



2023 Pre-Program

Wednesday, September 27th

Information Desk

8:00 am – 4:00 pm

Kellogg Concourse

Special Interest Group Satellites (SIGs):

10:30 AM and 2:30 PM breaks provided with light refreshments in the Kellogg Concourse

SIG 1: The Impact of Maternal Health on Offspring Immunity (9am-12pm)

Room: K

Co-Chairs: Ilhem Messaoudi, *University of Kentucky* & Jennifer Bermick, *University of Iowa*

- **Alterations in Adaptive Immune Function in Neonates Following Maternal Inflammation**, Timothy Boly, *University of Iowa*
- **Molecular Mechanisms Underlying Human Fetal T Regulatory Cell Differentiation and Function**, Trevor Burt, *Duke University*
- **Molecular Dynamics of SARS-Cov-2 in Pregnancy: Unraveling the Impact on the Placental Barrier**, Deepak Kumar, *Baylor College of Medicine*
- **Affected not Infected: Health of Children Born to Women Living with HIV**, Louise Kuhn, *Columbia University*
- **Dysregulation of Neonatal Immunity by Perinatal Opioid Exposure**, Ilhem Messaoudi, *University of Kentucky*

SIG 2: Regulation of the Microenvironment by Leukocyte-derived Extracellular Vesicles or Exosomes (9am-12pm)

Room: L

Co-Chairs: Brian Dobosh, *Emory University*; Kris Genschmer, *University of Alabama Birmingham*; Camilla Bell, *University of Alabama Birmingham*

- **Activated T Cells Secrete Extracellular Vesicles in the allergic Airway that Enhance Eosinophil Viability**, Heather Pua, *Vanderbilt University Medical Center*
 - **Platelets, Megakaryocytes and their Extracellular Vesicles in Immunity**, Florian Puhm, *Université Laval*
 - **Unpacking the Roles of Neutrophil-derived EVs and Extracellular DNA following Bacterial Challenge**, Mallary Greenlee-Wacker, *California Polytechnic State University*
 - **Metabolic Stress and Macrophage-derived EV and their Effects on Atherosclerosis and Cardiovascular Disease**, Robert Raffai, *UCSF*
 - **Nuclear Envelope Budding Controls the Dynamics of Neutrophil Chemotaxis**, Subhash Arya, *University of Michigan*
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SIG 3: Myeloid Cells in Inflammatory Diseases (1-4pm)

Room: K

Co-Chairs: Catherine 'Lynn' Hedrick, *Medical College of Georgia at Augusta University* & Zhichao Fan, *UConn Health School of Medicine*

- **Monocyte Heterogeneity in Human Cardiovascular Disease**, Catherine 'Lynn' Hedrick, *Medical College of Georgia at Augusta University*
 - **Monocytes Drive Irreversible Lung Tissue Damage in Cystic Fibrosis**, Hasan Oez, *Yale University School of Medicine*
 - **Fishing for New Regulators for Neutrophil Migration**, Qing Deng, *Purdue University*
 - **Functional and Metabolic Characterization of Olfr2 Expressing Aortic Macrophages in Atherosclerosis**, Marco Orecchioni, *Medical College of Georgia at Augusta University*
 - **Sex-specific and Leukocyte-specific Contributions of Beta2 Integrins in Myocardial Ischemia-reperfusion Injury**, Zhichao Fan, *UConn Health School of Medicine*
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SIG 4: Harnessing the Innate Immune System in the Fight Against Sepsis (1-4pm)

Room: L

Co-Chairs: Julia Bohannon, *Vanderbilt University Medical Center* & Vidula Vachharajani, *Cleveland Clinic Lerner College of Medicine of CWRU*

- **Innate Immune Exhaustion in Sepsis Pathogenesis**, Liwu Li, *Virginia Tech*
- **Innate Immune Training as a Means of Restoring Immune Function after Burn Injury**, Julia Bohannon, *Vanderbilt University Medical Center*
- **Training Innate Immunity as an Approach to the Management of Sepsis**, David Williams, *East Tennessee State University*
- **The Role of MDSCs in Pathogenesis of Sepsis**, Philip Efron, *University of Florida*
- **The Role of Sirtuins and Immuno-Metabolism of Sepsis**, Vidula Vachharajani, *Cleveland Clinic Lerner College of Medicine of CWRU*

SLB Council Meeting (Part 1): 5-9 pm – Oak Room – By Invitation Only

56th Annual Society for Leukocyte Biology Meeting
“The Future of Immunology: New Solutions to Old Problems”



Thursday, September 28th

Information Desk

7:30 am – 5:00 pm

Hill Atrium

8:30 am – 10:00 am FASEB DataWorks Breakfast Magnolia Ballroom

Join fellow attendees for a light breakfast and learn more about DataWorks.

Light breakfast provided.

10:00 am – 11:30 pm Plenary I: New

Frontiers in Cancer Immunotherapy

Chairs:

Peter Keyel & Balazs Rada

Location:

Mahler Hall

10:00 am

**Ancestry-associated
Immunological Profiles in
Breast Cancer**, Melissa B. Davis,
Cornell University

10:30 am

**Regulation of Anti-Tumor
Immunity by sFgl2**, Mandy Ford,
Emory University

11:00 am

**Improving T Cell Responses by
Depleting Regulatory Tregs
from Solid Tumors**, Manish
Butte, *UCLA*

11:30 am – 1:00 pm Poster Session Lunch I Hill Atrium/Pecan Tree

Join fellow attendees and browse posters while enjoying lunch.

Grab-n-go lunch provided.

JLB Editorial Board Lunch 11:30 am – 1:00 pm – Magnolia Ballroom – By Invitation Only

1:00 – 2:30 pm Presidential Scholars

Chairs:

David Underhill & Lou
Justement

Location:

Mahler Hall

Graduate Student Finalists

1:00 pm

**Adenosine Signaling Boosts
Neutrophil Recruitment in
Pneumococcal Infected Aged
Hosts**, **Shaunna Simmons**,
University of Buffalo #1

1:15 pm

**Impaired B-cell Immunity in
Humans with PD-1 or PD-L1
Deficiency**, **Masato Ogishi**, *The
Rockefeller University #2*

1:30 pm

**Yersinia pestis Inhibits
Antimicrobial Extracellular
Vesicle Production by Human
Neutrophils**, **Katelyn
Sheneman**, *University of
Louisville #19*

Postdoctoral Finalists

1:45 pm

Genome-wide DNA Methylation
Repatterning Regulates
Monocyte Exhaustion in Sepsis,
Blake Caldwell, Virginia Tech #3

2:00 pm

Secretion of Exosome-associated
DNA (SEAD) Regulates
Neutrophil Chemotaxis, **Subhash
Arya, University of Michigan #4**

2:15 pm

Mitoquinol Preserves
Glycolysis and Phagocytosis in
Ethanol-exposed
Macrophages, **Bishnu Pant,
Cleveland Clinic Lerner
Research Institute #20**

2:30 – 3:00 pm Networking Break Hill Atrium

Mingle with fellow attendees while visiting the various exhibit and informational tables.
Light refreshments provided

3:00 – 5:00 pm

**Excellence in
Leukocyte Biology**

Chairs:

David Underhill & Lou
Justement

Location:

Mahler Hall

Early Career Finalists

3:00 pm

Adhesion and Integrin Defects
in CFTR-deficient Monocytes,
Zhichao Fan, UConn Health #5

3:20 pm

Resolvin D4: Controls
Neutrophil Deployment During
Distal Infections, **Stephania
Libreros, Yale School of
Medicine #6**

3:40 pm

Kinetics of Endogenous Thymic
Regeneration Following
Chemotherapy Insult, **George
Karagiannis, Albert Einstein
College of Medicine #33**

Mid-Career Finalists

4:00 pm

Sphingosine-1-phosphate is Required for Skin Host
Defense in Obese Mice, **C. Henrique Serezani,
Vanderbilt University Medical Center #7**

4:30 pm

Eosinophils as Regulators of Host Defense during
Respiratory Infections, **Amali Samarasinghe,
University of Tennessee Health Science Center #21**

5:00 – 6:00 pm

**SLB Legacy
Keynote Lecture**

SLB Legacy Awardee

Complement as an “Influencer” in Health and Disease, Andrea Tenner, University of California, Irvine

Chair:

David Underhill & Lou
Justement

Location:

Mahler Hall

7:00 – 9:00 pm Opening Reception, Botanical Gardens

Pre-Registration and purchased ticket required

Bus transportation to the gardens begins at 6:30 pm with return trips beginning at 8:30 pm.
Join fellow attendees at this opening reception at the beautiful nearby UGA Botanical Gardens.
Transportation and reception style dinner provided (pre-purchased tickets required).

Due to liquor licensing, no alcohol will be provided or sold at this event. Non-alcoholic beverages will be provided.

Friday, September 29th

Information Desk

8:00 am – 4:00 pm

Hill Atrium

8:00 – 9:00 am Networking Breakfast Magnolia Ballroom

Hosted by the DEI Committee, join fellow attendees for breakfast while discussing suggested table topics on a variety of topics.

Breakfast Buffet provided.

9:00 am – 10:30 am Concurrent Sessions 1 & 2

Concurrent Session 1: Immunity to Microbial Pathogens

Chairs: Michael Bachman & Amal Amer

Location: Mahler Hall

Featured Speaker:

9:00 am Gram-negative Bacteremia: Pathogenesis and Innate Immunity, **Michael Bachman**, *University of Michigan*

Selected Talks:

9:30 am Regulatory Mature DC1 of the Lung During Influenza Infection, **Xinran Wang**, *University of Alabama at Birmingham #22*

9:45 am Antimycobacterial Functions of Lipid-reactive T Cells in BCG-inoculated Macaques, **Namita Rout**, *Tulane University #23*

10:00 am Immune Responses During Transition of Pneumococci from Colonizers to Pathogens, **Alexandra Lenhard**, *University of Buffalo #24*

10:15 am Thiocyanate Treatment Reduces Mortality in Mice Infected with Influenza

Concurrent Session 2: Neutrophil Biology & Function

Chairs: Jiaqi Shi & Aaron Silva Sanchez

Location: Masters Hall

Featured Speaker:

9:00 am Neutrophils in Pancreatic Cancer, **Jiaqi Shi**, *University of Michigan*

Selected Talks:

9:30 am Signaling Pathways in Neutrophil Response to *Peptoanaerobacter stomatis*: SALSA Dance, **Aruna Vashishta**, *University of Louisville #29*

9:45 am Impairment of Neutrophil Functionality by Novel *Treponema* Membrane Surface Proteins, **Michelle Visser**, *University at Buffalo #30*

10:00 am Monomeric IgA1 Reduces Killing of Methicillin-resistant *Staphylococcus aureus* by Neutrophils, **Naveen Gokanapudi**, *University of Georgia #31*

10:15 am Spleen Tyrosine Kinase in Low Density Granulocytes in Bacterial Sepsis,

OR

Viruses, **Nuha Ashtiwi**, *University of Georgia* #25

Heather Teague, *National Institutes of Health* #32

10:30 am – 11:00 am Break with JLB Hill Atrium

Meet the *Journal of Leukocyte Biology* Editor-in-Chief and Senior Editorial Team during this special coffee break.

Discuss your manuscript ideas and learn about the submission process. Meet at the JLB table.

OR Mingle with fellow attendees while visiting the various exhibit and informational tables.

Light refreshments provided

11:00 – 12:30 pm Concurrent Sessions 3 & 4

Concurrent Session 3: Tissue & Tumor Immunity

Chairs: Niroshana Anandasabapathy & Alexander Ball

Location: Mahler Hall

Featured Speaker:

11:00 am Tissue Immunity and Tumor Immunity Surveillance, **Niroshana Anandasabapathy**, *Cornell University*

Selected Talks:

11:30 am Gut Microbiota Impair Anti-tumor Immunity by Catabolizing Arginine, **Selene Meza-Perez**, *University of Alabama at Birmingham* #48

11:45 am Immunological and Microbial Shifts in Lung During Nontuberculous Mycobacterial Infection, **Ethan Napier**, *University of Kentucky* (Presidential Scholar - Graduate Student – Merit Finalist) #49

12:00 pm The Interplay of NETs and Diseased Lung Environments, **Katherine Nguyen**, *Georgia Institute of Technology* #50

12:15 pm miR-125b-5p Sensitizes Anti-PD-L1 Therapy by Enhancing Anti-tumor Immune Responses, **Xin Chen**, *University of Macau* #51

Concurrent Session 4: Immune Communication & Signaling

Chairs: Amit Gaggar & Catalina Argandona

Location: Master Hall

Featured Speaker:

11:00 am Immune Cell-derived Extracellular Vesicles: New Pathogenic Entities in Chronic Lung Disease, **Amit Gaggar**, *University of Alabama, Birmingham*

Selected Talks:

11:30 am Innate-immune Processes Associated with Resilience to Malaria in Nonhuman Primates, **Riley Drake**, *Emory University School of Medicine* #15

11:45am TREM-2 on Immune Cells is Protective During *Toxoplasma gondii* Infection, **Hannah Debray**, *University of California, Irvine* (Presidential Scholar - Graduate Student – Merit Finalist) #16

12:00 pm Neutrophils Control T Cell Responses to the Pneumococcal Conjugate Vaccine, **Essi Tchalla**, *University at Buffalo* #17

12:15 pm MiR-190 in Neutrophil Migration Regulation, **Daniel Kim**, *Purdue University* (Presidential Scholar - Graduate Student – Merit Finalist) #18

OR

12:30 – 2:00 pm Poster Session Lunch II Hill Atrium/Pecan Tree

Join fellow attendees and browse posters while enjoying lunch.

Grab-n-go lunch provided.

2:00 – 3:30 pm Plenary II: Immune

Chairs:

Amanda Brown & Craig Lefort

Location:

Mahler Hall

Responses to Emerging Viral Pathogens

2:00 pm

Myeloid Lineage Responses to Mosquito-borne Viral Encephalitis, **Nicholas King**, *University of Sydney*

2:30 pm

Epigenetic and Transcriptional Control during CD8+ T Cell Fate Commitment, **Luigia Pace**, *Italian Institute for Genomic Medicine*

3:00 pm

Life After the Pandemic – Looking at the Long Term Effects of COVID-19, **Jamie Sturgill**, *University of Kentucky*

3:30 – 4:00 pm Networking Break Hill Atrium

Mingle with fellow attendees while visiting the various exhibit and informational tables.

Light refreshments provided.

4:00 pm – 5:30 pm Plenary III:

Chairs:

Cynthia Leifer & Sergio Catz

Location:

Mahler Hall

Innovations in Autoimmunity

4:00 pm

Highly Selective Salt-Inducible Kinase (SIK) Inhibitors Modulate Innate Immune Activation and Suppress Intestinal Inflammation, **Holger Babbe**, *Janssen*

4:30 pm

Power from within: The Complosome and Cell Physiology, **Claudia Kemper**, *NIH*

5:00 pm

Immunometabolism and Trained Immunity in Autoimmune Disease, **Caroline Jefferies**, *Cedar-Sinai*

6:00 – 8:00 pm Professional Development Dinner Workshop Magnolia Ballroom

Pre-Registration and purchased ticket required

Join for this workshop organized by the Professional Development and Members in Transition and Training Committees.

Buffet dinner provided (pre-purchased tickets required).

Saturday, September 30th

Information Desk

7:30 am – 3:00 pm

Hill Atrium

8:00 – 9:30 am Breakfast and Poster Flash Talks

Magnolia Ballroom

Chairs: Archana Gopalakrishnan & Ramya Ganesan

Organized by the Members in Transition and Training Committee. Breakfast Buffet provided

Graduates/Trainees:

Exosomes do not Compromise MRSA Killing by Neutrophils, **Jacob Fairholm**, *University of Georgia* #26

Impacts of a *Campylobacter jejuni sirtuin* on Host Immune Response, **Madison Bunch**, *University of Tennessee Knoxville* #27

Predicting Adjuvant-induced Antibody Response by Measuring Lymph Node Stroma Function, **Alexander Ball**, *University of Virginia* #42

The Effects of IL-17/Act1 Signaling on Innate Immune Cells, **Tyler Pikes**, *Purdue University* #43

Undergraduates:

Toll-like Receptor Expression and Activation following Burn Injury and Infection, **Olivia Boykin**, *Vanderbilt University* (Presidential Scholar - Undergraduate Student - Merit Finalist) #52

Control of Monocyte miR-155 Expression by the Mevalonate Pathway, **Jack Drda**, *Dickinson College* #53

Investigation of HL60-derived Neutrophil Chemotaxis on Endo-epithelial Bilayer Model, **Daniel Feng**, *Georgia Institute of Technology* #54

Developing a Mouse Model Elucidating EZH2 Dependent Plasma Cell Differentiation, **Olivia Johnston**, *University of Alabama at Birmingham* (Presidential Scholar - Undergraduate Student - Merit Finalist) #55

Tumor-directing Immunotherapy for Metastatic Ovarian Cancer, **Chloe Jepson**, *University of Alabama at Birmingham* (Presidential Scholar - Undergraduate Student - Merit Finalist) #56

9:30 – 11:00 am Concurrent Sessions 5 & 6

Concurrent Session 5:

Dysregulation of Immunity

Chairs: Anna Helena Jonsson & Heather Teague

Location: Mahler Hall

Featured Speaker:

9:30 am Effector Mechanisms of Granzyme K+ CD8 T cells, **Anna Helena Jonsson**, *University of Colorado*

Selected Talks:

10:00 am Chronic Alcohol Consumption Dysregulates Innate Immune Response to SARS-CoV-2, **Madison Blanton**, *University of Kentucky* (Presidential Scholar - Graduate Student – Merit Finalist) #8

10:15 am Sirtuin 2 Expression Regulates Immune Cell-exhaustion in Septic Shock Patients, **Vidula Vachharajani**, *Cleveland Clinic Lerner College of Medicine* #9

10:30 am Dnase1L3 Eradication Triggers Lupus-like Phenotypes and Neurological Degeneration in Mice, **Lauryn Evans**, *Texas Tech University* (Presidential Scholar - Graduate Student – Merit Finalist) #10

10:45 am *Yersinia pestis* inhibits the synthesis of leukotriene B4 by leukocytes, **Matthew Lawrenz**, *University of Louisville School of Medicine* #11

OR

Concurrent Session 6: Novel Concepts in Immunology I

Chairs: Deborah Fraser & Essi Tchalla

Location: Masters Hall

Featured Speaker:

9:30 am Modulating Macrophages: A Novel Role for Complement in Lipid Metabolism, **Deborah Fraser**, *California State University, Long Beach*

Selected Talks:

10:00 am Unconventional Inflammasome-mediated Functions of Leukocytes During SARS-CoV-2 Infection, **Amal Amer**, *The Ohio State University* #34

10:15 am Retinal Pigment Epithelial Cells Mediate Innate Immune Memory in Macrophages, **Andrew Taylor**, *Boston University Chobanian & Avedisian School of Medicine* #35

10:30 am Microglial Aging and Sex Differences, **Helen Goodridge**, *Cedars-Sinai Medical Center* #36

10:45 am Mechanisms of T Cell Inhibition by Neonate Mature Regulatory cDC1, **Aaron Silva Sanchez**, *The University of Alabama at Birmingham* #37

11:00 – 11:30 am Networking Break Hill Atrium

Mingle with fellow attendees while visiting the various exhibit and informational tables.

Light refreshments provided.

11:30 am – 1:00 pm Concurrent Sessions 7 & 8

**Concurrent Session 7:
Technological Innovations in
Immunology**

Chairs: Rebecca Pompano & Namita Rout
Location: Mahler Hall

Featured Speaker:

11:30 am Modeling Vaccines and Tumor Immunity with Tissue Slices and Microfluidics, **Rebecca Pompano**, *University of Virginia*

Selected Talks:

12:00 pm Mycolic Acid: Alleviating Monocyte Exhaustion in Sepsis, **Yajun Wu**, *Virginia Tech* (Presidential Scholar - Graduate Student - Merit Finalist) #44

12:15 pm Engineering Chimeric Antigen Receptor Lymphocytes Against Feline Infectious Peritonitis Virus, **James Cockey**, *Cornell University* (Presidential Scholar - Graduate Student - Merit Finalist) #45

12:30 pm Extracellular Vesicles as Gene Delivery Vectors to Airway Neutrophils, **Brian Dobosh**, *Emory University* #46

12:45 pm Investigation of Withaferin A as a Therapeutic for Neutrophilic Asthma, **Rosemary Bayless**, *North Carolina State University College of Veterinary Medicine* #47

OR

**Concurrent Session 8: Novel
Concepts in Immunology II**

Chairs: Xuewei Zhu & Madison Bunch
Location: Masters Hall

Featured Speaker:

11:30 am Macrophage Metabolic Reprogramming during Acute Inflammation, **Xuewei Zhu**, *Wake Forest University School of Medicine*

Selected Talks:

12:00 pm Characterization of CDK2 in Neutrophils, **Ramizah Sabri**, *Purdue University* (Presidential Scholar - Graduate Student - Merit Finalist) #38

12:15 pm Plasma Membrane Potential Regulates Neutrophil Chemotaxis, **Tianqi Wang**, *Purdue University* #39

12:30 pm Maternal Opioid Use Leads to Aberrant Maternal and Fetal Immunity, **Heather True**, *University of Kentucky* (Presidential Scholar - Graduate Student - Merit Finalist) #40

12:45 pm Sex-based Differences in Pneumococcal Conjugate Vaccine Efficacy, **Anagha Betadpur**, *University at Buffalo* #41

1:00 – 2:30 pm Poster Session Lunch III Hill Atrium/Pecan Tree

Join fellow attendees and browse posters while enjoying lunch. Be sure to check out the Undergraduate Posters available today only and meet some rising stars!

Grab-n-go lunch provided.

2:30 pm – 3:00 pm Member Business Meeting & Award Presentations Mahler Hall

Learn about the current status of SLB and JLB and congratulate award winners with the announcement of Presidential Scholars, Excellence in Leukocyte Biology, and onsite poster award announcements.

3:00 – 4:30 pm Plenary IV:

**Unexpected Advances in Leukocyte
Biology**

Chairs:

Peter Keyel & Balazs Rada

Location:

Mahler Hall

3:00 pm

Methionine Oxidation by
Myeloperoxidase in Pediatric
Lung Disease, **Joshua Chandler,**
Emory University

3:30 pm

Cooperative Targeting of
mSWI/SNF Complex Poises
the T cell Effector Landscape
Prior to Antigen Receptor
Expression, **Andrew Koh,**
University of Chicago

4:00 pm

The Cystic Fibrosis Airway
Environment Impairs the Ability
of Neutrophils to Kill
Staphylococcus aureus, **Balazs
Rada,** *University of Georgia*

SLB Council Meeting (Part 2): 5-9 pm – Magnolia Ballroom – By Invitation Only