for effectively targeting neoantigens: • Ability to drive potent and broad T cell immune responses; • Ability to target a larger number of neoantigens in a single formulation; • Short manufacturing turnaround time	**Systemic delivery and enhanced immunotherapeutic activity with next generation oncolytic vaccinia** • The next generation of clinical oncolytic vaccinia viruses will need to be delivered systemically. • In addition improved targeting of the immunosuppressive microenvironment will be needed. • Approaches to achieve these goals, while maintaining	**Off-the-shelf, allogeneic T-Cell immunotherapy for patients with progressive Multiple Sclerosis (MS)** • Growing evidence that EBV has a major role in the pathogenesis of MS • Loss of EBV CD8+ T cell function correlates with MS disease progression • ATA188 is a novel off-the-shelf, allogeneic T-cell immunotherapy targeting EBV-infected B cells for patients with progressive MS	**Comprehensive analysis of neutralizing antibodies raised against the yellow fever virus vaccine** • First comprehensive analysis of antibody response to yellow fever vaccine • Emergence of highly potent neutralizing antibodies after vaccination over time • Insights into the capacity of the vaccine to protect against the emerging yellow fever virus strain in Brazil

	• Discuss leveraging platform regulatory and manufacturing advantages to facilitate clinical translation **Alfredo Perales-Puchalt,** Vice President, Research & Development**, Geneos Therapeutics** (CONFIRMED)	safety and oncolytic activity will be discussed **Steve Thorne**, Chief Scientific Officer, **Western Oncolytics** (CONFIRMED)	**AJ Joshi,** SVP, Chief Medical Officer , **Atara Biotherapeutics** (CONFIRMED)	**Denise Haslwanter,** Research Fellow, **Albert Einstein College of Medicine** (CONFIRMED)
10:40am	**Morning networking break**			
	Neoantigens	**Oncolytic Viruses**	**Non-Oncology Immunotherapy**	
	Chair: Stephen Schoenberger, Professor, **La Jolla Institute for Immunology** (invited to chair)	**Chair: Christophe Quéva, CSO, Oncorus**	**Chair: RJ Tesi,** CEO/CMO, **InMune Bio**	
11:10am	**Update from Vaccibody's clinical trial with the personalized cancer neoantigen vaccine, VB10.NEO; insight into parameters correlating with improved clinical responses** • Inducing a unique CD8-dominated T cell response by targeting antigens to APC • Clinical updates on the phase I/IIa VB N-01 trial in multiple indications • The link between high quality neoepitopes and anti-tumour efficacy **Agnete Fredriksen**, Co-Founder, President and CSO, **Vaccibody (**CONFIRMD)	**Realizing the full potential of multi-faceted oncolytic viruses** • Oncolytic viruses are safe and selective tumour lysing therapeutics • Vaccinia based viruses have tremendous coding capacity to express multiple therapeutic payloads • Oncolytic Viruses can be engineered to exploit exosome biology **John Bell,** Professor of Medicine, **Ottawa Health Research Institute** (CONFIRMED)	**Engineering T cells to cure HIV** • How can CAR T cells be designed to recognize HIV-specific T cells • How animal models can drive CAR T cell design • Current clinical trial design that is testing CAR T cells to delay viral rebound **James Riley**, Associate Professor of Microbiology, **University of Pennsylvania** (CONFIRMED)	
11:30am	**Engineering tools for cancer immunotherapy** • Discussion of robust, sensitive methods and bioengineered constructs for identifying tumor-antigen-specific T cell populations from patient blood • Discussion of high throughput tools for pairing the antigen-specificity of a T cell with the T cell receptor gene • Discussion of new immunotherapy strategies that enabled by these tools **Jim Heath,** President and Professor, **Institute for Systems Biology** (CONFIRMED)	**PeptiCRAd - a novel oncolytic virus based therapeutic cancer vaccine for the treatment of solid tumors** • PeptiCRAd technology uses highly immunogenic, next generation oncolytic adenoviruses as powerful peptide vaccine delivery system to specifically target and treat solid tumors • Rapidly adaptable platform-based delivery can accommodate shared tumor antigens or patient-specific neoantigens	**IL-33 in pulmonary inflammation** • IL33 is a key regulator of type 2 cytokines • I IL33 can regulate non-type 2 pathways • Blockade of IL33 has effects on type 2 and non-type 2 pathways in mouse models of lung disease **Rajita Pappu,** Senior Scientist, **Genentech** (CONFIRMED)	

		• First-in-human clinical trial of PeptiCRAd in combination with checkpoint inhibitor will be started during 2020 **Sari Pesonen**, VP, Scientific and Clinical Development, Co-Founder, **Valo Therapeutics** (CONFIRMED)	
11:50am	**Neoepitope vaccination for Glioblastoma: promise and challenges** • Neoepitope vaccination is feasible in immunologically cold tumors with low mutational burden like GBM • Concurrent corticosteroids may mitigate vaccine immune responses • Additional steps to optimize neoepitope vaccine production and therapeutic benefit are warranted **David Reardon**, Clinical Director, Center for Neuro-Oncology, **Dana-Farber Cancer Institute** (CONFIRMED)	**Oncolytic viruses as immunotherapy: overcoming translational challenges** **Moderator: Christophe Quéva,** CSO, **Oncorus** **John Bell,** Professor of Medicine, **Ottawa Health Research Institute** (CONFIRMED) **Robert Coffin,** CEO, **Replimmune** (CONFIRMED) **Sari Pesonen**, VP, Scientific and Clinical Development, Co-Founder, **Valo Therapeutics** (CONFIRMED)	**Title TBA** **Kathryn Austgen**, Associate Director**, BlueRock Therapeutics** (CONFIRMED)
12:10pm	**Discovery of novel mAbs targeting Solid Tumor Neoantigens** • An immunogenic cancer vaccine demonstrating clinical activity was utilized as a platoform • Antibodies were screened for tumor sensitivity and specificity, as well as anti-tumor activity • Selected antibodies were utilized to identify tumor Neoantigens **Philip Arlen,** President & CEO, **Precision Biologics** (CONFIRMED)		**The role of inflammation in depression and its therapeutic implications: trials and tribulations** • Inflammation is thought to affect specific pathways in the brain and to drive relevant symptoms in the ~30-50% of depressed patients with elevated peripheral inflammatory markers • Anti-inflammatory therapies may convey benefit in depression or other psychiatric illnesses when targeted to appropriate patients • The linking of peripheral and brain biomarkers provides a platform for determining efficacy of therapies that block inflammation or its effects on the brain and behavior **Jennifer Felger**, Associate Professor**, Emory University** (CONFIRMED)
12:30pm	**Networking lunch**		
	Closing plenary		

	AI and Machine Learning in Immuno-Oncology
	Chair: David Liu, Instructor in Medicine, **Dana-Farber Cancer Institute**
1:45pm	**Integrated predictive modeling of anti-PD1 immune checkpoint blockade response in melanoma** • Previously hypothesized predictors and signatures of PD-1 immune checkpoint blockade response are correlated • In the largest cohort of clinically-annotated PD-1 treated melanoma patients with molecular characterization, we found that clinical context and tumor subtypes confounded the predictors of immunotherapy response. • Taking clinical context into account, we developed parsimonious models integrating clinical and molecular data to predict intrinsic resistance to anti-PD1 ICB **David Liu,** Instructor in Medicine, **Dana-Farber Cancer Institute** (CONFIRMED)
2:10pm	**Using machine learning for identification of Neoantigens for cancer immunotherapy** • Neoantigen identification for cancer immunotherapy • is a significant challenge • Tumor immunopeptidomics combined with deep learning • provides a powerful approach for neoantigen prediction • Gritstone's EDGE prediction model identifies • therapeutically relevant neoantigens **James Sun,** Senior Director, Head of Bioinformatics**, Gritstone Oncology** (CONFIRMED)
2:35pm	**AI applications for drug discovery and development** **Kefeng (Kevin) Hua,** Senior Manager, AI/Machine Learning Development, **Bayer** (CONFIRMED)
3:00pm	Chair's closing remarks
3:10pm	Closing remarks from Terrapinn
3:15pm	**End of conference**