

# ICMI

# 2022

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JULY 16-20

SCIENTIFIC  
PROGRAM

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Society for Mucosal Immunology

## Welcome to ICMI 2022!

Dear Colleagues,

Welcome to Seattle for the Society for Mucosal Immunology's 20th International Congress of Mucosal Immunology. It has been some time since our last in person meeting and we are eager to greet you this week. Seattle is home to the world-famous Space Needle and Pike Place Market, as well as several unique museums and other attractions. The conference hotel is just a few steps away from a free shuttle that will take you to many of these places. We trust that you will enjoy your time here and take advantage of the many sites of Seattle and natural beauty of Puget Sound and the Pacific Northwest.

Mucosal immunology is a field with increasingly expanding impact as we become more aware of the importance of the mucosal interface between the resident microbiota and the immune system in health and disease, in addition to the mucosa being the major site for human infections. The International Congress of Mucosal Immunology is SMI's premier meeting held every two years, bringing together researchers, clinician scientists and industry professionals studying immunology at mucosal surfaces.

The International Program Committee and International Scientific Advisory Committee, with representatives from Australia, England, France, Japan, South Korea and the United States, have assembled an engaging scientific program with leading speakers covering a variety of contemporary topics facing the field.

There will be many opportunities throughout the week to network, as well as exchange and develop ideas. The SMI Board of Councilors is particularly committed to training and developing the next generation of mucosal immunologists. Make sure to take time to engage with the poster sessions and other events to connect with young investigators. We are very pleased to share that this year, we were able to offer travel awards to forty young investigators, who otherwise may not have been able to attend.

We are grateful for our sponsors, including Pfizer, The Helmsley Charitable Trust, Merck Sharp & Dohne, Gates Foundation, and Vaxart, and to SMI for their organizational support. Finally, thank you for joining us in Seattle and supporting the Society for Mucosal Immunology – we hope you have productive conversations, enjoy some good science and have a great time!

Sincerely,



**Jennifer Lund, PhD**  
Fred Hutch  
*ICMI 2022 Co-Chair*



**Mark Travis, PhD**  
Manchester University  
*ICMI 2022 Co-Chair*



**Steven Ziegler, PhD**  
Benaroya Research Institute  
*ICMI 2022 Co-Chair*

## ICMI 2022 International Program Committee

William Busse, MD, University of Wisconsin, Madison  
Ellen Foxman, MD, PhD, Yale School of Medicine  
Kenya Honda, MD, PhD, Keio University School of Medicine  
Molly Ingersoll, PhD, Institut Pasteur  
Douglas Kwon, MD, PhD, Harvard University  
Clare Lloyd, PhD, Imperial College, London  
Laura MacKay, PhD, University of Melbourne  
Benjamin Marsland, PhD, Monash University  
Joshua Schiffer, PhD, Fred Hutch  
Jonathan Spergel, MD, PhD, University of Pennsylvania

## About ICMI 2022 in Seattle, USA

### Registration Desk Hours

Please check in at the ICMI registration desk when you arrive at the Sheraton Grand Seattle, located at the Spruce Registration Desk on the second floor outside the Grand Ballroom.

**Saturday, July 16:** 14:00 – 17:30

**Sunday, July 17:** 8:00 – 17:30

**Monday, July 18:** 8:00 – 17:30

**Tuesday, July 19:** 8:00 – 17:30

### Evaluations

Your feedback matters to us. Please take a moment to complete the overall congress evaluation at [socmucimm.org/ICMIsurvey](https://socmucimm.org/ICMIsurvey)



### Do You Need a Certificate of Attendance?

Certificates can be requested by emailing [info@socmucimm.org](mailto:info@socmucimm.org) and will be sent electronically after the conclusion of the congress.

### WiFi Lounge

Free wireless access available for registered attendees in the Ballroom Foyer.

### Online ICMI 2022 Sessions Gallery

View ICMI 2022 session types, rooms, schedule and time slots from the convenience of your computer or mobile device. Scan the QR code and bookmark the page.



## Don't Miss these Special Events at ICMI

### Opening Reception

You are invited to join us at the Welcome Reception on Saturday, July 16, from 19:00–20:30. This event is located in the Grand Ballroom Foyer, just outside the Grand Ballroom on the second floor. This is a wonderful opportunity to meet new people, catch up with old friends and enjoy drinks and hors d'oeuvres.

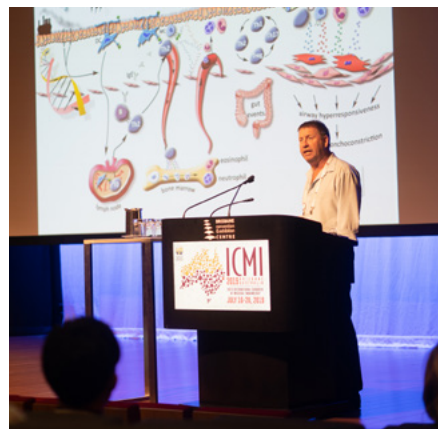
### SMI Member Business Meeting

All SMI members are encouraged to join the annual business meeting on Sunday from 8:30–8:55 in the Grand Ballroom. Join us for a financial update, recognition of outgoing board members, celebration of our many committee volunteers and an important update on the future of *Mucosal Immunology*.

### Poster Receptions

Join us for three evenings of poster hall presentations in the Grand Ballroom Foyer & Willow Room. We've received more than 150 posters and are eager to meet with these researchers over drinks and light hors d'oeuvres on Sunday, Monday and Tuesday evenings, between 17:00–19:00. Authors should hang their posters the morning of their assigned presentation, by 10:30. All poster receptions sponsored by *Mucosal Immunology*.

Join the conversation. Share a selfie with your poster using #ICMI2022



## SMI Mentorship Program

Join us for scientific talks with the current SMI Mentorship Program Cohort at 15:30 on Tuesday, July 19, in Grand Ballroom BCD.

**Alessandra Filardy, PhD** Laboratório de Imunologia Celular - *TAM receptors play distinct roles in lung homeostasis and inflammation*

**Devesha Kulkarni, PhD**, Washington University School of Medicine - *The effects of obesity-associated dysbiotic gut microbiota on the intestinal and adipose tissue inflammation*

**Ziad Al Nabhani, PhD**, Bern University Hospital - *Long-term consequences of early life immune-microbial interactions*

**Joana F. Neves, PhD**, King's College London - *Bi-directional signalling between the intestinal epithelium and type-3 Innate Lymphoid Cells (ILC3) regulates their phenotype and function*

**Danyvid Olivares-Villagómez, PhD**, Vanderbilt University Medical Center - *Milk-derived osteopontin supports the development of the intestinal immune system and gut microbiota*



## Principles of Mucosal Immunology Course

The Principles of Mucosal Immunology Course will be held on Saturday, July 16, 2022. Separate registration is required with SMI onsite registrations accepted – either separately or as an add-on to your ICMI 2022 registration. The course is located in the Willow Room at the Sheraton Grand Seattle.

### Topics include:

#### **Adaptive immune responses to the gut microbiota (IgA, CD4 T cells)**

Timothy W. Hand, PhD, UPMC Children's Hospital of Pittsburgh, University of Pittsburgh

#### **Immune sensing by epithelial barriers in mucosa**

Isabella Rauch, PhD, Oregon Health and Science University

#### **Innate lymphoid cells and intestinal inflammation**

Lauren Zenewicz, PhD, The University of Oklahoma, College of Medicine

#### **Modulation of genital inflammation and disease susceptibility by vaginal microbiota**

Douglas S. Kwon, MD, PhD, Harvard University, Massachusetts General Hospital

#### **Cellular heterogeneity in the immune system:**

##### **Turning a bug into a feature with single-cell genomics**

Alex K. Shalek, PhD, MIT and Broad Institute

##### **Early-life education of the mucosal immune system**

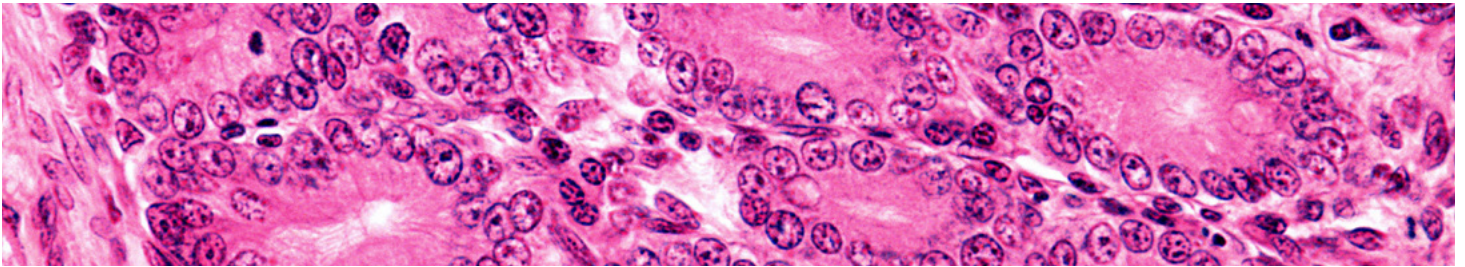
Michael Silverman, MD, PhD, University of Pennsylvania, Children's Hospital of Philadelphia

##### **Innate defenses against respiratory viruses**

Ellen Foxman, MD, PhD, Yale University School of Medicine

##### **A career in immunology**

Andreas Bäuml, PhD, UC Davis School of Medicine



## ICMI 2022 SCIENTIFIC PROGRAM

### SATURDAY, JULY 16

14:00 – 17:30	<b>Registration Desk Open</b> ..... Spruce Registration Desk outside Grand Ballroom, Level 2
17:30 – 18:00	<b>Official Start of ICMI 2022</b> <b>Welcome</b> ..... Grand Ballroom Jennifer Lund, PhD, Fred Hutchinson Cancer Research Center Mark Travis, PhD, University of Manchester Steven Ziegler, PhD, Benaroya Research Institute  <b>Opening Remarks &amp; Presentation of Awards</b> Michael McGuckin, PhD <b>Distinguished Service Award:</b> Clare Lloyd, PhD, Imperial College, London <b>Per Brandtzaeg Distinguished Scientific Achievement Award:</b> Andrew Macpherson, MD, PhD, University Clinic of Visceral Surgery and Medicine, University of Bern, Switzerland <b>Young Investigator Award:</b> Theresa Alenghat, DVM, PhD, Cincinnati Children's Hospital & Iliyan Iliev, Weill Cornell Medicine
18:00 – 19:00	<b>Opening Plenary</b> ..... Grand Ballroom <b>Multi-kingdom control or barrier immunity: Context and consequences</b> Yasmine Belkaid, PhD, National Institutes of Health (NIH) Opening plenary supported by the Helmsley Charitable Trust.



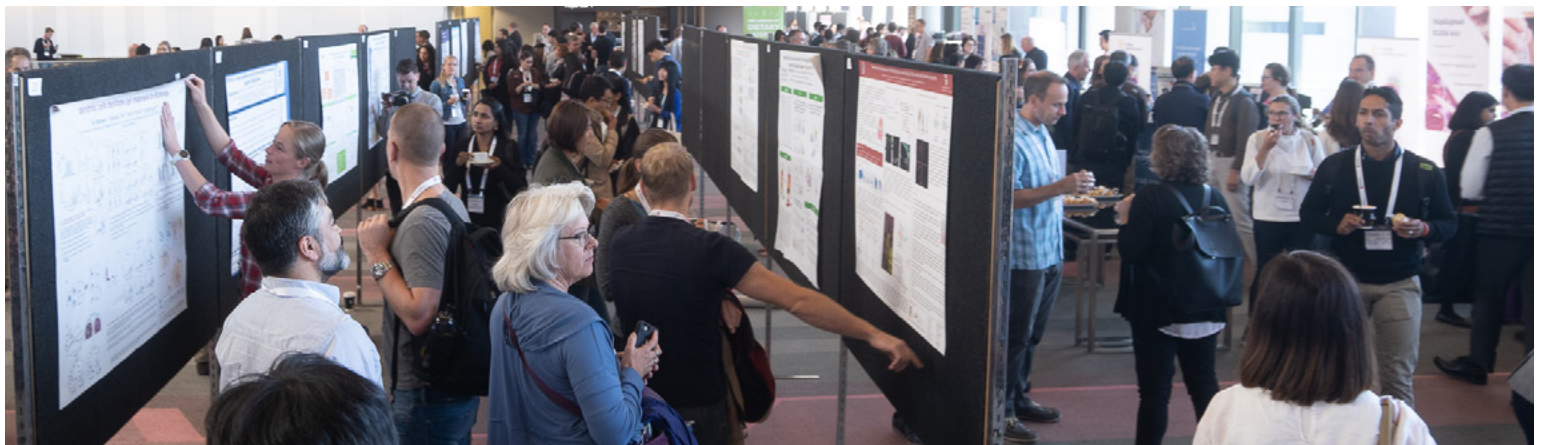
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19:00 – 20:30	<b>Welcome Reception</b> ..... Grand Ballroom Foyer
<b>SUNDAY, JULY 17</b>	
8:00 – 17:30	<b>Registration Desk Open</b> ..... Spruce Registration Desk outside Grand Ballroom, Level 2
8:30 – 8:55	<b>SMI Membership Annual Business Meeting</b> ..... Grand Ballroom <i>Open to all SMI members</i>
9:00 – 10:30	<b>Plenary Session</b> ..... Grand Ballroom <b><i>IL-1 Cytokines Family and Barrier Immunity</i></b> <b>Neuronal regulation of Type 2 Immunity</b> De'broski R. Herbert, PhD, University of Pennsylvania School of Veterinary Medicine <b>Stromal-immune interactions regulating pulmonary barrier immunity</b> Clare Lloyd, PhD, Imperial College London <b>Regulation of IL-33 at mucosal surfaces</b> Marsha Wills-Karp, PhD, Johns Hopkins Bloomberg School of Public Health
10:30 – 11:00	<b>Coffee Break</b> ..... Grand Ballroom Foyer
11:00 – 12:30	<b>Oral Abstract Sessions</b> <i>Please refer to the online ICMI 2022 sessions gallery for presenters, topics &amp; rooms</i>
12:30 – 14:00	<b>Network &amp; Lunch</b> <i>A list of area restaurants is available at the registration desk</i>
14:00 – 15:00	<b>Concurrent Sessions</b> <b><i>Genital Tract Immunity</i></b> ..... Grand Ballroom BCD <b>Metabolic adaptation controls HIV-1 persistence in macrophages in vivos</b> Morgane Bomsel, PhD, Institut Cochin Centre De Recherche <b>Regulation of vaginal tissue immunity in the context of infections</b> Jennifer Lund, PhD, Fred Hutchinson Cancer Research Center  <b><i>Upper Airway Diseases and Mucosal Immunity</i></b> ..... Metropolitan Ballroom <b>Dynamic innate immune states of the airway epithelium in defense against respiratory viruses</b> Ellen Foxman, MD, PhD, Yale School of Medicine <b>Mucosal inflammation and disease in human upper airway</b> Robert P. Schleimer, PhD, Northwestern University Feinberg School of Medicine
15:00 – 15:30	<b>Coffee Break</b> ..... Grand Ballroom Foyer
15:30 – 17:00	<b>Oral Abstract Sessions</b> <i>Please refer to the online ICMI 2022 sessions gallery for presenters, topics &amp; rooms</i>
17:00 – 19:00	<b>Poster Reception</b> ..... Grand Ballroom Foyer & Willow Room Sponsored by <b>MucosalImmunology</b> <small>OFFICIAL JOURNAL OF THE SOCIETY FOR MUCOSAL IMMUNOLOGY</small>
19:00 – 21:00	<b>SMI Young Investigator Member Reception</b> ..... Benaroya Research Institute Sponsored by Benaroya Research Institute <i>Note: Invite only; ticket required</i>



## MONDAY, JULY 18

8:00 – 17:30	<b>Registration Desk Open</b> .....Spruce Registration Desk outside Grand Ballroom, Level 2
9:00 – 10:30	<b>Plenary Session</b> .....Grand Ballroom <b>COVID-19 Pathogenesis Vaccinology</b> <b>SARS-CoV2 mucosal immunity responses after acute and chronic infection in vivo</b> Ralph Baric, PhD, UNC Gillings School of Global Public Health <b>Inflammatory and protective responses to SARS-CoV-2 in hospitalized patients</b> Peter Openshaw, MD, Imperial College London <b>Immune memory to SARS-CoV-2</b> Marion Pepper, PhD, University of Washington
10:00 – 10:30	<b>Coffee Break</b> ..... Grand Ballroom Foyer
11:00 – 12:30	<b>Oral Abstract Sessions</b> <i>Please refer to the online ICMI 2022 sessions gallery for presenters, topics &amp; rooms</i> Vaccination at mucosal surface session sponsored by Vaxart
12:30 – 14:00	<b>Network &amp; Lunch</b> <i>A list of area restaurants is available at the registration desk</i>
14:00 – 15:00	<b>Concurrent Sessions</b> <b>Microbiota and Infection</b> ..... Grand Ballroom BCD <b>Impact of the lung microbiome on the innate immune response to respiratory infections</b> Amanda Jamieson, PhD, Brown University <b>A role for innate and adaptive immunity to Malassezia yeast in Crohn's Disease</b> David Underhill, PhD, Cedars Sinai Medical Center <b>Therapeutic Advances</b> ..... Metropolitan Ballroom <b>Epithelial cytokine inhibitors in the treatment of atopic disorders</b> TBA <b>Specialized metabolic niches in the gut for IgA plasma cells</b> Stephanie Eisenbarth, MD, PhD, Northwestern University School of Medicine
15:00 – 15:30	<b>Coffee Break</b> ..... Grand Ballroom Foyer
15:30 – 17:00	<b>Oral Abstract Sessions</b> <i>Please refer to the online ICMI 2022 sessions gallery for presenters, topics &amp; rooms</i>
17:00 – 19:00	<b>Poster Reception</b> ..... Grand Ballroom Foyer & Willow Room Sponsored by <i>Mucosal Immunology</i> <b>MucosalImmunology</b>




## TUESDAY, JULY 19

8:00 – 17:30	<b>Registration Desk Open</b> .....Spruce Registration Desk outside Grand Ballroom, Level 2
9:00 – 10:30	<b>Plenary Session</b> .....Grand Ballroom <b><i>Immune-Nervous System Interactions at Mucosal Surfaces</i></b> <b>Neuroimmune interactions in Eosinophilic asthma</b> Matthew Drake, MD, Oregon Health & Science University <b>Scratching that itch: neuroimmune control of allergic immunity</b> Caroline Sokol, MD, PhD, Massachusetts General Hospital/Harvard Medical School <b>Neuroimmune interactions in health and disease</b> Henrique Veiga-Fernandes, PhD, Fundação Champalimaud
10:00 – 10:30	<b>Coffee Break</b> ..... Grand Ballroom Foyer
11:00 – 12:30	<b>Oral Abstract Sessions</b> <i>Please refer to the online ICMI 2022 sessions gallery for presenters, topics &amp; rooms</i>
12:30 – 14:00	<b>Network &amp; Lunch</b> <i>A list of area restaurants is available at the registration desk upon request</i>
14:00 – 15:00	<b>Concurrent Sessions</b> <b>Epithelial Control of Mucosal Immunity</b> ..... Grand Ballroom BCD <b>Leveraging single-cell genomics to understand COVID-19</b> Alex K. Shalek, PhD, Massachusetts Institute of Technology <b>Small intestinal tuft cells: Sentinels and effectors of type 2 immunity</b> Jakob von Moltke, PhD, Washington University <b>Underappreciated Mucosal Sites</b> .....Metropolitan Ballroom <b>Divergent regulatory networks driving the allergic inflammation and esophageal epithelial remodeling in Eosinophilic Esophagitis subtypes</b> Simon P. Hogan, PhD, University of Michigan <b>Disentangling human tumor immune alterations from non-malignant tissue inflammation</b> Martin Prlic, PhD, Fred Hutchinson Cancer Research Center
15:00 – 15:30	<b>Coffee Break</b> ..... Grand Ballroom Foyer
15:30 – 17:00	<b>Oral Abstract Sessions</b> <i>Please refer to the online ICMI 2022 sessions gallery for presenters, topics &amp; rooms</i> <b>SMI Mentorship Program Presentations</b> ..... Grand Ballroom BCD <b>TAM receptors play distinct roles in lung homeostasis and inflammation</b> Alessandra Filardy, PhD Laboratório de Imunologia Celular <b>The effects of obesity-associated dysbiotic gut microbiota on the intestinal and adipose tissue inflammation</b> Devesha Kulkarni, PhD, Washington University School of Medicine <b>Long-term consequences of early life immune-microbial interactions</b> Ziad Al Nabhani, PhD, Bern University Hospital <b>Bi-directional signaling between the intestinal epithelium and type- 3 Innate Lymphoid Cells (ILC3) regulates their phenotype and function</b> Joana F. Neves, PhD, King's College London <b>Milk-derived osteopontin supports the development of the intestinal immune system and gut microbiota</b> Danyvid Olivares-Villagómez, PhD, Vanderbilt University Medical Center
17:00 – 19:00	<b>Poster Reception</b> .....Grand Ballroom Foyer & Willow Room <i>Sponsored by</i> <b>MucosalImmunology</b> <small>OFFICIAL JOURNAL OF THE SOCIETY FOR MUCOSAL IMMUNOLOGY</small>



## WEDNESDAY, JULY 20

9:00 – 10:30	<b>President's Rising Stars Abstract Plenary</b> .....Grand Ballroom <i>Chair: Michael McGuckin, PhD, University of Melbourne</i> <b>Single-cell RNA sequencing unveils intestinal eosinophil development and specialization</b> Alessandra Gurtner, PhD Student, University of Zurich <b>Mucosal fungi promote gut barrier function and social behavior via Type 17 immunity</b> Irina Leonardi, PhD, Weill Cornell Medical College <b>Diet at birth conditions successful development of type 2 immunity</b> Akila Rekima, PhD, Telethon Kids Institute / University of Western Australia <b>Antibiotic-induced <i>Malassezia</i> spp. expansion in infants elicits intestinal immune dysregulation and increases airway inflammation in mice</b> Erik van Tilburg Bernardes, PhD, Candidate, University of Calgary <b>Regulatory T cell coordination of the mucosal NK cell response during viral infection</b> Sarah Vick, PhD, Fred Hutchinson Cancer Research Center <b>Presentation of <i>Mucosal Immunology</i> Journal Poster Awards</b> 
10:30 – 11:00	<b>Coffee Break</b>
11:00 – 12:30	<b>Plenary</b> .....Grand Ballroom <b><i>Immune-Microbe Interactions in Homeostasis and Disease</i></b> <b>The intratumoral microbiota impact spatial and cellular heterogeneity within human oral and colorectal cancers</b> Susan Bullman, PhD, Fred Hutchinson Cancer Research Center <b>Roles for the gut microbiota in health and disease</b> Wendy Garrett, MD, PhD, Harvard T.H. Chan School of Public Health <b>Effects of intestinal microbes and metabolites on shaping innate immunity and regulating homeostasis</b> Kathy McCoy, PhD, University of Calgary
12:30 – 13:00	<b>Closing Address</b>

## About SMI

It is your painstaking research that is uncovering the vast and intricate network of specialist cells, regulatory proteins and genetic expression that make up our immune system.

It is our honor to support you.

The Society for Mucosal Immunology (SMI) was formed in 1987 to advance research and education related to the field of mucosal immunology. Today, the society represents a diverse group of more than 700 scientists and clinicians from all over the world.

Learn more and join us at [socmucimm.org](https://socmucimm.org).

## What are the benefits of SMI membership?

### Meetings

Enjoy discounts on SMI events, like the Virtual Principles of Mucosal Immunology Course (July 2023) and the International Congress of Mucosal Immunology (ICMI 2024) in Europe (city to be announced). Members also enjoy discounted abstract submission fees, access to travel grants and childcare travel funds.

### Grants & Awards

SMI supports the advancement of immunologists through every step of their career through grants and programs:

- Apply for Travel Awards to attend SMI biennial scientific meetings
- Win Technique Sharing Travel Grants for students and early career researchers who want to learn new techniques from other host labs

- Participate in a competitive Mentorship Program for researchers looking to connect with top leaders in their field
- SMI Childcare Travel Awards offer support for parents who need financial aid for childcare while they attend ICMI
- SMI partners may also receive external meeting support to build programs for mucosal immunologists

### More Benefits

- Free registration to the SMI Webinar Series and archive access
- Free access to the society journal *Mucosal Immunology*
- Reduced submission fees to *Mucosal Immunology*
- Free job postings in the SMI Career Center
- Access to the SMI membership directory for direct collaboration with other members
- 20% off *Principles of Mucosal Immunology* textbook

### Membership Categories Include:

- Regular - \$120 USD (1 year membership)
- Early Career Investigator - \$100 USD
- Student/Trainee - \$65 USD
- Scientists from Under-Represented Countries - \$35 USD
- Emeritus Membership - \$55 USD



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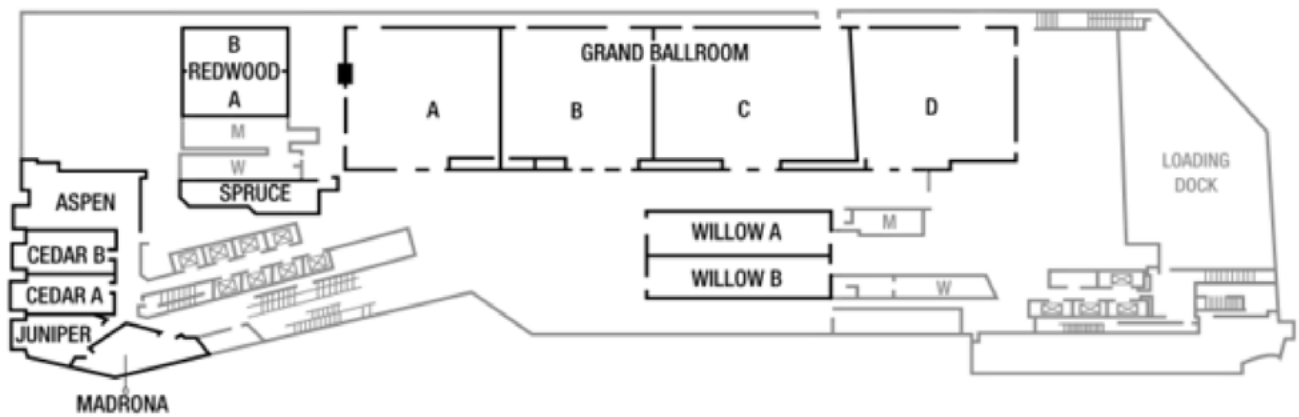


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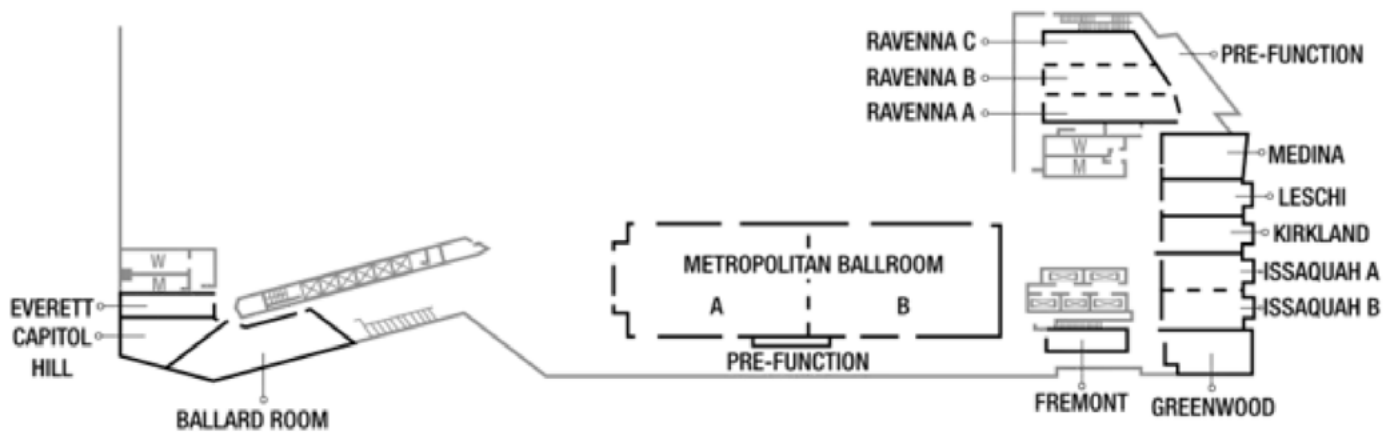




## SECOND FLOOR



## THIRD FLOOR





# Your Society Journal Dedicated to Mucosal Immunology

- 2021 2-year Impact Factor: 8.7\*
- 2021 5-year Impact Factor: 9.3\*
- 2021 CiteScore: 15.7\*\*
- Total citations: 11,380\*

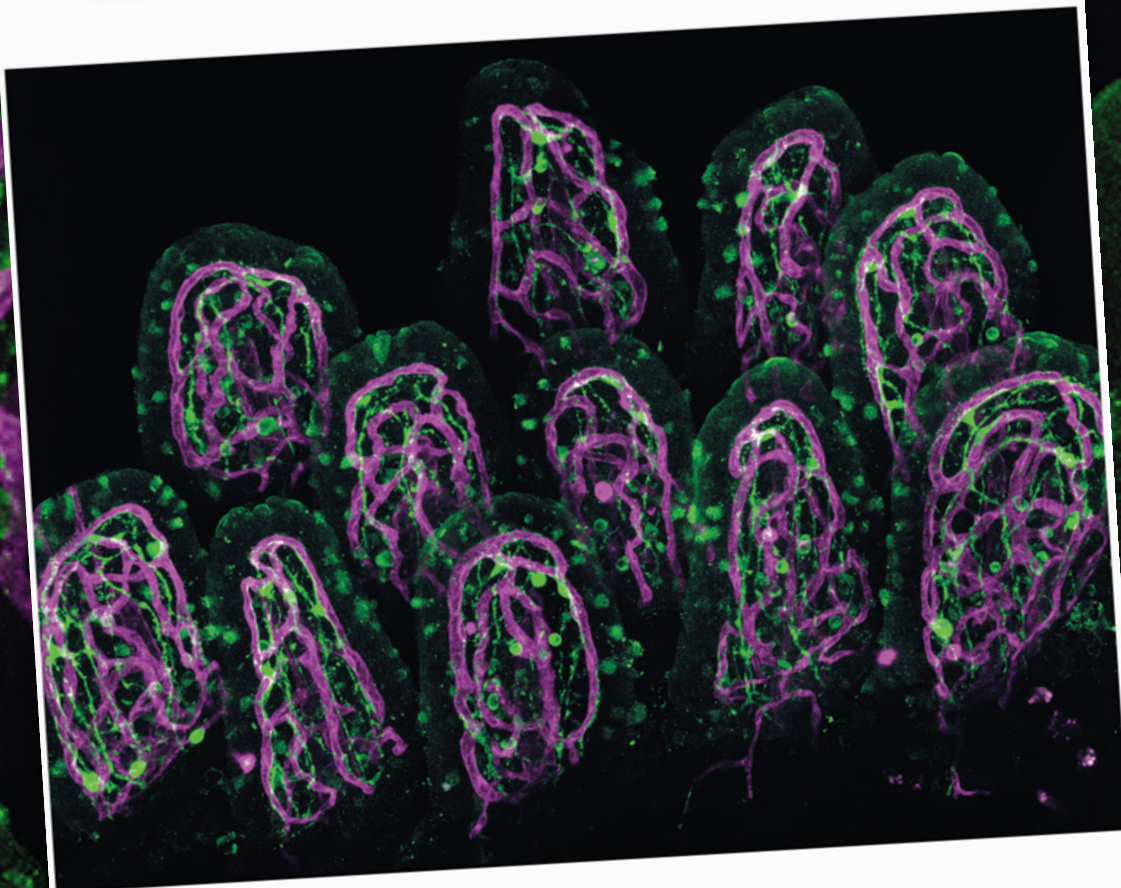
## MucosalImmunology

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SOCIETY FOR  
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\* Clarivate 2021 Journal Citation Report  
\*\* Scopus Elsevier 2021 Report