<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Track</th>
<th>Presentation Title</th>
<th>Speaker</th>
</tr>
</thead>
</table>
| 2-Apr| 06:00 - 07:00 AM |        | A Multi-Omic Approach to Detection and Characterization of Viral Pathogens and Their Impact on the Immune System | Bill Hunt, MS  
Director, Microfluidics Product Management, Fluidigm  
Andrew Quong, PhD  
Chief Science Officer, Fluidigm                                                                 |
| 2-Apr| 06:00 - 07:00 AM |        | Enhanced Rapid Target Identification by NGS for Vaccine Development                  | Cris Kinross  
Global Market Development, Thermo Fisher Scientific                                                                 |
| 2-Apr| 07:30 - 08:30 AM |        | COVID-19: Putting together the pieces of the pandemic                                | Rowshanak Hashemiyoon, PhD  
Clinical Scientist, Author, Consultant                                                                 |
| 2-Apr| 07:30 - 08:30 AM |        | From Hendra to Wuhan: emerging bat-borne viruses in a quarter of century             | Linfa Wang, PhD  
Professor & Director, Emerging Infectious Diseases Program, Duke-NUS Medical School, Singapore     |
| 2-Apr| 08:30 - 09:30 AM |        | Laboratory Diagnosis of SARS-CoV-2 Infections: Current Status                        | Yi-Wei Tang, MD, PhD, F(AAM), FIDSA  
China Chief Medical Officer of Cepheid at the Danaher Diagnostic Platform in Shanghai               |
| 2-Apr| 08:30 - 09:30 AM |        | Rapid Discovery of Therapeutic Antibodies for SARS-CoV-2 and Other Viral Pandemics   | Anupam Singhal  
Product Manager, Antibody Therapeutics, Berkeley Lights, Inc.                                        |
| 2-Apr| 10:00 - 11:00 AM |        | Laboratory Tests for CoVID-19                                                      | Jun Wu, PhD  
Associate Professor, Pathology, Vice Director of Clinical Laboratory Medicine Center, Shanghai General Hospital, affiliated to Shanghai Jiaotong University |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
</table>
| 2-Apr | 10:00 AM    | SARS-CoV-2 (CoVID-19: Emergence, Biology, and Countermeasures)                | Mark R. Denison, MD  
Director, Division of Infectious Diseases, Craig-Weaver Professor of Pediatrics, Professor of Pathology, Microbiology & Immunology, Professor at Vanderbilt University |
| 2-Apr | 11:30 AM    | COVID-19 infection mechanism, tools for testing and therapeutic antibody development | Manzhu Kang, PhD  
Senior Scientist of Antibody Research Group at GenScript ProBio  
Sean Taylor  
Manager of the Field Applications Group at GenScript USA, Inc |
| 2-Apr | 11:30 AM    | Implementation of Molecular Diagnostics for SARS-CoV-2                       | Li Jiang, MD, PhD  
Sichuan Academy of Medical Sciences & Sichuan Provincial People's Hospital Sichuan Provincial Center for Clinical Laboratories (SPCCL) |
| 2-Apr | 01:00 PM    | PANEL: Specimen Collection and Laboratory Safety                              | Jason Chen, MD  
Head of Virology Unit of KingMed Diagnostics  
Yushen Jiang, MD  
Deputy Director of Central Lab of DIAN Diagnostics  
Ruben Luo, PhD  
NACCCA Board Secretary, Clinical Fellow of UC San Francisco  
Chengbin Wang, MD  
Chairman of Chinese Society of Laboratory Medicine, Director of Clinical Laboratory of PLA General Hospital, Chief Physician  
Frank Yang, MD, PhD  
Pathologist (ABP-AP/CP, Hem), Vice President of ADICON Medical Laboratories |
| 2-Apr | 01:00 PM    | Rapid Response to the Coronavirus Outbreak: How Collaboration Meets the Challenge | Geert Koene, PhD  
Biosearch Technologies Market Segment Manager MDx, LGC |
| 2-Apr | 02:30 PM    | COVID-19 Total Solutions for Detection and Surveillance                       | Subodh Nimkar  
Senior Product Manager, Complete Genomics Facility, MGI  
Pan Zhang, PhD  
Laboratory Director at BGI |
| 2-Apr | 02:30 PM    | Opportunities for using PacBio Long-read Sequencing for COVID-19 Research    | Meredith Ashby, PhD  
Director, Market Strategy for Microbial and Cancer Genomics, Pacific Biosciences |
| 17-Jun| 12:00 AM    | Coronavirus Webinar Series; Understanding Diagnostic Modalities for SARS-CoV-2 | Jamie Evelyn Phillips, MS, PhD  
Sr. Scientific Affairs Manager, Roche Diagnostic Corporation |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Presentation Title</th>
<th>Speaker</th>
</tr>
</thead>
</table>
| 17-Jun| 12:00-12:05 AM| Setting up a Coronavirus (COVID-19) Clinical Diagnostic Testing Lab? LIMS for Automation and Data Management | Shonali Paul, MBA  
Chief Operating Officer, CloudLIMS.com |
| 17-Jun| 06:00-07:00 AM| Enhanced, rapid NGS tools for viral research                                         | Cris Kinross  
Global Market Development, Thermo Fisher Scientific |
| 17-Jun| 06:00-07:00 AM| Rapid Development of Multiplex Serological Assays for COVID-19 Beyond                 | Steve Angeloni  
Senior Field Applications Scientist, Luminex  
Nicole Pecora, MD, PhD  
Assistant Professor in Pathology and Laboratory Medicine at the University of Rochester Medical Center in Rochester NY |
| 17-Jun| 06:00-07:00 AM| Role of serology in the next phase of COVID-19 investigation and response            | Linfa Wang, PhD  
Professor & Director, Emerging Infectious Diseases Program, Duke-NUS Medical School, Singapore |
| 17-Jun| 07:30-08:30 AM| Advanced solutions for viral detection and immune monitoring                          | Joel Guthridge, PhD  
Assistant Member, Arthritis and Clinical Immunology Director of Translational Informatics, Clinical Resources, Biorepository and Human Phenotyping Cores, Oklahoma Medical Research Foundation  
Petter Brodin, MD, PhD  
Associate Professor and consultant physician Science for Life Laboratory, Karolinska Institutet Department of Pediatric Rheumatology, Karolinska University Hospital, Stockholm |
| 17-Jun| 07:30-08:30 AM| Development of Luminex Based Serological Test for COVID-19 Diagnosis and Monitoring | Imad Tarhoni, MD, PhD  
Postdoctoral Fellow at Rush University Medical Center in Chicago |
| 17-Jun| 07:30-08:30 AM| Effective RNA extraction for COVID-19 testing                                        | Gabriel Fernandez de Pierola  
General Manager - Genomics & Diagnostic Solutions Cytiva (formerly GE Life Sciences)  
Christopher Norey, PhD  
R&D Leader, Cytiva (formerly GE Healthcare Life Sciences) |
| 17-Jun| 09:00-10:00 AM| Keynote Presentation: Another New Coronavirus?: The Coronaviruses of the 21st Century  | Stephen S. Morse, PhD, FAAM, F.A.C.E.  
Professor of Epidemiology, Director, Infectious Disease Epidemiology Certificate, Columbia University, Mailman School of Public Health |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
</table>
| 17-Jun| 10:30 AM - 11:30 AM | Applications of Flow Cytometry and Imaging Flow Cytometry to COVID-19 Research | Haley R. Pugsley, PhD  
Manager, Senior Scientist  
Kamala Tyagarajan, PhD  
Director, Flow Cytometry Assays & Application |
General Manager, Specialty Diagnostics |
| 17-Jun| 10:30 AM - 11:30 AM | Strategies and Challenges for COVID-19 Antibody Development          | Jiahui Yang, PhD  
Director, R&D, Sino Biological |
| 17-Jun| 12:00 PM - 01:00 PM | High-Throughput Assay for Monitoring COVID19 Antibodies and Their Isotypes | Susan Zolla-Pazner, PhD  
Professor of Medicine, Division of Infectious Diseases  
Icahn School of Medicine at Mount Sinai |
| 17-Jun| 12:00 PM - 01:00 PM | Luminex®: Flexible Solutions for SARS-CoV-2 Detection              | Aaron P. Benfield, PhD  
Senior Director, Molecular Applications  
Sherry A. Dunbar, PhD, MBA  
Senior Director, Global Scientific Affairs |
| 17-Jun| 12:00 PM - 01:00 PM | Panel discussion: Critical design considerations for COVID-19 rapid POC diagnostic test development | Klaus Hochleitner, PhD  
Global Technology Lead, Diagnostics, Cytiva  
Brendan O’Farrell, PhD  
President and Co-Founder, DCN Diagnostics  
Darren Rowles  
President and CEO, Sona Nanotech  
David Wilson  
Commercial Director, Diagnostics, Avacta Life Sciences  
Lee Jenkins  
Senior Product Leader, Cytiva |
| 17-Jun| 01:30 PM - 02:30 PM | Harnessing the power of synthetic biology to combat COVID-19       | Dan Gibson, PhD  
CTO  
Krishna Kannan, PhD  
Staff Scientist  
Katie Lyons, MS  
Sr. Scientist |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
</table>
| 17-Jun| 01:30  | Insights into the Pathogenesis of COVID-19 as Revealed by Spatial Biology | Joseph M. Beechem, PhD  
CHIEF SCIENTIFIC OFFICER AND Senior Vice President Of Research and Development, NANOSTRING TECHNOLOGIES  
Christopher E. Mason, PhD  
Associate Professor of Genomics, Physiology, and Biophysics at Weill Cornell Medicine and the Director of the WorldQuant Initiative for Quantitative Prediction  
Robert E. Schwartz, PhD  
Assistant Professor of Medicine, Weill Medical College of Cornell University |
| 17-Jun| 01:30  | Will we have a vaccine for COVID-19? 5 reasons for optimism!          | Rob Kozak, PhD FCCM  
Clinical Microbiologist, Sunnybrook Health Sciences Centre,  
Associate Professor, Department of Laboratory Medicine and Pathobiology, University of Toronto |
| 17-Jun| 03:00  | Accelerating vaccine development using a next generation microfluidic CE platform | Jeray Thelwell  
Mid-Atlantic and Southeast Biotherapeutics Solution Specialists |
| 17-Jun| 03:00  | COVID-19: Enrichment and analysis of rare antigen- and virus-specific T cells | Marcello Stein, PhD  
Global Product Manager and Group Leader Immunology T cells |
| 17-Jun| 03:00  | Surgery as (Un)Usual: Development of Rodent Intracerebroventricular injection Capabilities During COVID-19 | Matthew Flegal, BS, SRS  
Senior Manager InVivo Sciences, Charles River |
| 17-Jun| 04:30  | Critical raw material for mRNA-based vaccine development              | Andrius Kočevas  
Product Manager, Thermo Fisher Scientific |
| 17-Jun| 04:30  | Patterns of Intrahost and Interhost variation in SARS-CoV-2          | Todd Treangen  
Assistant Professor, Computer Science, Rice University, Co-Lead COVID-19 International Research Team (COV-IRT) |
| 17-Sep| 12:00  | Insights into SARS-CoV-2 Biology                                    | Adolfo Garcia-Sastre, PhD  
Professor, Departments of Microbiology and Medicine, Tisch Cancer Center Icahn School of Medicine at Mount Sinai |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-Sep</td>
<td>12:00 - 12:45 AM</td>
<td>Testing for SARS-CoV-2: The Cleveland Clinic Experience</td>
<td>Gary Procop, MD, MS Medical Director &amp; Co-Chair, Enterprise Laboratory Stewardship Committee, Enterprise Medical Operations, &amp; Director of Microbiology, Virology, Mycology &amp; Parasitology, Cleveland Clinic</td>
</tr>
<tr>
<td>17-Sep</td>
<td>12:00 - 12:05 AM</td>
<td>The detection, characterization, and surveillance of the SARS-CoV-2 viral genome using hybridization capture-based NGS assay</td>
<td>Dorottya Nagy-Szakal, MD PhD Chief Medical Officer, Biotia, Research Assistant Professor, Department Cell Biology/College of Medicine, SUNY Downstate Health Sciences University</td>
</tr>
<tr>
<td>17-Sep</td>
<td>06:00 - 07:00 AM</td>
<td>Keynote Presentation: The American Response to COVID-19: what went right, what went wrong</td>
<td>Ashish K. Jha, M.D., M.P.H. Dean, Brown University School of Public Health</td>
</tr>
<tr>
<td>17-Sep</td>
<td>07:30 - 08:30 AM</td>
<td>Keynote Presentation: IHME Covid-19 projections for the US: Strategies to reduce the spread</td>
<td>Ali H. Mokdad, PhD Chief Strategy Officer, Population Health, University of Washington</td>
</tr>
<tr>
<td>17-Sep</td>
<td>09:00 - 10:00 AM</td>
<td>Coronaviruses: History, Biology and Innate Immune Antagonism</td>
<td>Susan R. Weiss, PhD Professor and Vice Chair Department of Microbiology, Co-Director, Penn Center for Research on Coronaviruses and Other Emerging Pathogens Perelman school of Medicine University of Pennsylvania</td>
</tr>
<tr>
<td>17-Sep</td>
<td>09:00 - 10:00 AM</td>
<td>Preclinical Optical Imaging of Infectious Diseases</td>
<td>Kevin Francis, PhD Divisional VP, Biology Solutions at PerkinElmer</td>
</tr>
<tr>
<td>17-Sep</td>
<td>09:00 - 10:00 AM</td>
<td>Purification of cells from SARS-CoV-2 convalescent samples and potentially infectious materials with fluorescent-activated cell sorting</td>
<td>Joe Ostrand, PhD Flow Cytometry Specialist, Miltenyi Biotec</td>
</tr>
<tr>
<td>17-Sep</td>
<td>10:00 - 11:00 AM</td>
<td>Keynote Presentation: Discovery of SARS-CoV-2 antivirals through large-scale repositioning studies</td>
<td>Sumit Chanda, PhD Director &amp; Professor, Immunity &amp; Pathogenesis Program, Sanford Burnham Prebys Medical Discovery Institute</td>
</tr>
<tr>
<td>17-Sep</td>
<td>11:00 - 12:00 PM</td>
<td>Host and Viral Transcriptomes During COVID-19 Infection</td>
<td>Christopher E. Mason, PhD Associate Professor of Genomics, Physiology, and Biophysics at Weill Cornell Medicine and the Director of the WorldQuant Initiative for Quantitative Prediction</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Title</td>
<td>Speaker/Position</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 17-Sep | 11:00 - 12:00 PM | Innovative Reagent Solutions in Virology Research                  | Mathis Laffenetre  
Life Sciences Technology Platform Metabolic Diseases Reagents Leader  
Nicolas Pierre  
Life Sciences Technology Platforms Leader, Discovery Reagents |
| 17-Sep | 11:00 - 12:00 PM | Lung-Chip - Accelerating Study of Viral Infection and Therapeutics | Lorna Ewart, PhD  
EVP European Scientific Liaison Emulate, Inc. |
| 17-Sep | 12:00 - 01:00 PM | Advanced NGS solutions for SARS-CoV-2 monitoring and insights       | Cris Kinross  
Global Market Development, Thermo Fisher Scientific |
| 17-Sep | 12:00 - 01:00 PM | Antibody therapy against SARS-CoV-2: A Global Collaboration       | Erica Ollmann Saphire, PhD  
Professor, La Jolla Institute for Immunology |
| 17-Sep | 12:00 - 01:00 PM | Important considerations for choosing a SARS-CoV-2 assay           | Arvind Kothandaraman  
General Manager, Specialty Diagnostics |
| 17-Sep | 01:00 - 02:00 PM | Keynote Presentation: SARS-CoV-2 Susceptibility, Transmission and Reinfection in Domestic Cats | Jürgen A. Richt, DVM, PhD  
Regents Distinguished Professor at KSU, University Distinguished Professor, Director - Center on Emerging & Zoonotic Infectious Diseases (CEZID), NIH Center of Biomedical Research Excellence |
| 17-Sep | 02:00 - 03:30 PM | Keynote Presentation: The formation of an International Collaborative Network to find COVID-19 Therapeutics | Jacqueline Fabius  
Chief Operating Officer, Quantitative Biosciences Institute (QBI)  
Nevan Krogan, PhD  
Professor of Cellular and Molecular Pharmacology, UCSF, Principal Investigator, Gladstone Institute of Data Science and Biotechnology, Director of the Quantitative Bioscience Institute |
| 17-Sep | 03:30 - 04:30 PM | Discovery of a druggable pocket in SARS-CoV-2 Spike: New avenue to defeat COVID-19? | Imre Berger  
Founder and Managing Director of the Max Planck Bristol Centre for Minimal Biology |
| 17-Sep | 03:30 - 04:30 PM | Repurposing in COVID-19: Can we identify new antivirals       | Sara Cherry, PhD  
Professor of Pathology and Laboratory Medicine and Microbiology, Perelman School of Medicine, University of Pennsylvania |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session Title</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 17-Sep | 03:30-04:30 PM | SARS-CoV-2 Testing Today and a New Serology Approach For High Throughput Screening | Russell Garlick, PhD  
Chief Scientific Officer, LGC SeraCare  
Richard Hughes  
Associate Scientific Director at LGC  
Joel Lefferts, PhD, HCLD, DABCC  
Assistant Professor of Pathology and Laboratory Medicine, Geisel School of Medicine at Dartmouth and Assistant Director, Clinical Genomics and Advanced Technology (CGAT) Laboratory |
| 17-Sep | 04:30-05:30 PM | COVID-19 T-Cell Data: Mapping Out SARS-CoV-2 Antigen & T-Cell Repertoires     | Sean Nolan  
Distinguished Engineer  
Patrick Raber, PhD  
Senior Manager, Research and Business Development  
Thomas Snyder, PhD  
VP, Research, immunoSEQ Dx |
| 17-Sep | 04:30-05:30 PM | Ultra-fast one-step RT-PCR protocol for the detection of SARS-CoV-2          | Brian McNally, PhD  
Chief Commercial Officer, Molecular Biology Systems, BV |
| 3-Dec  | 12:00-12:45 AM | COVID-19 RNA and DNA vaccines                                                | Deborah Fuller, PhD  
Professor, Department of Microbiology, University of Washington School of Medicine, Division Chief, Infectious Diseases and Translational Medicine, Washington National Primate Research Center |
| 3-Dec  | 12:00-12:45 AM | Development, assessment and commercialization of serological SARS CoV-2 tests - an interdisciplinary success story | Dr. Mark Dürkop  
CEO Novasign GmbH, Project Lead BOKU - Department of Biotechnology, University of Natural Resources and Life Sciences, Vienna |
| 3-Dec  | 12:00-12:45 AM | Immunity, Aging and COVID-19 : where do we stand?                           | Janko Nikolich-Zugich, MD, PhD  
Bowman Professor and Head, Department of Immunobiology, Co-Director, University of Arizona Center on Aging, University of Arizona College of Medicine-Tucson |
| 3-Dec  | 12:00-12:45 AM | NGS Workflows for Studying Infectious Disease                               | Gary P. Schroth, PhD  
Vice President and Distinguished Scientist, Illumina, Inc. |
| 3-Dec  | 12:00-12:45 AM | Putting COVID-19 Into Context                                                | Amesh A. Adalja, MD  
Senior Scholar, Johns Hopkins Center for Health Security |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Dec</td>
<td>12:00 - 12:45 AM</td>
<td>Recent insights into SARS-CoV-2 intra-host population dynamics</td>
<td>Todd Treangen, Assistant Professor, Computer Science, Rice University, Co-Lead COVID-19 International Research Team (COV-IRT)</td>
</tr>
<tr>
<td>3-Dec</td>
<td>06:00 - 07:00 AM</td>
<td>Keynote Presentation: Facial Masking for COVID-19: Transmission, Severity and Immunity</td>
<td>Monica Gandhi, MD, MPH, Professor of Medicine and Associate Chief, Division of HIV, Infectious Diseases, and Global Medicine, UCSF, Director, UCSF-Gladstone Center for AIDS Research (CFAR)</td>
</tr>
<tr>
<td>3-Dec</td>
<td>07:30 - 08:30 AM</td>
<td>Keynote Presentation: Prevalence of SARS-CoV-2 Immunity in Those Undiagnosed with COVID-19 in the U.S.</td>
<td>Matthew J. Memoli, MD, MS, Director, LID Clinical Studies Unit, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health</td>
</tr>
<tr>
<td>3-Dec</td>
<td>09:00 - 10:00 AM</td>
<td>New! PerkinElmer® RT-PCR SARS-CoV-2 Solution Updates</td>
<td>Arvind Kothandaraman, General Manager, Specialty Diagnostics</td>
</tr>
<tr>
<td>3-Dec</td>
<td>09:00 - 10:00 AM</td>
<td>Transmission Dynamics of SARS-CoV-2: Inference and Projection</td>
<td>Jeffrey Shaman, Professor of Environmental Health Sciences, Columbia University Mailman School of Public Health</td>
</tr>
<tr>
<td>3-Dec</td>
<td>10:00 - 10:30 AM</td>
<td>Keynote Presentation: COVID-19 Projections for the United States</td>
<td>Ali H. Mokdad, PhD, Chief Strategy Officer, Population Health, University of Washington</td>
</tr>
<tr>
<td>3-Dec</td>
<td>10:30 - 11:30 AM</td>
<td>Accelerating vaccine development using a next generation microfluidic CE platform</td>
<td>Jeray Thelwell, Mid-Atlantic and Southeast Biotherapeutics Solution Specialists</td>
</tr>
<tr>
<td>3-Dec</td>
<td>10:30 - 11:30 AM</td>
<td>The Immunology of COVID-19: A dynamic immune signature for prognosis and spatial transcriptomics of lung tissue</td>
<td>Arutha Kulasinghe, PhD, Peter Doherty NHMRC Early Career Fellow at the Queensland University of Technology (QUT), Miguel Muñoz-Ruiz, PhD, PostDoc fellow at the Immunosurveillance Lab at the Francis Crick Institute</td>
</tr>
<tr>
<td>3-Dec</td>
<td>12:00 - 01:00 PM</td>
<td>Advancing SARS-CoV-2 Diagnostics Through Standardization and Quantitation</td>
<td>Russell Garlick, PhD, Chief Scientific Officer, LGC SeraCare, Marc Salit, PhD, Director, Joint Initiative for Metrology in Biology, Stanford University</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Title</td>
<td>Speaker</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3-Dec</td>
<td>01:30 - 02:30 PM</td>
<td>Using an ARIES® Laboratory Developed Test for SARS-CoV-2 to Respond to the COVID-19 Pandemic in Louisville, KY</td>
<td>Leslie A. Wolf, PhD, HCLD (ABB) Division of Infectious Diseases</td>
</tr>
<tr>
<td>3-Dec</td>
<td>03:00 - 04:00 PM</td>
<td>Novel SARS-CoV-2 Neutralization Antibody test, performance and applications</td>
<td>Roumen Bogoev Director, Catalog Products, GenScript USA Inc</td>
</tr>
<tr>
<td>3-Dec</td>
<td>04:30 - 05:30 PM</td>
<td>An Iterative Approach to Structure-based in silico to in vivo Development of Combinatorial Anti-SARS-CoV-2 Therapy</td>
<td>Garth D. Ehrlich, PhD, FAAAS Professor of Microbiology &amp; Immunology, Professor of Otolarynology-Head and Neck Surgery, Drexel University College of Medicine</td>
</tr>
<tr>
<td>14-Apr</td>
<td>12:00 - 12:45 AM</td>
<td>Clarigene: a Pandemic Diagnostic Story</td>
<td>Michael Risley, PhD Chief Development Officer, Yourgene Health</td>
</tr>
<tr>
<td>14-Apr</td>
<td>12:00 - 12:45 AM</td>
<td>Is SNP Genotyping a Better Approach for Monitoring for Known Variants of Concern</td>
<td>Richard Michelmore Distinguished Professor and Director, The Genome Center, Genome and Biomedical Sciences Facility, University of California, Davis</td>
</tr>
<tr>
<td>14-Apr</td>
<td>12:00 - 12:45 AM</td>
<td>New Technologies for Accessible, Durable and Broadly Protective Coronavirus Vaccines</td>
<td>Corey Casper, M.D., MPH CEO, IDRI; Clinical Professor of Medicine and Global Health, University of Washington; Affiliate Professor, Vaccine and Infectious Disease Division, Fred Hutch Cancer Research Center</td>
</tr>
<tr>
<td>14-Apr</td>
<td>12:00 - 12:45 AM</td>
<td>SARS-CoV-2 - Dynamics of the COVID-19 Epidemic</td>
<td>Harm van Bakel, PhD Assistant Professor of Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai</td>
</tr>
<tr>
<td>14-Apr</td>
<td>12:00 - 12:45 AM</td>
<td>The Next Big Question: Genomic Surveillance of SARS-CoV-2</td>
<td>Gary Schroth, Ph.D. Vice President and Distinguished Scientist, Illumina</td>
</tr>
<tr>
<td>14-Apr</td>
<td>12:00 - 12:45 AM</td>
<td>The Rapid Development of COVID-19 Vaccines</td>
<td>Paul Goepfert Professor of Medicine, University of Alabama at Birmingham Director, Alabama Vaccine Research Clinic (AVRC)</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Presenter(s)</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| 06:00-07:00 | A two-pronged approach to tackle COVID-19: Lessons learned from temporal and spatial expression analysis of infected tissue | Eugenia Z. Ong, PhD  
Senior Research Fellow, Duke-NUS Medical School Singapore  
Joe Poh Sheng Yeong, MBBS PhD Mmed (Path)  
Associate Faculty, Institute of Molecular and Cell Biology (A*STAR) Singapore |
| 06:00-07:00 | Novel, high throughput test for detection of SARS-CoV-2 neutralizing antibodies                        | Shuting Xu, PhD  
Field Application Scientist                                                      |
| 07:30-08:30 | Keynote Presentation: The impact of the New COVID-19 Variants and Vaccine Rollout on the pandemic       | Ali H. Mokdad, PhD  
Chief Strategy Officer, Population Health, University of Washington            |
| 09:00-10:00 | Keynote Presentation: What the NIH Serosurvey Tells Us So Far and Why We Should Try to Develop a Broadly Protective/Universal Beta-Coronavirus Vaccine | Matthew J. Memoli, MD, MS  
Director, LID Clinical Studies Unit, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health |
| 10:30-11:30 | Keynote Presentation: New Vaccine and Antiviral Strategies for COVID-19                                | Adolfo Garcia-Sastre, PhD  
Professor, Departments of Microbiology and Medicine, Tisch Cancer Center Icahn School of Medicine at Mount Sinai |
| 12:00-01:00 | New Challenges for SARS-CoV-2 Diagnostics: Viral Load Testing and Variant Strain Genotyping              | Russell Garlick, PhD  
Chief Scientific Officer, LGC SeraCare  
Nathan A. Ledeboer, PhD  
Professor and Vice Chair, Pathology; Medical Director, Medical College of Wisconsin |
| 12:00-01:00 | Solutions for SARS-CoV-2 Strain Lineage Surveillance                                                   | Stephen Jackson  
Associate Director, Product Applications Genetic Sciences Division, Thermo Fisher Scientific |
| 01:30-02:30 | Automated Solutions for SARS-CoV-2 Variant Identification and Surveillance                            | Subodh Nimkar  
Senior Product Manager, Complete Genomics Facility, MGI  
Anthony Tong, PhD  
Director of Product Management, BGI |
| 01:30-02:30 | Molecular Testing for the Detection and Strain Identification of SARS-CoV-2                           | Manohar R. Furtado, PhD  
Director R&D, Thermo Fisher Scientific, Genetic Testing Solutions |
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-Apr</td>
<td>03:00 - 04:00 PM</td>
<td>NEXTFLEX® Variant-Seq™ SARS-CoV-2 Kit</td>
<td>Pedro Echave, PhD&lt;br&gt;Global Leader, NGS Product Experts, PerkinElmer</td>
</tr>
<tr>
<td>14-Apr</td>
<td>03:00 - 04:00 PM</td>
<td>Quick and Easy Sequencing of SARS-CoV-2 to Identify Variants of Concern</td>
<td>Jordan RoseFigura, PhD&lt;br&gt;Director of Material Sciences, Swift Biosciences</td>
</tr>
<tr>
<td>14-Apr</td>
<td>04:30 - 05:30 PM</td>
<td>How RT-PCR Testing Allows Labcorp to Perform National SARS-CoV-2 Pandemic Surveillance</td>
<td>Brian Krueger, PhD&lt;br&gt;Associate Vice President, Research and Development, Laboratory Corporation of America</td>
</tr>
<tr>
<td>13-Oct</td>
<td>12:00 - 12:45 AM</td>
<td>Rapid and Inexpensive Whole-Genome Sequencing of SARS-CoV-2 Using the &quot;Midnight&quot; Panel</td>
<td>Nikki Freed, PhD&lt;br&gt;Lead at Auckland Genomics, University of Auckland, New Zealand</td>
</tr>
<tr>
<td>13-Oct</td>
<td>12:00 - 12:45 AM</td>
<td>SARS-CoV-2 Evolution: Addition by Subtraction</td>
<td>Kevin R. McCarthy, PhD&lt;br&gt;Assistant Professor, Department of Microbiology and Molecular Genetics, University of Pittsburgh School of Medicine Center for Vaccine Research</td>
</tr>
<tr>
<td>13-Oct</td>
<td>06:00 - 07:00 AM</td>
<td>Keynote Presentation: Discovery and Biology of Protective SARS-CoV-2 Human Monoclonal Antibodies</td>
<td>James Crowe, MD&lt;br&gt;Director of the Vanderbilt Vaccine Center, Ann Scott Carell Professor of Pediatrics, Pathology, Microbiology and Immunology</td>
</tr>
<tr>
<td>13-Oct</td>
<td>09:00 - 10:00 AM</td>
<td>Keynote Presentation: Costly Closures: The Return on Investment in COVID-19 Prevention for Retail, School, Sports, and Entertainment</td>
<td>Blythe Adamson, PhD, MPH&lt;br&gt;Founder and Epidemiologist, Infectious Economics, LLC</td>
</tr>
<tr>
<td>13-Oct</td>
<td>10:30 - 11:30 AM</td>
<td>Altered MicroRNA Expression in COVID-19 Patients Accurately Identifies of SARS-CoV-2 Infection</td>
<td>Ryan Farr, PhD&lt;br&gt;Research Scientist, Host Response Team, Health and Biosecurity (H&amp;B) at the Australian Centre for Disease Preparedness (ACDP), CSIRO</td>
</tr>
<tr>
<td>13-Oct</td>
<td>10:30 - 11:30 AM</td>
<td>Spatial Transcriptomic Profiling of Severe COVID-19 Patients</td>
<td>Camilla Margaroli, PhD&lt;br&gt;Department of Medicine; Division of Pulmonary, Allergy, and Critical Care University of Alabama at Birmingham</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Title</td>
<td>Speaker/Title/Institution</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
</tbody>
</table>
| 13-Oct | 12:00 - 01:00 PM | A Virtual Conversation with Dr. John Moore: COVID Vaccines and Variants | John P. Moore, PhD  
Professor of Microbiology and Immunology, Weill Cornell Medicine |
| 13-Oct | 01:30 - 02:30 PM | Panel Presentation: Advantage of Absolute Quantification of Digital PCR in Wastewater Monitoring QIAGEN’s Workflow Solutions for SARS-CoV-2 Surveillance | Dominic O’Neil  
Director of Microbiome Product Development, QIAGEN  
Colin Donohoe, PhD  
Senior Scientist, Research and Development at QIAGEN |
| 13-Oct | 01:30 - 02:30 PM | SARS-CoV-2 Related Workflow and Solutions: Detection and Genotyping | Manohar R. Furtado, PhD  
Director R&D, Thermo Fisher Scientific, Genetic Testing Solutions |
| 13-Oct | 03:00 - 04:00 PM | Accelerating SARS-CoV-2 Genomic Surveillance with High-throughput NGS | James Caffrey, PhD, MBA  
Director Strategic Marketing, Genomics, QIAGEN |
| 13-Oct | 03:00 - 04:00 PM | SARS-CoV-2 Neutralizing Antibody Testing for Vaccine Efficacy Assessment | Sean Taylor, MBA, PhD  
North American Field Application Scientist Manager, GenScript USA, Inc. |
| 13-Oct | 04:30 - 05:30 PM | Delivering Insights by Analyzing Metagenomic NGS Data | Patrick Ettenhuber, PhD  
Product Owner |
| 13-Oct | 04:30 - 05:30 PM | New Diagnostic Tools to Fight the Pandemic - Screening and Syndromic Testing | Arvind Kothandaraman  
General Manager, Specialty Diagnostics |
Senior Scholar, Johns Hopkins Center for Health Security |
| 13-Oct | 11:55 - 11:55 PM | Low-Dose mRNA-1273 COVID-19 Vaccine Generates Durable Memory Enhanced by Cross-reactive T Cells | Daniela Weiskopf, PhD  
Research Assistant Professor, Center for Infectious Disease and Vaccine Research, La Jolla Institute for Immunology (LJI) |
| 13-Oct | 11:59 - 11:59 PM | COVID Policy in the Vaccine Era | Jay Bhattacharya, MD, PhD  
Professor of Medicine, Stanford University |