Thursday, September 9th
9:30 am  Opening Remarks
George Kuchel, M.D., FCP, AGSF UConn Center on Aging and University of Connecticut & Duygu Ucar, Ph.D., The Jackson Laboratory for Genomic Medicine

Session 1: Sex and genetics in immune responses/diseases
Session Moderator: Duygu Ucar, Ph.D., The Jackson Laboratory for Genomic Medicine

9:40 am  Sex Differences in Immunity to SARS-CoV-2
Sabra Klein, Ph.D., Johns Hopkins University

10:20 am  Lifelong Sex Differences in Neutrophil Phenotypes
Berenice Benayoun, Ph.D., USC Leonard Davis

11:00 am Break

11:20 am  Keynote: Genetic and Immunological Causes of Life-Threatening COVID-19
Jean-Laurent Casanova, M.D., Ph.D., Rockefeller University; HHMI

12:20 pm Lunch Break

Session 2: Epigenetics in immune responses and diseases
Session Moderator: Asa Thibodeau, Ph.D., Jackson Laboratory

1:00 pm  High-Throughput Genomic Technologies for Human Immunology
Ansuman Satpathy, M.D. PhD., Stanford University

1:40 pm  Interpreting Genetic Variants Through Chromatin Interaction Maps In Primary Human Immune Cells
Ferhat Ay, Ph.D., La Jolla Institute for Immunology

2:20 pm  Short Talk 1
Single-Cell Epigenetic and Transcriptional Analyses of an Aging Immune System Reveal GZMK+ CD8+ T Cells as Conserved Hallmark of Inflammaging
Denis Mogilenko, Ph.D., Washington University in St. Louis
2:40 pm       Break

Session 3: Metabolic dysfunctions
Session Moderator: Berenice Benayoun, Ph.D., USC Leonard Davis

3:00 pm       Mitochondrial-Encoded Immunity
Changhan David Lee, Ph.D., University of Southern California

3:40 pm       Immuno-Metabolic Dysregulation in Macrophages During Aging: Aging at the Cross Roads of Inflammation and Metabolism
Anthony Covarrubias, Ph.D., University of California, Los Angeles

4:20 pm       The Microbiome Contributes to Unhealthy Aging
Dawn Bowdish, Ph.D., McMaster University

5:00 pm       Dysregulation of the Adipose-Resident Immune Compartment Drives Thermogenic Failure During Aging
Emily Goldberg, Ph.D., University of California, San Francisco

5:40 pm       Panel/Open Discussion with the Day’s Speakers

Friday, September 10th
Session 4: Biomarkers of aging
Session Moderator: Duygu Ucar, Ph.D., The Jackson Laboratory for Genomic Medicine

9:30 am       Human Immune Monitoring Coming of Age
Shai Shen Orr, Ph.D., Technion-Israel Institute of Technology

10:10 am      Biomarkers for Geroscience-Guided Clinical Trials
Jamie Justice, Ph.D., Wake Forest School of Medicine

10:50 am      Quantification of the Pace of Biological Aging From a Blood Test: the DunedinPoAm DNA Methylation Algorithm
Daniel Belsky, Ph.D., Columbia University

11:40 am      Short Talk 2
Cellular and Plasma Proteomic Determinants of Healthy Aging Vs. Inflammation
Maxim Artyomov, Ph.D., Washington University School of Medicine

12:00 pm      Lunch Break

Session 5. Infectious diseases
Session Moderator: Djamel Nehar-Belaid, Ph.D., The Jackson Laboratory

12:40 pm      Developing Therapies to Improve Antiviral Immunity in Older Adults
Joan Mannick, M.D., Life Biosciences
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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>1:20 pm</td>
<td><strong>Host Responses to SARS-CoV-2 Infection</strong></td>
<td>Adolfo García -Sastre, Ph.D., <em>Icahn School of Medicine at Mount Sinai</em></td>
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<td>2:00 pm</td>
<td><strong>Immunity</strong></td>
<td>Patrick Wilson, Ph.D., <em>Weill Cornell Medicine</em></td>
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<td>2:40 pm</td>
<td><strong>Short Talk 3</strong></td>
<td><em>Senescence-Induced Changes in CD4 T Cell Differentiation Can be Alleviated by Treatment With Senolytics</em></td>
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<td><em>Senescence-Induced Changes in CD4 T Cell Differentiation Can be Alleviated by Treatment With Senolytics</em></td>
<td>Laura Haynes, Ph.D., <em>University of Connecticut, School of Medicine</em></td>
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<td>3:00 pm</td>
<td><strong>Panel/Open Discussion with the Day's Speakers</strong></td>
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