

SOCIETY FOR  
MUCOSAL IMMUNOLOGY

# NEWSLETTER

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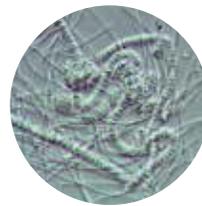
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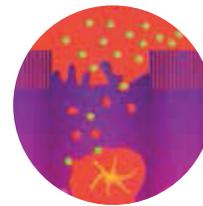
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Save the Date! • July 15<sup>th</sup>-18<sup>th</sup>, 2015!

# ICMI 2015

17th International Congress of Mucosal Immunology

# Announcing the 2014-2015 Board of Councilors



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## ICMI 2015 Scientific Program Themes Revealed

The scientific program will feature the following topics:

- Biology of innate and adaptive immune responses at mucosal surfaces
- The host-microbiota interface
- Impact of the microbiota on systemic immunity
- Mucosal immunity in humans
- Translational immunology in inflammatory bowel disease
- Mechanisms of antigen uptake
- Regulation of immunity in the intestine, lung and UG tract

Tell us what you would like  
to learn about at ICMI.  
Send us your ideas here.

# An Ode to Leo LeFrancois and Lloyd Mayer

by Jo Viney



2013 was a sad year for mucosal immunology, and for the SMI in particular. Two world-renowned scientific leaders who were SMI members passed away. Leo LeFrancois and Lloyd Mayer both made many contributions to the scientific literature, and advanced our understanding of how the immune system regulates responses at mucosal surfaces. Both were also dedicated leaders and served many years on the SMI Board, and both were instrumental in contributing to the successful launch of the society's flagship journal – *Mucosal Immunology*.

In May, the SMI hosted a symposium at the AAI meeting in Pittsburgh that was dedicated to the memory of Leo LeFrancois. The speakers were comprised of Leo's former students and trainees – David Masopust, Vaiva Vezyz, Kim Klonowski, Kamal Khanna, and Kim Schluns – and the topics focused on T cell memory, trafficking and protection from infection. The speakers highlighted how their research blossomed under Leo's tutelage, and how they have gone on to become independent investigators contributing to the field in their own right. The session ended with a tribute to Leo from his former mentor, Mike Bevan. Despite being located in a double room, the audience was packed, and there was standing room only.



Leo LeFrancois



Lloyd Mayer

Coming up in June, the SMI is co-hosting a symposium with the CCFA at the annual FOCIS meeting in Chicago. This symposium, a one day event, will be focused on regulation of immune responses in the intestine, and will be dedicated to the memory of Lloyd Mayer.

The symposium will feature 15 speakers who have either worked or collaborated with Lloyd, or who have been heavily influenced by Lloyd's contributions to the scientific community. The first session will feature Chuck Elson, Eugene Chang, Jo Viney and Scott Plevy and will focus on host-microbe interactions and the induction of regulatory cell pathways. The second session will feature Cecilia Berin, Jean-Frederic-Columbel, Steph Targan and Scott Snapper, and will focus first on food allergy and then on intestinal inflammation, with an emphasis on describing new therapeutic approaches for treating IBD. The third session features Iris Dotan, Warren Strober and Rick Blumberg and will describe pouchitis followed by the molecular contributions of paneth cells to IBD. The final session will feature Sean Colgan, Julie Blander, Miriam Merad and Sergio Lira and will discuss the role of innate immunity and epithelial cells in controlling inflammation in the intestine. It looks to be a fascinating science-packed schedule and will be a fitting tribute to Lloyd. We hope you will be able to join us!

## June's Featured Papers

Each month the Society for Mucosal Immunology leadership selects innovative and scientifically rigorous papers to prominently feature on its website. The papers are selected and vetted by the Board of Councilors. **This month's papers are:**

Segmented Filamentous Bacteria Antigens Presented by Intestinal Dendritic Cells Drive Mucosal Th17 Cell Differentiation. Goto Y, Panea C, Nakato G, Cebula A, Lee C, Diez MG, Laufer TM, Ignatowicz L, Ivanov II. *Immunity*. 2014 Mar 27. pii: S1074-7613(14)00085-5.

Increased Production of Retinoic Acid by Intestinal Macrophages Contributes to Their Inflammatory Phenotype in Patients with Crohn's Disease. Sanders TJ, McCarthy NE, Giles EM, Davidson KL, Haltalli ML, Hazell S, Lindsay JO, Stagg AJ.

# Might MERS become the New SARS?



by Peter Openshaw

Coronaviruses cause about 15% of common colds, which are normally mild. So why are public health authorities so alarmed about the latest coronavirus disease, Middle East Respiratory Syndrome (MERS)?

With the first reports of person to person transmission, MERS-CoV is uncomfortably reminiscent of the Severe Acute Respiratory Syndrome (SARS)-CoV, which emerged in South East Asia 12 years ago. SARS-CoV had an alarming ability to transmit in healthcare facilities, in hotels and in residential blocks. In one case, at least 70 hospital staff were infected by a single case; in another, a patient in Hanoi infected 63 staff members, of whom 3 died. These super-spreading events were terrifying, but the introduction of stringent hygiene ultimately led to the elimination of SARS. The final tally was 8096 cases and 774 deaths (9.6% mortality).

MERS-CoV bears remarkable phylogenetic similarity to a bat coronaviruses (as did SARS), but may be transmitted by contact with camels (rather than civet cats). Infections were first reported in Saudi Arabia in 2012. Similar to SARS, MERS causes not only pneumonia but also sometimes severe systemic complications including renal failure and gastrointestinal disease. Moreover, MERS cases tend to progress to respiratory failure more rapidly than SARS cases. This may be related to the older age group that it tends to affect and to the presence of (comorbid) illnesses.

MERS-CoV has so far has shown little ability to spread from person to person, but there has been a sharp increase in the reported number of MERS cases in recent months. As of May 28, 2014, the World Health Organization reports 636 confirmed cases and 193 deaths (30% mortality). Of these cases, 306 have been reported in the past two months, mostly from Saudi Arabia. Cases are now appearing of primary or secondary infections in several countries, including Iran and the USA.

This is an outbreak that needs to be watched carefully, especially in relation to the upcoming Hajj. We lack effective antiviral drugs or vaccines, and poorly understand the pathogenesis of severe disease. The best that can be done at present is to study transmission, and to institute infection control measures in the hope that MERS can be beaten in the same way as SARS.

# Educate with *Principles of Mucosal Immunology*

*Principles of Mucosal Immunology*, the official textbook of the Society for Mucosal Immunology, examines the commonalities of the mucosal immune system. It focuses on all compartments, but especially those for which the largest body of information is available, such as the small and large intestine, lung and upper airways, genital and urinary systems, and the ocular system. *Principles of Mucosal Immunology* is intended for graduate students receiving advanced training in mucosal immunology, doctoral students and postdoctoral fellows investigating topics in mucosal immunology, medical and dental students, and immunologists and clinicians seeking a broad perspective of the field.

## Book Reviews

"*Principles of Mucosal Immunology* is an excellent book and can be recommended not only to students and professionals who wish to expand their knowledge in immunology but also to the tutors of specialized immunology courses too. Furthermore, it is very detailed and clear enough to become one of the first books you reach for whenever a basic question of immunology arises."  
– *Scandinavian Journal of Immunology*



"The length of the book is optimal, covering most areas of mucosal immunology, and the depth of coverage in each area is appropriately proportioned to the available literature in the field. The quality of the color figures and diagrams are excellent. Expert contributors are internationally recognized leaders in the field of mucosal immunology. Although it has multiple authors, there is uniformity of style. In comparing this book with other textbooks of mucosal immunology, *Principles of Mucosal Immunology* presents not opinions of particular authors, but collective expert opinions of the Society for Mucosal Immunology with a Board of Councilors established in guiding the development of this book's content, ensuring that the latest paradigms were presented. Therefore, this book represents the most up-to-date and comprehensive mucosal immunology textbook available...*Principles of Mucosal Immunology* achieves the aim of providing a standard textbook for students of all levels interested in advanced training in mucosal immunology. The book is well organized and has downloadable figures and diagrams to facilitate instructors teaching in classroom settings." – *Gastroenterology*

SMI members receive a 20% discount on *Principles of Mucosal Immunology* textbook purchase as an SMI membership benefit!

## The Reichstag Awaits You at ICMI 2015

While attending the International Congress for Mucosal Immunology in July 2015, be sure to take time to see some of the historic landmarks in Berlin, Germany.

The Reichstag Building is a historical edifice in Berlin, Germany constructed to house the Imperial Diet of the German Empire. It was opened in 1894 and housed the Diet until 1933, when it was severely damaged in a fire. After World War II, the building fell into disuse and was partially refurbished in the 1960s, but wasn't full restored until after the German reunification in 1990.



The roof terrace and dome of the Reichstag Building can be visited by members of the public and offers exceptional views of the parliamentary and government district of Berlin.

To learn more about the history of the Reichstag Building and visiting the Reichstag Dome, please click here.

SOCIETY FOR MUCOSAL IMMUNOLOGY

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...fostering communication among investigators examining the mucosal immune system

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