### Overview

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Registration</td>
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<tr>
<td>9:00 am</td>
<td>Welcome</td>
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</table>
| 9:15 am | The Collaborative Effect of Scientific Meetings: A Study of the International Milk Genomics Consortium  
Danielle Lemay, Western Human Nutrition Research Center, USDA, Davis, CA, USA |
| 9:35 am | A Brief History of the IMGC  
Gerrit Jan Hiddink, Emeritus Professor, Wageningen University, The Netherlands |

### Milk Genetics and Genomics

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| 9:50 am | Invited Speaker: Opportunities to Genetically Improve the Nutritional Value of Milk  
Filippo Miglior, Research and Strategic Development, Canadian Dairy Network, Canada |
| 10:30 am | Coffee Break                                                          |
| 11:00 am | Annotating the Lactation Genome  
Monique Rijnkels, Texas A&M University, USA |
| 11:25 am | Genetic Parameter Estimation for Bovine Milk Oligosaccharides in Danish Dairy Breeds  
Nina Aagaard Poulsen, Aarhus University, Denmark |
| 11:50 am | Dairy Goats: Gene Discovery and Herd Development in the Time of Genome Sequencing  
Klaus Lehnert, University of Auckland, New Zealand |
| 12:15 pm | Lunch                                                                |
| 1:30 pm | Invited Speaker: Milk Odd- And Branched-Chain Fatty Acids - An Overview of Current Research  
Rachel Gervais, Université Laval, Québec, Canada |
| 2:10 pm | In-Silico Genome-Wide Association Mapping of Loci Associated with Milk Triglyceride, Protein, and Lactose in The Mouse Diversity Panel  
Darryl Hadsell, Baylor College of Medicine, Houston, Texas, USA |
| 2:35 pm | Characterization and Valorization of the Genetic Pool of the Canadienne Breed  
Alexandra Carrier, Université Laval, Québec, Canada |
| 3:00 pm | Coffee Break                                                          |
| 3:30 pm | Student Travel Award Recipient: Next-Generation Sequencing of Bovine Milk-Derived Exosomal MicroRNA to Determine Transcriptome Expression for Efficient Recovery from Mastitis Infection  
Andrea Zukowski, University of Ottawa, Ontario, Canada |
| 3:45 pm | The Human Milk Metabolome - Effect of Gestational and Lactational Age  
Ulrik Kræmer Sundekilde, Aarhus University, Denmark |
| 4:20 pm | Quantitative Variation in The Proteome of Individual Healthy Cows  
Kasper Hettinga, Wageningen University, The Netherlands |
| 4:45 pm | Student Travel Award Recipient: Alternative splicing, a fortuitous or genetically programmed event to expand molecular diversity of milk proteins: Camel CSN1S2, a relevant model to try to provide some response elements  
Ryskaliyeva Alma, INRA, UMR GABI, AgroParisTech, Université Paris-Saclay, France |

### Evening Sessions

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<tr>
<th>Time</th>
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<tr>
<td>5:30-6:30 pm</td>
<td>Joint Scientific Advisory Council/Steering Committee Meeting (Closed Session)</td>
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<tr>
<td>6:00-8:00 pm</td>
<td>Poster Reception</td>
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### Health Impact of the Gut Microbiota

**9:00 am**  
*Keynote Speaker: Impact of Dairy Products on the Gut Microbiota of Animal Models of Cardio-Metabolic Diseases*  
*André Marette, INAF, Université Laval, Québec, Canada*

**9:40 am**  
*Bifidobacterial Dominance Correlates with Reduced Infant Gut Antibiotic Resistance*  
*Diana H. Taft, University of California, Davis, USA*

**10:05 am**  
*Coffee Break*

**10:35 am**  
*Rescuing The Infant Gut Microbiome Over the First Year of Life in Breastfed Infants with Bifidobacterium Longum Subsp. Infantis EVC001*  
*Steve Frese, Evolve Biosystems, Inc., Davis, CA, USA*

**11:00 am**  
*Milk Secretory Immunoglobulin A Protects Lactobacillus Reuteri from Digestion and Aids in Colonization in Vitro*  
*Vanessa Dunne-Castagna, University of California, Davis, USA*

### Milk and Dairy Products Impact on Health - Protein-Peptides, Oligosaccharides

**11:25 am**  
*Milk Protein Digestion in Premature Infants and Bioactive Peptide Discovery*  
*David Dallas, Oregon State University, USA*

**11:50 am**  
*Milk Bioactive Peptide Database: A Comprehensive Milk Bioactive Peptide Database and Novel Visualization*  
*Søren D. Nielsen, Aarhus University, Denmark*

**12:15 pm**  
*Lunch*

**1:30 pm**  
*Osteopontin and Its Relation to Transcription of the Major Milk Proteins*  
*Vivi R. Gregersen, Aarhus University, Denmark*

**1:55 pm**  
*Analysis of Milk Phosphor-Peptides in a Processed Whey Stream*  
*Peter Williamson, University of Sydney, Australia*

**2:20 pm**  
*Raw Cow’s Milk Prevents the Development of Airway Inflammation in a Murine House Dust Mite-Induced Asthma Model*  
*Betty van Esch, Utrecht University, The Netherlands*

**2:55 pm**  
*Student Travel Award Recipient: Comparative Analysis of Bioactive Oligosaccharide Production in Dairy Cows Using Novel Analytical Techniques*  
*Randall Robinson, University of California, Davis, USA*

**3:10 pm**  
*Coffee Break*

### Milk and Dairy Products Impact on Health - Lipids

**3:40 pm**  
*Keynote Speaker: How Has Saturated Fat Become So Controversial?*  
*Benoit Lamarche, Université Laval, Québec, Canada*

**4:20 pm**  
*Differential Impact of Cheese Matrix on Postprandial Lipid Response: A Randomized, Crossover, Controlled Trial*  
*Jean-Philippe Drouin-Chartier, Université Laval, Québec, Canada*

**4:35 pm**  
*Student Travel Award Recipient: Identification of Parameters Involved in Disintegration of Commercial Cheese Matrix and Lipid Digestion by Using an In Vitro Static Digestion Model*  
*Léa Guinot, Université Laval, Québec, Canada*

**4:50 pm**  
*Milk Fat Globule: New Insights into an Unappreciated Complex Lipid System*  
*Bruce German, University of California, Davis, USA*

### Evening Event

**6:30-11 pm**  
*Group Dinner*
### Human Milk

<table>
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<tr>
<th>Time</th>
<th>Title</th>
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<tbody>
<tr>
<td>9:00 am</td>
<td>Human Milk for Populations at Risk</td>
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<td>Deborah O'Connor, University of Toronto, Canada</td>
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<tr>
<td>9:40 am</td>
<td>A Role for Human Milk Bioactivity in Improved Health Outcomes for Premature and Low Birth Weight Babies: Lessons from the Evolution of Lactation</td>
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<td>Kevin Nicholas, Monash University, Victoria, Australia</td>
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<td>10:05 am</td>
<td>Maternal Programming of Lung Development During Lactation in the Marsupial Neonate</td>
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<td>Christophe Lefevre, Walter and Eliza Hall Medical Research Institute, Melbourne, Australia</td>
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<tr>
<td>10:30 am</td>
<td>Coffee Break</td>
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<tr>
<td>10:45 am</td>
<td>Lactational Concentration Changes of Individual Human Milk Oligosaccharides in Breast Milk from Chinese and Malaysian Women</td>
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<td>Paul McJarrow, Fonterra Research and Development Centre, Palmerston North, New Zealand</td>
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<tr>
<td>11:10 am</td>
<td>Beyond the Bench: The Future of Human Milk Stem Cells for Preterm Infants</td>
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<td>Carrie-Ellen Briere, University of Massachusetts Amherst, USA</td>
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<tr>
<td>11:35 am</td>
<td>Student Travel Award Recipient: Milk as a Protein-Protease Delivery System: Collaborative Approaches Inspire Inquiry into the Dynamics and Complexities of Human Milk</td>
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<td>Junai Gan, University of California, Davis, USA</td>
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<tr>
<td>11:50 pm</td>
<td>CLOSING REMARKS</td>
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<tr>
<td>12:00 pm</td>
<td>LUNCH</td>
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