# 19th Annual NIH Center for Molecular Studies in Digestive and Liver Diseases

**“Technological Advances in the Use of Human Digestive Tissues for Basic Science Research”**

**Monday, April 15, 2019**

**National Constitution Center**
Independence Mall, 525 Arch Street
Philadelphia, Pennsylvania 19106

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 am – 8:30 am</td>
<td><strong>REGISTRATION and BREAKFAST</strong></td>
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<tr>
<td>8:30 am – 8:40 am</td>
<td>Opening Remarks: Klaus Kaestner, PhD and Gary Wu, MD</td>
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<tr>
<td>8:40 am</td>
<td><strong>SESSION I: The use of high dimensional profiling technologies in the characterization of the digestive tissues</strong></td>
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<tr>
<td>8:40 am – 9:00 am</td>
<td>Vesselin Tomov, MD, PhD</td>
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<tr>
<td></td>
<td>Assistant Profess or Medicine, University of Pennsylvania</td>
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<td></td>
<td>“Mass Cytometry of isolated lamina propria mononuclear cells”</td>
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<tr>
<td>9:00 am – 9:20 am</td>
<td>Klaus Kaestner, PhD</td>
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<td>Thomas And Evelyn Suor Butterworth Professor In Genetics, University of Pennsylvania</td>
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<td>“Imaging mass cytometry of pancreas and intestine – a new tool in the arsenal of GI researchers”</td>
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<td>9:20 am – 9:40 am</td>
<td>Kyong-Mi Chang, MD,</td>
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<td>Associate Dean for Research at the Crescenz VA &amp; Professor of Medicine, University of Pennsylvania</td>
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<td>“High dimensional view of live in health and disease with image mass cytometry”</td>
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<td>9:40 am – 10:00 am</td>
<td><strong>BREAK</strong></td>
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<tr>
<td>10:00 am</td>
<td><strong>SESSION 2: Perpetuating the cellular phenotypes of human digestive tissues in culture</strong></td>
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<td>10:00 am – 10:40 am</td>
<td><strong>KEYNOTE SPEAKER:</strong> Stephen A. Duncan, DPhil</td>
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<td>Smartstate Chair in Regenerative Medicine, Medical University of South Carolina</td>
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<td>“A screen Using IPSC-Derived Hepatocytes Reveals NAD+ as a Potential Treatment for mtDNA Depletion Syndrome”</td>
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<td>10:40 am – 11:00 am</td>
<td>Edward E. Morrisey, PhD</td>
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<td>Robinette Foundation Professor of Cardiovascular Medicine, University of Pennsylvania</td>
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<td>“Cell culture and the iPS Core (CCiC)”</td>
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<td>11:00 am – 11:20 am</td>
<td>Hiroshi Nakagawa, MD,</td>
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<td>PhD</td>
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<td>Research Associate Professor of Medicine, University of Pennsylvania</td>
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<td>“3D organoids – approaches to esophageal diseases”</td>
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<td>11:20 am – 11:40 am</td>
<td>Tatiana Karakasheva, PhD</td>
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<td>Postdoctoral Researcher, University of Pennsylvania</td>
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<td>“3D organoids and personalized medicine”</td>
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<td>11:40 am – 1:00 pm</td>
<td><strong>LUNCH and POSTER SESSION</strong></td>
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<td>1:00 pm</td>
<td><strong>SESSION 3: The human gut microbiota in health and disease</strong></td>
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<td>1:00 pm – 1:40 pm</td>
<td><strong>KEYNOTE SPEAKER:</strong> Jonathan U. Peled, MD, PhD</td>
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<td>Assistant Attending, Memorial Sloan Kettering Cancer Center</td>
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<td>“Gut microbiota injury in allogeneic haematopoietic stem cell transplantation”</td>
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<td>1:40 pm – 2:00 pm</td>
<td>Kyle Bittinger, PhD</td>
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<td>Assistant Professor of Pediatrics, Children’s Hospital of Philadelphia</td>
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<td>“Integrative multi-omic analysis of infants first microbiota”</td>
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<td>2:00 pm</td>
<td><strong>SESSION 4: Opportunities for human biospecimen collection at Penn</strong></td>
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<td>2:00 pm – 2:20 pm</td>
<td>Meenakshi Bewtra, MD, MPH</td>
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<td>Assistant Professor of Medicine, University of Pennsylvania</td>
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<td>“The IBD Immunology Initiative (I3)”</td>
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<td>2:20 pm – 2:40 pm</td>
<td>Gary D. Wu, MD</td>
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<td>Ferdinand G. Weisbrod Professor in Gastroenterology, University of Pennsylvania</td>
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<td>“The Penn Center for Nutritional Science and Medicine”</td>
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<td>2:40 pm – 3:00 pm</td>
<td>Maayan Levy, PhD</td>
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<td>Assistant Professor of Microbiology, University of Pennsylvania</td>
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<td>“Mouse colonoscopy”</td>
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<td>3:00 pm – 3:20 pm</td>
<td>James L. Lewis, MD,</td>
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<td>MSCE</td>
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<td>Professor of Medicine and Epidemiology, University of Pennsylvania</td>
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<td>“The PennCHOP Microbiome Program”</td>
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<td>3:20 pm – 3:30 pm</td>
<td><strong>Closing Remarks and Poster Awards:</strong> Klaus Kaestner, PhD and Gary Wu, MD</td>
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Register online at: [https://somapps.med.upenn.edu/forms/molecular/view.php?id=14028](https://somapps.med.upenn.edu/forms/molecular/view.php?id=14028)