Monday, September 23, 2019

Registration Open
7:00 am – 9:00 pm

ASHI Inspectors Training Workshop
8:00 am – 4:30 pm

Banff Regenerative Medicine
8:00 am – 10:00 am

Banff Digital Pathology, Machine Learning and AI in Transplantation
10:30 am – 12:30 pm

Joint Pre-Meeting: HLA 101 and Pathology 101
2:00 pm – 3:30 pm

Pathology of Solid Organ Allografts and the Banff Classification
2:00 pm – 2:30 pm

HLA Didactic Presentation
2:30 pm – 3:00 pm

Case Presentation
3:00 pm – 3:30 pm

ASHI First Time Attendees & New Members Reception*
5:00 pm – 6:00 pm
*By invitation only

Opening Session: ‘Burden of Genius’ Movie Viewing
6:00 pm – 7:30 pm

Opening Reception with Exhibits Open
7:30 pm – 9:00 pm

Tuesday, September 24, 2019

Registration Open
6:30 am – 8:15 pm

The Paul I. Terasaki Clinical Science Award
8:00 am – 9:00 am

Keynote Address
9:00 am – 10:00 am

What Has Been and What Will Be: A Transplant Odyssey
Robert Montgomery, MD, D.Phil, FACS
NYU Langone Transplant Institute
New York, NY, USA

Coffee Break, Exhibit Hall Open
10:00 am – 10:30 am

Plenary I: 50 Years of Humoral Theory of Transplantation: The ASHI-Banff Crosstalk
10:30 am – 12:20 pm

10:30 am – 11:10 am Is There Evidence for a Causative Role of DSA in Solid Organ Transplant Rejection?
11:10 am – 11:40 am DSA Testing in Solid Organ Transplantation: A STAR IS BORN
11:40 am – 12:20 pm DSA Testing in Liver and Thoracic Transplantation: The Banff and ISHLT Perspective

Banff Working Lunch I: Progress Report on Banff Working Groups
12:30 pm – 2:20 pm

Banff Workshop: Intestinal Transplant Rejection
2:30 pm – 6:30 pm

2:30 pm – 2:45 pm Welcome Introduction to the Banff Process
2:45 pm – 3:00 pm Clinical Overview of Intestine Transplantation
<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>3:00 pm – 3:15 pm</td>
<td>Snap Shot of Center Experience</td>
<td>2:50 pm – 3:15 pm</td>
<td>Lessons from Explant Pathology</td>
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<td>3:15 pm – 3:55 pm</td>
<td>Review of Literature: Intestine Transplant Pathology</td>
<td>3:15 pm – 3:30 pm</td>
<td>Nanostring &amp; Molecular Diagnostics: Update</td>
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<td>3:55 pm – 4:25 pm</td>
<td>Follow Up from the Paris Intestine Workshop</td>
<td>3:30 pm – 3:45 pm</td>
<td>Nanostring Technology and CLAD: Successes and Lessons Learned</td>
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<td>4:25 pm – 4:45 pm</td>
<td>Break</td>
<td>3:45 pm – 4:00 pm</td>
<td>Evaluation of Immune Parameters in Lung Transplant</td>
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<td>4:45 pm – 6:30 pm</td>
<td>Working Discussion</td>
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<td><strong>Banff Workshop: Kidney</strong></td>
<td><strong>2:30 pm – 6:30 pm</strong></td>
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<td>2:30 pm – 3:15 pm</td>
<td>Causes of Total-I, i-IFTA and t-IFTA and Prognosis: The Dekaf Experience</td>
<td>4:15 pm – 4:30 pm</td>
<td>Immunobiology: Impact on DSA Pathology</td>
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<td>3:15 pm – 3:45 pm</td>
<td>Fine Tuning of Chronic Active TCMR Criteria Enunciated in Banff 2017</td>
<td>4:30 pm – 4:45 pm</td>
<td>Immunobiology: Impact of Polymorphism on Clinical Outcome and Response to Treatment</td>
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<td>3:45 pm – 4:15 pm</td>
<td>Potential Role for Morphometry, Molecular Diagnosis in Further Refining the Definition of Chronic TCMR</td>
<td>5:00 pm – 5:15 pm</td>
<td>Non-HLA DSA in Lung Transplantation</td>
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<td>4:30 pm – 5:00 pm</td>
<td>Molecular Phenotype and IFTA</td>
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<td>5:00 pm – 5:30 pm</td>
<td>Borderline Lesions in the Banff Classification: How to Eliminate?</td>
<td>2:30 pm – 3:05 pm</td>
<td>Chronic Rejection in VCA</td>
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<td>5:30 pm – 6:00 pm</td>
<td>BKVAN With and Without Rejection: How to Move Towards Specific Diagnoses</td>
<td>3:05 pm – 3:35 pm</td>
<td>Eosinophilia in the Skin as a Predictor of Allograft Rejection in VCA: Insight from Other Organ Transplants</td>
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<td>6:00 pm – 6:30 pm</td>
<td>TCMR Survey Proposal</td>
<td>3:35 pm – 4:10 pm</td>
<td>Rejection in Sentinel Flaps: Benefits and Liabilities</td>
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<td><strong>Banff Workshop: Lung</strong></td>
<td><strong>2:30 pm – 6:30 pm</strong></td>
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<td>2:30 pm – 2:50 pm</td>
<td>Pathological New Features: Associated with Chronic Lung Dysfunction: Update</td>
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<td>Break</td>
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<td>2:30 pm – 6:30 pm</td>
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<td>4:40 pm – 5:10 pm</td>
<td>Cutaneous GVD and Skin Rejection in VCA: A Clinical and</td>
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Histopathologic Comparison
5:10 pm – 5:45 pm
Update on a Systematic Pathological Component Score For Skin-Containing VCAs
5:45 pm – 6:30 pm
Working Group on Chronic Rejection: Update and Discussion

ASHI Symposium I: HLAs and Their Role in Immunogenetics
2:30 pm – 4:00 pm
CART Therapeutic Approaches Beyond Cancer
2:30 pm – 3:10 pm
The Role of HLAs in Developing Vaccine-Based Immunotherapies
3:10 pm – 3:50 pm
Patient HLA Class I Genotype Influences Cancer Response to Checkpoint Blockade Immunotherapy
3:50 pm – 4:30 pm
Coffee Break
4:30 pm – 5:00 pm
ASHI Workshop I: Laboratory Automation Selection and Implementation: What You Need to Know
5:00 pm – 6:30 pm
Considerations in Selecting and Implementing Laboratory Automation
5:00 pm – 5:30 pm
Managing Laboratory Automation Expectations
5:30 pm – 6:00 pm
Challenges in Obtaining Laboratory Automation: A Beginner’s Experience
6:00 pm – 6:30 pm

ASHI Workshop II: Developing a QualityQA Program
5:00 pm – 6:30 pm
Non-Conforming Events and Root Cause Analysis
5:00 pm – 5:30 pm
Tracking Quality Metrics
5:30 pm – 6:00 pm

ASHI Workshop III: UNOS IT and ASHI: BFFs!
5:00 pm – 6:30 pm
UNOS IT
5:00 pm – 5:30 pm
SystemLink/Histotrac
5:30 pm – 6:00 pm
HLA Data Systems/mTilda
6:00 pm – 6:30 pm

ASHI Abstract Session I: Solid Organ Pre-Transplant Testing
5:00 pm – 6:30 pm
ASHI Abstract Session II: Immunotherapy/Tolerance/Immunomodulation
5:00 pm – 6:30 pm
ASHI Abstract Session III: The Past, Present, and Future of HLA
5:00 pm – 6:30 pm
Poster Reception with Exhibits Open
6:30 pm – 8:15 pm

ASHI ARB Inspectors & International Reception*
7:00 pm – 9:00 pm
*By invitation only

Wednesday, September 25, 2019

The Tulip Run: 5K Run/1 Mile Walk
Offsite: Three Rivers Heritage Trail
6:30 am – 8:00 am
Registration Open
8:00 am – 6:00 pm
Scientific Award Presentation: Rose Payne Award
8:30 am – 9:30 am
Plenary II: Joint Progresses in the Diagnosis and Treatment of Rejection
9:30 am – 11:00 am

TTS Consensus Meeting Update
9:30 am – 9:50 am
It's Not All about AMR: Fine Tuning of Chronic Active TCMR
9:50 am – 10:12 am
Molecular Assessments for Precision
10:12 am – 10:32 am

Coffee Break
5:00 pm – 6:30 pm
ASHI Abstract Session III: The Past, Present, and Future of HLA
5:00 pm – 6:30 pm
Poster Reception with Exhibits Open
6:30 pm – 8:15 pm

ASHI ARB Inspectors & International Reception*
7:00 pm – 9:00 pm
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<tr>
<th>Time</th>
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<tr>
<td>10:32 am – 11:00 am</td>
<td>Diagnostics and Prognostication</td>
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<td>11:30 am – 12:20 pm</td>
<td>AMR without DSA: Non-HLA Antibodies and Implication or Pathophysiology and Diagnostics</td>
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<td>11:30 am – 11:55 am</td>
<td>HCT Complex Case</td>
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<td>11:55 am – 12:20 pm</td>
<td>VCA Complex Case</td>
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<td>12:30 pm – 2:20 pm</td>
<td>ASHI User Group Meetings</td>
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<td>12:30 pm – 1:00 pm</td>
<td>FDA Requirements, Qualification Context of Use</td>
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<td>1:00 pm – 1:30 pm</td>
<td>TTC Progress and Overview</td>
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<td>1:30 pm – 2:00 pm</td>
<td>ABMR Related Clinical Trials: The Slippery Slope Into Confusion and Prospect for Improvement</td>
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<td>2:00 pm – 2:20 pm</td>
<td>New Developments and Ongoing Clinical Trials</td>
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<td>2:30 pm – 2:45 pm</td>
<td>Duodenal Cuff and Pancreas</td>
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<td>2:30 pm – 6:00 pm</td>
<td>Banff Workshop: Pancreas</td>
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<td>3:30 pm – 4:15 pm</td>
<td>Combining Molecular Profiling and T-Cell Subset</td>
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<td>4:15 pm – 4:30 pm</td>
<td>Break</td>
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<td>4:30 pm – 5:15 pm</td>
<td>Minimization</td>
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<td>5:15 pm – 6:00 pm</td>
<td>Molecular Predictors of Progressive Liver Damage: A Non-Transplant Perspective</td>
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<td>3:00 pm – 3:15 pm</td>
<td>Experience with Duodenal Cuff Biopsies</td>
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<td>3:15 pm – 4:00 pm</td>
<td>Advances in the Diagnosis of Pancreas Rejection</td>
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<td>Antibody Mediated Rejection in Intestinal Biopsies</td>
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<td>3:30 pm – 4:15 pm</td>
<td>Transcriptome Profile of Pancreas Transplant Rejection Using Blood and Tissue Samples</td>
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<td>Lessons from Concurrent Pancreas and Kidney Biopsies</td>
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<td>4:30 pm – 4:45 pm</td>
<td>Chronic Active Rejection in the Pancreas?</td>
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<td>4:45 pm – 5:00 pm</td>
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<td>5:00 pm – 5:15 pm</td>
<td>Islet Dysfunction After Beta Cell Replacement After Pancreas Transplantation</td>
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<td>5:15 pm – 5:30 pm</td>
<td>Primary Islet Dysfunction, Morphological Studies</td>
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<td>5:30 pm – 5:45 pm</td>
<td>Islet Cell Studies on Drug Interactions</td>
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<td>5:45 pm – 6:00 pm</td>
<td>Islet Engraftment and Inflammatory Reaction</td>
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<td>2:30 pm – 2:35 pm</td>
<td>Introduction to the Session</td>
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<td>2:30 pm – 6:00 pm</td>
<td>Banff Workshop: Heart</td>
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<td>2:30 pm – 4:00 pm</td>
<td>How to Assess and Monitor DSA’s Post Lung Transplantation</td>
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<td>2:35 pm – 2:50 pm</td>
<td>How Can We Improve EMB Accuracy For The Diagnostic of Rejection?</td>
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<td>2:50 pm – 3:05 pm</td>
<td>Molecular Assessment As A Companion to Histopathology</td>
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<td>3:05 pm – 3:20 pm</td>
<td>Phenotyping of the Inflammatory Cells</td>
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<td>3:20 pm – 3:35 pm</td>
<td>Evolution of Endothelium, Capillary and Small Vessel Damage</td>
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<td>3:35 pm – 3:50 pm</td>
<td>What Should Be Called “Cardiac Injury” on EMB?</td>
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<td>3:50 pm – 4:40 pm</td>
<td>Quilty Effect in 2018</td>
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<td>4:40 pm – 4:55 pm</td>
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<td>4:55 pm – 5:10 pm</td>
<td>Pathogenesis of Quilty: Is It Rejection? Pros and Cons</td>
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<td>5:10 pm – 5:25 pm</td>
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<td>5:25 pm – 6:00 pm</td>
<td>Roundtable: Project Proposal and Conclusion</td>
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<td>6:00 pm – 7:00 pm</td>
<td>ASHI Workshop Session: Assessment and Management of Post-Transplant DSA in Lung Transplant Patients: A Pro-Con Discussion</td>
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<td>2:30 pm – 4:00 pm</td>
<td>ASHI Workshop Session: Detection of Non-HLA Antibodies – International Experiences with Multiplex Assays</td>
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2:30 pm – 3:00 pm  Informatics Tools for Precision Histocompatibility Assessments 10:10 am – 10:45 am  Advances in Histocompatibility Testing for HCT

3:00 pm – 3:30 pm  Describe the Strengths and Weaknesses of Each Algorithm in Predicting Allograft Outcome and De Novo DSA Risk 10:45 am – 11:00 am  Panel Discussion

3:30 pm – 4:00 pm  Machine Learning Strategies for Taking Epistatic and Heterogeneous Associations in Precision Histocompatibility

ASHI Abstract Session IV: Solid Organ Post-Transplant Testing 2:30 pm – 4:00 pm

ASHI Abstract Session V: Bone Marrow, HST, Chimerism 2:30 pm – 4:00 pm

ASHI Abstract Session VI: Case Studies 2:30 pm – 4:00 pm

ASHI Directors’ and Technologists’ Combined Forum 4:30 pm – 5:15 pm

ASHI Directors’ Forum 5:15 pm – 6:30 pm

ASHI Technologists’ Forum 5:15 pm – 6:30 pm

Thursday, September 26, 2019

Registration Open 7:30 am – 6:00 pm

Bernard Amos Distinguished Scientist Award 8:00 am – 9:00 am

ASHI Symposium II: HCT and Cellular Therapy: Almost Everything You Need to Know 9:00 am – 11:00 am

9:00 am – 9:35 am  HCT and Cellular Therapy: A Primer for the Non-Transplanter 1:30 pm – 1:45 pm  The BK Classification: Potential New Directions

9:35 am – 10:10 am  Haplo-Identical HCT 1:45 pm – 2:20 pm  Discussion

10:00 am – 10:45 am  MMDX When, Who and Why Should I Order It? 10:45 am – 11:00 am  Panel Discussion

Coffee Break 11:00 am – 11:30 am

Scholar Award Abstract Session 11:30 am – 12:30 pm

ASHI User Group Meetings 12:30 pm – 2:20 pm

Banff Working Lunch IV: Kidney: Discussions and Next Steps from Kidney Working Group Results 12:30 pm – 2:20 pm

12:30 pm – 12:45 pm  Overview of 2017 Banff Changes: The Good, The Bad and The Ugly

12:45 pm – 1:15 pm  Discussion

1:15 pm – 1:30 pm  The BK Classification Update

1:30 pm – 1:45 pm  The BK Classification: Potential New Directions

1:45 pm – 2:20 pm  Discussion

Banff Working Lunch V: Digital Pathology: Digital Liver, Kidney, and Heart Pathology Algorithms 12:30 pm – 2:20 pm

12:30 pm – 2:20 pm  Discussion
Banff Working Lunch VI – Lung: AMR Consensus Discussion
12:30 pm – 2:20 pm

12:30 – 2:20 pm Discussion

Banff Workshop: Kidney II
2:30 pm – 6:00 pm

2:30 pm – 3:30 pm Pathologic Assessment of Transplant Glomerulopathy

3:30 pm – 4:00 pm CG Breaking Heterogeneity by Integrative Approaches

4:00 pm – 4:30 pm NK For Improving ABMR Activity Stage and Diagnosis

4:30 pm – 4:45 pm Break

4:45 pm – 5:15 pm The Continuous Process of AMR: Implementation of a DAMAGE Index – Elimination of the Term “Chronic”

5:15 pm – 5:45 pm Banff AMR Without Detectable HLA DSA: Phenotype and Outcome

5:45 pm – 6:00 pm Round Table Discussion

Banff Workshop: Liver II
2:30 pm – 6:00 pm

2:30 pm – 3:15 pm Interface Hepatitis: A Deep Dive Into the Morphology and Possible Pathogenesis

3:15 pm – 4:00 pm Molecular Profiling of Rejection and Tolerance: Similarities Across Different Organs

4:00 pm – 4:15 pm Break

4:15 pm – 5:00 pm Morphological Characterization of Chronic Liver Allograft AMR

5:00 pm – 5:45 pm Insight into The Immunopathogenesis of Subclinical Allograft Damage

5:45 pm – 6:00 pm General Discussion of Consensus Molecular Profiling for Liver Allografts

ASHI Symposium: One Transplant for Life: Clinical Transplant Tolerance
2:30 pm – 4:00 pm

Donor Bone Marrow and Stem Cells as Mediators of Clinical Tolerance

Clinical Transplant Tolerance Trials – Beyond Donor Stem Cells

Biomarkers of Clinical Transplant Tolerance

ASHI Workshop: Reconciling The HLA Alphabet Soup: IMGT, UNOS, ARB, QAS and Beyond
2:30 pm – 4:00 pm

WHO HLA Nomenclature

UNOS Viewpoint

ARB Viewpoint

QAS Viewpoint

Panel Discussion

Coffee Break
4:00 pm – 4:30 pm

International Workshop Updates (IHIW/STAR)
4:00 pm – 5:00 pm

IHIW Update

STAR Update

Professional Standards Division Updates: PT/QAS/ARB/DTRC
5:00 pm – 5:30 pm

ASHI Business Meeting and Updates
5:30 pm – 6:30 pm

Banff Summary
8:00 am – 10:30 am

Kidney Summary

Friday, September 27, 2019
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<th>Time</th>
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<tr>
<td>8:25 am</td>
<td>Liver Summary</td>
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<tr>
<td>8:50 am</td>
<td>Lung Summary</td>
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<td>9:10 am</td>
<td>Heart Summary</td>
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<td>9:30 am</td>
<td>Pancreas Summary</td>
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<td>9:50 am</td>
<td>VCA Summary</td>
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<td>10:10 am</td>
<td>Intestinal Summary</td>
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**ASHI Symposium IV: Space-Structure-Function**
8:30 am – 10:30 m

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<th>Time</th>
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<tr>
<td>8:30 am</td>
<td>The Three-Dimensional Gene Regulatory Architecture of Human T Follicular Helper Cells Implicates Casual Variants and Reveals Novel Drug Targets at SLE GWAS loci</td>
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<td>9:10 am</td>
<td>Chromatin Organizing Principles Through the Lens of the Cell Cycle</td>
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<tr>
<td>9:50 am</td>
<td>The Genome character As Revealed by Complexity Theory</td>
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**ASHI/Banff Joint Scientific Meeting Summary**
11:00 am – 12:00 pm