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<th>Date</th>
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<th>Presentation Title</th>
<th>Speaker</th>
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| 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 Hashemiyooon, 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 |
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<tr>
<th>Date</th>
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| 2-Apr  | 10:00 - 11:00 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 - 12:30 PM | 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 - 12:30 PM | 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 - 02:00 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 - 02:00 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 - 03:30 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 - 03:30 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 - 12:05 AM | Coronavirus Webinar Series; Understanding Diagnostic Modalities for SARS-CoV-2 | Jamie Evelyn Phillips, MS, PhD  
Sr. Scientific Affairs Manager, Roche Diagnostic Corporation |
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| 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 |
| 17-Jun | 10:30 - 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 |
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</table>
General Manager, Specialty Diagnostics |
| 17-Jun | 10:30-11:30 AM | Strategies and Challenges for COVID-19 Antibody Development                     | Jiahui Yang, PhD  
Director, R&D, Sino Biological |
| 17-Jun | 12:00-01:00 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 | 12:00-01:00 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 | 12:00-01:00 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 | 01:30-02:30 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 |
| 17-Jun | 01:30-02:30 PM | 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 |
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| 17-Jun | 01:30-02:30 PM | 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 | 03:00-04:00 PM | Accelerating vaccine development using a next generation microfluidic CE platform | Jeray Thelwell  
Mid-Atlantic and Southeast Biotherapeutics Solution Specialists|
| 17-Jun | 03:00-04:00 PM | COVID-19: Enrichment and analysis of rare antigen- and virus-specific T cells | Dr. Marcello Stein  
Global Marketing Manager - Translational Immunology, Miltenyi Biotec|
| 17-Jun | 03:00-04:00 PM | 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 | 04:30-05:30 PM | Critical raw material for mRNA-based vaccine development              | Andrius Kočevas  
Product Manager, Thermo Fisher Scientific|
| 17-Jun | 04:30-05:30 PM | Patterns of Intrahost and Interhost variation in SARS-CoV-2           | Todd Treangen, PhD  
Assistant Professor of Computer Science, Department of Bioengineering, Rice University|
| 17-Sep | 12:00-12:05 AM | 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|
| 17-Sep | 12:00-12:45 AM | Testing for SARS-CoV-2: The Cleveland Clinic Experience              | Gary Procop, MD, MS  
Medical Director & Co-Chair, Enterprise Laboratory Stewardship Committee, Enterprise Medical Operations, & Director of Microbiology, Virology, Mycology & Parasitology, Cleveland Clinic|
| 17-Sep | 12:00-12:05 AM | The detection, characterization, and surveillance of the SARS-CoV-2 viral genome using hybridization capture-based NGS assay | Dorottya Nagy-Szakal, MD PhD  
Chief Medical Officer, Biotia, Research Assistant Professor, Department Cell Biology/College of Medicine, SUNY Downstate Health Sciences University|
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<tr>
<td>06:00 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. Adam, Brown University School of Public Health</td>
</tr>
<tr>
<td>07:30 AM - 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; Director, Middle Eastern Initiatives Professor, Health Metrics Sciences Institute for Health Metrics and Evaluation</td>
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<tr>
<td>09:00 AM - 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>
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<tr>
<td>09:00 AM - 10:00 AM</td>
<td>Preclinical Optical Imaging of Infectious Diseases</td>
<td>Kevin Francis, PhD Divisional VP, Biology Solutions at PerkinElmer</td>
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<tr>
<td>09:00 AM - 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>
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<tr>
<td>10:00 AM - 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>11:00 AM - 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>
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<tr>
<td>11:00 AM - 12:00 PM</td>
<td>Innovative Reagent Solutions in Virology Research</td>
<td>Mathis Laffenetre Life Sciences Technology Platform Metabolic Diseases Reagents Leader Nicolas Pierre Life Sciences Technology Platforms Leader, Discovery Reagents</td>
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<td>11:00 AM - 12:00 PM</td>
<td>Lung-Chip - Accelerating Study of Viral Infection and Therapeutics</td>
<td>Lorna Ewart, PhD EVP European Scientific Liaison Emulate, Inc.</td>
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| 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 |
| 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 |
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<td>17-Sep</td>
<td>04:30 - 05:30 PM</td>
<td>COVID-19 T-Cell Data: Mapping Out SARS-CoV-2 Antigen &amp; T-Cell Repertoires</td>
<td>Sean Nolan</td>
<td>Distinguished Engineer, Patrick Raber, PhD, Senior Manager, Research and Business Development, Thomas Snyder, PhD, VP, Research, immunoSEQ Dx</td>
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<td>17-Sep</td>
<td>04:30 - 05:30 PM</td>
<td>Ultra-fast one-step RT-PCR protocol for the detection of SARS-CoV-2</td>
<td>Brian McNally, PhD</td>
<td>Chief Commercial Officer, Molecular Biology Systems, BV</td>
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<td>3-Dec</td>
<td>12:00 - 12:45 AM</td>
<td>COVID-19 RNA and DNA vaccines</td>
<td>Deborah Fuller, PhD</td>
<td>Professor, Department of Microbiology, University of Washington School of Medicine, Division Chief, Infectious Diseases and Translational Medicine, Washington National Primate Research Center</td>
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<td>3-Dec</td>
<td>12:00 - 12:45 AM</td>
<td>Development, assessment and commercialization of serological SARS CoV-2 tests - an interdisciplinary success story</td>
<td>Dr. Mark Dürkop</td>
<td>CEO Novasign GmbH, Project Lead BOKU - Department of Biotechnology, University of Natural Resources and Life Sciences, Vienna</td>
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<td>3-Dec</td>
<td>12:00 - 12:45 AM</td>
<td>Immunity, Aging and COVID-19: where do we stand?</td>
<td>Janko Nikolich-Zugich, MD, PhD</td>
<td>Bowman Professor and Head, Department of Immunobiology, Co-Director, University of Arizona Center on Aging, University of Arizona College of Medicine-Tucson</td>
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<td>3-Dec</td>
<td>12:00 - 12:45 AM</td>
<td>NGS Workflows for Studying Infectious Disease</td>
<td>Gary P. Schroth, PhD</td>
<td>Vice President and Distinguished Scientist, Illumina, Inc.</td>
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<td>3-Dec</td>
<td>12:00 - 12:45 AM</td>
<td>Putting COVID-19 Into Context</td>
<td>Amesh A. Adalja, MD</td>
<td>Senior Scholar, Johns Hopkins Center for Health Security</td>
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<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, PhD</td>
<td>Assistant Professor of Computer Science, Department of Bioengineering, Rice University</td>
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<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</td>
<td>Professor of Medicine and Associate Chief, Division of HIV, Infectious Diseases, and Global Medicine, UCSF, Director, UCSF-Gladstone Center for AIDS Research (CFAR)</td>
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| 3-Dec | 07:30 - 08:30 AM | Keynote Presentation: Prevalence of SARS-CoV-2 Immunity in Those Undiagnosed with COVID-19 in the U.S. | 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 |
| 3-Dec | 09:00 - 10:00 AM | New! PerkinElmer® RT-PCR SARS-CoV-2 Solution Updates | Arvind Kothandaraman  
General Manager, Specialty Diagnostics |
| 3-Dec | 09:00 - 10:00 AM | Transmission Dynamics of SARS-CoV-2: Inference and Projection | Jeffrey Shaman  
Professor of Environmental Health Sciences, Columbia University Mailman School of Public Health |
| 3-Dec | 10:00 - 10:30 AM | Keynote Presentation: COVID-19 Projections for the United States | Ali H. Mokdad, PhD  
Chief Strategy Officer, Population Health, University of Washington; Director, Middle Eastern Initiatives Professor, Health Metrics Sciences Institute for Health Metrics and Evaluation |
| 3-Dec | 10:30 - 11:30 AM | Accelerating vaccine development using a next generation microfluidic CE platform | Jeray Thelwell  
Mid-Atlantic and Southeast Biotherapeutics Solution Specialists |
| 3-Dec | 10:30 - 11:30 AM | The Immunology of COVID-19: A dynamic immune signature for prognosis and spatial transcriptomics of lung tissue | 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 |
| 3-Dec | 12:00 - 01:00 PM | Advancing SARS-CoV-2 Diagnostics Through Standardization and Quantitation | Russell Garlick, PhD  
Chief Scientific Officer, LGC SeraCare  
Marc Salit, PhD  
Director, Joint Initiative for Metrology in Biology, Stanford University |
| 3-Dec | 01:30 - 02:30 PM | Using an ARIES® Laboratory Developed Test for SARS-CoV-2 to Respond to the COVID-19 Pandemic in Louisville, KY | Leslie A. Wolf, PhD, HCLD (ABB)  
Division of Infectious Diseases | University of Louisville |
| 3-Dec | 03:00 - 04:00 PM | Novel SARS-CoV-2 Neutralization Antibody test, performance and applications | Roumen Bogoev  
Director, Catalog Products, GenScript USA Inc |
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<td>3-Dec</td>
<td>04:30 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 Otolaryngology-Head and Neck Surgery, Drexel University College of Medicine</td>
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<td>14-Apr</td>
<td>12:00 AM</td>
<td>Clarigene: a Pandemic Diagnostic Story</td>
<td>Michael Risley, PhD Chief Development Officer, Yourgene Health</td>
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<td>14-Apr</td>
<td>12:00 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>
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<td>14-Apr</td>
<td>12:00 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>
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<td>14-Apr</td>
<td>12:00 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>
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<td>14-Apr</td>
<td>12:00 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>
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<td>14-Apr</td>
<td>12:00 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>
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<tr>
<td>14-Apr</td>
<td>06:00 AM</td>
<td>A two-pronged approach to tackle COVID-19: Lessons learned from temporal and spatial expression analysis of infected tissue</td>
<td>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</td>
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<td>14-Apr</td>
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<td>Novel, high throughput test for detection of SARS-Cov-2 neutralizing antibodies</td>
<td>Shuting Xu, PhD Field Application Scientist</td>
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| 07:30 AM   | 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; Director, Middle Eastern Initiatives Professor, Health Metrics Sciences Institute for Health Metrics and Evaluation |
| 09:00 AM   | 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 AM   | 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 PM   | 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 PM   | Solutions for SARS-CoV-2 Strain Lineage Surveillance                        | Stephen Jackson  
Associate Director, Product Applications Genetic Sciences Division, Thermo Fisher Scientific |
| 01:30 PM   | 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 PM   | 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 |
| 03:00 PM   | NEXTFLEX® Variant-Seq™ SARS-CoV-2 Kit                                       | Pedro Echave, PhD  
Global Leader, NGS Product Experts, PerkinElmer |
| 03:00 PM   | Quick and Easy Sequencing of SARS-CoV-2 to Identify Variants of Concern     | Jordan RoseFigura, PhD  
Director of Material Sciences, Swift Biosciences |
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<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 Associate Vice President, Research and Development, Laboratory Corporation of America</td>
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<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 Lead at Auckland Genomics, University of Auckland, New Zealand</td>
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<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 Assistant Professor, Department of Microbiology and Molecular Genetics, University of Pittsburgh School of Medicine Center for Vaccine Research</td>
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<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 Director of the Vanderbilt Vaccine Center, Ann Scott Carell Professor of Pediatrics, Pathology, Microbiology and Immunology</td>
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<td>13-Oct</td>
<td>07:30 - 08:30 AM</td>
<td>Keynote Presentation: Impact of New Escape Variants and Waning Immunity on the Covid-19 Pandemic</td>
<td>Ali H. Mokdad, PhD Chief Strategy Officer, Population Health, University of Washington; Director, Middle Eastern Initiatives Professor, Health Metrics Sciences Institute for Health Metrics and Evaluation</td>
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<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 Founder and Epidemiologist, Infectious Economics, LLC</td>
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<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 Research Scientist, Host Response Team, Health and Biosecurity (H&amp;B) at the Australian Centre for Disease Preparedness (ACDP), CSIRO</td>
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<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 Department of Medicine; Division of Pulmonary, Allergy, and Critical Care University of Alabama at Birmingham</td>
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<td>13-Oct</td>
<td>12:00 - 01:00 PM</td>
<td>A Virtual Conversation with Dr. John Moore: COVID Vaccines and Variants</td>
<td>John P. Moore, PhD Professor of Microbiology and Immunology, Weill Cornell Medicine</td>
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<td>Date</td>
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| 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, MS, MBA  
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 |
| 4-May  | 05:30 - 05:30 AM | COVID Testing: The Key to the Beginning, Middle & End of the Global Pandemic | Mara G. Aspinall  
Managing Director, Health Catalysts Group and Professor of Practice, Biomedical Diagnostics, Arizona State University |
|--------|-----------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 4-May  | 05:30 - 05:30 AM | COVID: How Did We Get Here and Where Are We Going? | Andrew Noymer, PhD  
Epidemiologist and Population Health Scientist, Associate Professor, Department of Population Health and Disease Prevention, University of California, Irvine |
| 4-May  | 05:30 - 05:30 AM | Epistatic Interactions Among SARS-CoV-2 Spike Amino Acids Required for Viability of Variants of Concern | Jeremy Luban, MD  
Professor, David J. Freelander Chair in AIDS Research, Program in Molecular Medicine, Biochemistry & Molecular Biotechnology, University of Massachusetts Medical School |
| 4-May  | 05:30 - 05:30 AM | Neuropathology of SARS-CoV-2 Infection in Aged Non-human Primates | Tracy Fischer, PhD  
Associate Professor, Tulane National Primate Research Center, Division of Comparative Pathology |
| 4-May  | 05:30 - 05:30 AM | Top 10 Lessons Learned from COVID with a Focus on Minority Populations and a Way Forward | Peter Chin-Hong, MD  
Associate Dean, Regional Campuses, Professor of Medicine, Division of Infectious Diseases, University of California, San Francisco |
| 4-May  | 06:00 - 07:00 AM | Keynote Presentation: Toward Universal Coronavirus Vaccines: From Concept to Clinic | Kayvon Modjarrad, MD, PhD  
Director, Emerging Infectious Diseases Branch Walter Reed Army Institute of Research Medical Officer, Civilian, Department of the Army, Associate Professor of Medicine, Uniformed Services University |
| 4-May  | 07:30 - 08:30 AM | Keynote Presentation: SARS-CoV2: Rapid Response Platforms for Pandemic Virus Control in the 21st Century | Ralph S. Baric, PhD  
Kenan Distinguished Professor of Epidemiology, Gillings School of Global Public Health and Microbiology and Immunology School of Medicine, University of North Carolina |
| 4-May  | 09:00 - 10:00 AM | Keynote Presentation: After the Mandates End: Preparing for the Next COVID-19 Variant | Abraham Flaxman, PhD  
Associate Professor, Health Metrics Sciences, Institute for Health Metrics and Evaluation (IHME), University of Washington |
| 4-May  | 10:30 - 11:30 AM | Keynote Presentation: Covid-19: Variants Have Changed the Endgame | Professor Salim S. Abdool Karim, FRS  
Director: CAPRISA, CAPRISA Professor of Global Health: Department of Epidemiology, Mailman School of Public Health, Columbia University |
| 4-May  | 10:30 - 11:30 AM | Neuropathology of SARS-CoV-2 as Revealed by Spatial Biology | Susanne Krasemann, MD, PhD  
Group Leader, Institute of Neuropathology at the University Medical Center Hamburg-Eppendorf, UKE; Head of the Core Facility, Experimental Pathology "Mouse Patho", UKE |
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<th>Session Title</th>
<th>Presenter(s)</th>
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| 4-May | 12:00 -01:00PM| Panel Presentation: Responding to SARS-CoV-2 Variants, such as Omicron: Detection and Surveillance | Jelena Feenstra, PhD  
Senior Manager, Global Scientific Communications, Thermo Fisher Scientific  
Vanessa Lacey, PhD  
Staff Scientist, Molecular Biology, Clinical Applications, Thermo Fisher Scientific |
| 4-May | 01:30 -02:30PM| Panel Presentation: Advance your High-Throughput Workflow with Sample Preparation and Automation | Hannah Saunders  
Manager, Clinical Sample Preparation R&D, Thermo Fisher Scientific  
Fan Liu, PhD  
Staff Engineer, Systems Design, Thermo Fisher Scientific  
Lillie Manley  
Scientist III, Clinical Sample Preparation R&D, Thermo Fisher Scientific |
| 4-May | 01:30 -02:30PM| Panel Presentation: Optimized Sample Processing and NGS Techniques for Wastewater-Monitoring of SARS-CoV-2 | Dominic O’Neil, MS, MBA  
Director of Microbiome Product Development, QIAGEN  
Jonathan Shaffer, PhD, MBA  
Director, R&D, NGS Assay Technologies, QIAGEN |
| 4-May | 03:00 -04:00PM| Deep Spatiotemporal Insights into COVID-19: a Multi-organ Study                 | Arutha Kulasinghe, PhD  
NHMRC Research Fellow, The University of Queensland |
| 19-Oct| 06:00 -06:00AM| Evolution of SARS-CoV-2                                                        | Kei Sato, PhD  
Professor, The Institute of Medical Science, University of Tokyo |
| 19-Oct| 06:00 -07:00AM| Keynote Presentation: A Newcastle Disease Virus-Based COVID-19 Vaccine with Live Q&A | Adolfo Garcia-Sastre, PhD  
Professor, Departments of Microbiology and Medicine, Tisch Cancer Center Icahn School of Medicine at Mount Sinai |
| 19-Oct| 06:00 -06:00AM| mRNA Variant Vaccines as a Second Boost: results from the COVID-19 Variant Immunologic Landscape Trial (COVAIL Trial) | Nadine Rouphael, MD  
Professor of Medicine, Infectious Diseases Division, Department of Medicine, Emory University, Executive Director, Hope Clinic |
| 19-Oct| 06:00 -06:00AM| SARS-CoV-2 Interactions with the Host Innate Immune Response and the Ubiquitin System | Ricardo Rajsbaum, PhD.  
Associate Professor, Department of Medicine, Director, Center for Virus-Host-Innate Immunity (CVHII), Institute for Infectious and Inflammatory Diseases, Rutgers University, New Jersey Medical School Cancer Center |
| 19-Oct| 06:00 -06:00AM| Sex Differences and Effects of Pregnancy on Symptoms and Severity of COVID-19 | Sabra L. Klein, PhD  
Professor, Department of Molecular Microbiology & Immunology, Biochemistry & Molecular Biology and International Health John Hopkins Bloomberg School of Public Health Co-director...
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| 19-Oct| 07:30-08:30 AM| Keynote Presentation: The Direct and Indirect Impact of the COVID-19 Pandemic on Children with Live Q&A | Scott A. Rivkees, MD  
Professor of Practice and Vice Chair, Department of Health Services, Policy and Practice  
Brown University School of Public Health |
| 19-Oct| 09:00-10:00 AM| Keynote Presentation: The Future of Covid-19: Expectations and Lessons with Live Q&A | Ali H. Mokdad, PhD  
Chief Strategy Officer, Population Health, University of Washington; Director, Middle Eastern Initiatives  
Professor, Health Metrics Sciences Institute for Health Metrics and Evaluation |
| 19-Oct| 10:30-11:30 AM| Keynote Presentation: SARS-CoV-2 and COVID-19: Natural History, Diagnosis and Monitoring: Lessons Learned with Live Q&A | Yvonne (Bonnie) Maldonado, MD  
Senior Associate Dean for Faculty Development and Diversity, Taube Endowed Professor of Global Health and Infectious Diseases, Professor of Pediatrics and of Epidemiology and Population Health, Chief, Division of Pediatric Infectious Diseases, Stanford University School of Medicine, Medical Director, Infection Prevention and Control and Attending Physician, Lucile Packard Children's Hospital at Stanford |
| 19-Oct| 12:00-01:00 PM| Keynote Presentation: Advancing Toward Recovery from Post-Acute Sequelae of SARS-CoV-2 Infection (PASC): The NIH RECOVER Initiative with Live Q&A | Walter Koroshetz, MD  
Director of the National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health |
| 19-Oct| 01:00-02:00 PM| Panel Presentation: Pending Talk Title - Sponsored by LGC Clinical Diagnostics | Marc Salit, PhD  
Director, Joint Initiative for Metrology in Biology, Stanford University  
Eric Morreale, PhD  
Director of Product Management at LGC Clinical Diagnostics |
| 19-Oct| 01:30-02:30 PM| A Phase 1 Trial of Cyclosporine for Hospitalized Patients with COVID-19 | Julia Han Noll, MS  
University of Pennsylvania |