

## EDITOR'S NOTES – Souvenir D. Tachado, i-SLB Editor



Hello all, and welcome to the summer edition of the iSLB newsletter. We continue our interview series of present and past winners of awards bestowed by our society who have made significant contributions to advance science and our understanding of complex diseases. In this issue, I have the pleasure to interview Dawn Bowdish, PhD, who won the 2011 Thorbecke award for her work on the interplay between phagocytosis and inflammation and their role in susceptibility to infections especially in the elderly. The

impact of this well-deserved recognition of a young investigator in my opinion is priceless.

I would also want to encourage you to submit your abstracts to our upcoming meeting in Rhode Island. Please help make this meeting a success.

On a personal note, I want to thank most whole-heartedly, Jen Holland, who helped me tremendously in organizing this quarter's edition of the newsletter. I hope you enjoy it!



### President's Message

*Jill Suttles, President*

Spring has come and gone and we are already rapidly approaching our annual abstract deadline! This year we have not just one, but two exciting satellite sessions to kick-off our annual meeting. See details about the Regulator Satellite led by O.M. Zach Howard and William Levis later in this issue. Also highlighted is our third annual Grant Writing Workshop and updates on the Women and Diversity Session.

August will bring our annual elections and your vote is very important in determining leadership for your society. Review the candidate bios in this issue in preparation for voting season. The Membership Committee, led by Andrei Medvedev, has been very busy in an outreach campaign and you may note the testimonial in this issue by Louis Justment, Publication Committee Chair, and his perspective about the value of SLB Membership. In addition to being a strong professional community, SLB is the proud publisher of JLB and we await our coming Impact score as we continue to add valuable features to the journal. Coming soon is a unique feature bridging the gap between bench and bedside. Read more in this issue.

Thank YOU for your continued membership and support to the society and a special thanks to our sustaining

members whose extended support helps drive travel award programs and other society initiatives. Remember to register, apply for awards and submit those abstracts and we'll see you in Newport!

### SLB's Third Annual Grant Writing Workshop

SLB Professional Development Committee will offer the third grant-writing workshop at the 2013 SLB meeting in Rhode Island, by Julian G. Cambronero (Wright State U, Ohio).

The Society will host for the 3rd time the grant-writing workshop at the 2013 SLB meeting in Rhode Island as part of its educational mission. Like in previous editions, it will be organized by Dr. Julian G. Cambronero and will count the following round table leaders or "facilitators": Professors Lee-Ann H. Allen (University of Iowa), Julian Gomez Cambronero (Wright State University, Ohio), Louis Justment (University of Alabama at Birmingham), Elizabeth J. Kovacs (Loyola University Chicago), Carol Miller-Graziano (University of Rochester Medical Center) and Dan Remick (Boston University).

Last time the Workshop was held (Hawaii, 2012) the attendance was about 40 people (grad students, postdocs and Assistant professors, from institutions both US and abroad).

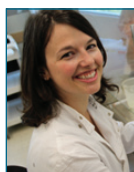
During the round table, we discussed different types of NIH grants available, the organizational structure of the NIH staff, and the review process, and, of course, the process of grant writing. Each group had attendants with similar levels of experience from student to Assistant Professor.

The attendees reported that the workshop was very worth their time, and that they learned a great many new strategies. We appreciate and thank the panel of Professors and the panelists also enjoyed the meeting greatly. The actual power point presentation can be found at <http://leukocytebiology.org/Categories/Archives/Media.aspx> Also the panelist of the first Workshop published a paper: *Nature Immunology* 13, 105–108 (2012) and summarized by the journal as “A workshop organized by the Society for Leukocyte Biology offered advice to young scientists on how to decipher the grant-submission process of the US National Institutes of Health and compose a clear, compelling and fundable grant”.

We take this opportunity to thank the participation of Dr. M. Katherine Jung, PhD Program Director Division of Metabolism and Health Effects, National Institute on Alcohol Abuse and Alcoholism, NIH; she was invited by Dr. Kovacs and she provided a great view of the work of an NIH Program Officer and he/she can do to help applicants before and after the application has been submitted. Plans are in the way to invite an NIH program officer for the next offering.

Additional news items related to this workshop are that Jen Holland and Kendra LaDuca are collecting a survey on past “alumni” to see if what they learned in our Workshop was useful for their applications. Also, Dr. Sulie Chang (Seton Hall University, NJ) and Dr. Elizabeth Kovacs, are forming a “Student Subcommittee” (that are now part of Professional Development) and will be running the session “Street Smarts” at the October meeting in Newport.

Be on the look-out for the announcement of the Grant Writing Workshop in July. Acceptance is in a first come first serving basis.



## 2011 G. Jeanette Thorbecke Award Winner Interview: Dawn Bowdish

**Q. What do you consider your most important contribution to the field of immunology?**

**A.** If I didn't believe that my most important contribution was yet to come, I think I'd find my job a lot less challenging and fulfilling! One of the things I love about being a scientist (although it's also one of the more challenging aspects) is that you only get to rest on your laurels for about five minutes before you need to be making your next big discovery and moving on to the next big thing. Having said that, my PhD work demonstrating that the antimicrobial/host defence peptides had immunomodulatory properties in addition to their antimicrobial function was novel at the time and was the basis of a patent that became a company, a number of publications and a very fun PhD thesis. Some of the recent work that my team at McMaster has done that is an extension of my post-doctoral demonstrates that the scavenger receptors are required for bacterial recognition in the upper respiratory tract and are essential for generating an inflammatory response in addition to phagocytosis. We've recently found that the phagocytic response becomes profoundly impaired with age, and this may be an explanation for the increased risk of respiratory infection in the elderly. I think understanding the interplay between phagocytosis and inflammation and the dynamic nature of these responses across the aging trajectory will ultimately be of broad importance in immunology.

**Q. Which bacterial components are recognized by the scavenger receptors?**

**A.** That sounds like a simple question but is remarkably complex! The scavenger receptors got their name because of their broad ligand specificity; however, broad does not mean non-specific. In general there seems to be a requirement for a ligand, be it a protein, lipid or nucleic acid, to have a negative charge and some data suggests that there are additional structural requirements as well. To date scavenger receptors have been shown to bind viral double stranded RNA, bacterial lipids (e.g. mycobacterial trehalose



## PIZZA AND PUBS PROGRAM

Sign up to get \$200 per year to local groups to be used at regular meetings!

To qualify, your group needs to have at least 10 people, of which at least two must be PIs who are SLB members, and one student/postdoc who will join SLB as a new member.

To apply, simply send us an email ([slb@faseb.org](mailto:slb@faseb.org)) with the names and email addresses of the members of your group, a brief description of the lab group/journal club/discussion group, and a paid application for a student membership (you may download this off the SLB Web site ([www.leukocytebiology.org](http://www.leukocytebiology.org))).



## SLB Member Testimonial

### Louis Justement

Why be a member of the Society for Leukocyte Biology? That is a question all of us ask ourselves when it comes time to renew our membership in SLB; particularly now when funds are tight and tough fiscal decisions have to be made. The first answer to this question is that we do not conduct science in a vacuum. To be successful, we need to be part of a community of peers with whom we interact to share our ideas and to learn from. The Society for Leukocyte Biology provides exactly that opportunity. The members of the Society belong to a community of cutting-edge scientists who share a common scientific interest. Through attendance at the annual meetings, participation of SLB committees and other society-related activities, each of us is afforded the opportunity to interact with our peers on many levels. Indeed, I have been a member of SLB longer than any other scientific society and through the years my interactions with other members of SLB have generated numerous scientific collaborations, and more importantly, I have made a lot of friends. Secondly, to be successful, we all need venues in which to disseminate our scientific findings. The Society for Leukocyte Biology provides numerous opportunities for that in the form of the annual meetings and *The Journal of Leukocyte Biology*. Membership in the Society offers everyone a chance to support these endeavors that make up a major focus of the society. In return, we benefit from discounted registration at meetings and from the fact that the Society runs a highly successful and well-respected journal in which to publish our work. Third, in order for each of us to be successful, we need to have opportunities for career advancement and professional development. The Society for Leukocyte Biology sponsors numerous workshops at the annual meetings pertaining to grant writing, professional development and other important topics. The Society also provides access to resources that are valuable for learning how to advance one's career. Finally, in order to be successful, we need a voice; not only within the scientific community, but also in the lay community and on Capitol Hill to promote the significant benefits associated with biomedical research to ensure the future success of the scientific endeavor in the US. The Society of Leukocyte Biology represents all of its members in each of these arenas and is therefore valuable to our future success. Regardless of whether you are someone who is thinking of joining SLB for the first time, or someone who is renewing your membership, your support of the Society will provide numerous benefits that enhance your future success as a member of a vibrant community of scientists.

di-mycolate), LPS and lipotechoic acids, and bacterial proteins. Understanding receptor-ligand interactions better might shed light on whether charge is the only common feature of these diverse ligands.

**Q. Your laboratory is studying causes of susceptibility of the elderly to pneumococcal pneumonia. Which of the following do you predict may play a role in these patients: downregulation of certain scavenger receptors? Decreased post-translational modification(s) of scavenger receptors? Signaling defects? Quorum-sensing molecules affecting *S. pneumoniae* and/or signaling in macrophages of the elderly? Other causes?**

**A.** We certainly find in mice and in humans that the phagocytic response to *S. pneumoniae* is impaired with age, although it doesn't seem to be at the level of receptor expression. This has some parallels to studies demonstrating that TLR induced inflammatory responses change with age, but these defects occur at the level of signalling than TLR expression. Since so little is known scavenger receptor signalling, this is an exciting (if sometimes frustrating) avenue of research for my team. Since my first scientific love was microbiology, I'm certain that the aging immune system will apply different pressures to *S. pneumoniae* than the adult immune system and that this may affect bacterial virulence factor expression. In fact, others have shown that some bacteria bind better to senescent cells. In collaboration with Dr. Mike Surette we are studying how the microbiome

of the upper respiratory tract changes with age and with *S. pneumoniae* infection. Whether the aging microbiome contributes to infection risk is an exciting possibility.

**Q. Does chronic immune activation in the elderly play a role in their susceptibility to pneumonia? If so, how?**

**A.** In some ways we've always known that chronic immune activation or chronic inflammation contributes to pneumonia because chronic diseases that are characterized by having increased inflammation, such as diabetes, dementia and even cardiovascular disease, carry with them an increased risk of *S. pneumoniae* infection. The mechanistic basis of the relationship between chronic inflammation and pneumonia risk remains less understood. Some really compelling data from Carlos Orihuela and others suggest that exposure to pro-inflammatory cytokines such as TNF compromise the antibacterial response. Since increased levels of circulating cytokines such as TNF seem to be an inevitable component of aging, this would also explain the increased risk of pneumonia with age.

**Q. What did it mean to you to win the Thorbecke Award?**

**A.** A great deal! I've been going to Society of Leukocyte Biology meetings since I was a graduate student. I presented my first poster at an SLB meeting, I met my post-doctoral supervisor Dr. Siamon Gordon at a SLB meeting, and I gave my first talk as an independent investigator at an SLB meeting. Good things always seem to happen to me at

# Come Early to SLB 2013 in Newport to Find out What Regulates the Regulators

Regulatory leukocytes, be they lymphoid or myeloid, shape host responses to trauma, infection, autoimmunity and cancer. Because regulatory cells tweak the immune system, they must be finely regulated themselves, an ideal regulator would be responsive to a changing environment and tightly regulated itself, suggesting microRNA. Mature microRNAs are  $\approx$  22 base pair non-coding RNAs that transcriptionally regulate both immune and stromal cell reactions leading to both pathologic and homeostatic responses. The identification and function of select microRNA in immune regulatory environments of the liver, breast and skin will be reported and discussed in this early Sunday morning satellite meeting. You are invited to participate, converse, deliberate and pilot the way to “What Regulates the Regulators”.



the SLB so I was honoured to be recognized by the society that has supported me throughout my scientific career. Dr. Thorbecke was the kind of scientist I aspire to be so having an award in her name is an excellent motivator. This type of recognition is a career building opportunity for a young scientist and I am grateful that the SLB has made it a priority.



## Women and Diversity Interview: Laura Sly, MSc, Ph.D.

Assistant Professor, Department of Pediatrics, Division of Gastroenterology, Child & Family Research Institute, BC Children's Hospital, and the University of British Columbia.

2012 G. Jeanette Thorbecke Award winner

### Q. Have you always been interested in scientific research?

**A.** I have been interested in scientific research since I was about 10 years old. My elementary school offered a program to students in grades 5 and 6 to learn about science. I had the opportunity to “work” in three different research labs through that program and was hooked at a very early age. I was fascinated by our ability to work at the leading edge of science in our field of choice and spent the rest of my school experiences trying out different fields of science.

### Q. Can you give us a brief description of your current research and what most excites you about it now?

**A.** I am a biomedical researcher and my research program includes basic, translational, and clinical research. My favorite cell type is the macrophage and my favorite process is inflammation. We currently have two major research foci in the lab. In our first project, we are investigating the potential to use ex vivo derived macrophages polarized to a regulatory (anti-inflammatory) or alternatively activated (healing) phenotype to reduce inflammation and promote tissue restitution in chronic inflammatory diseases. In a second project, we are investigating the cause of intestinal inflammation in the SHIP deficient mouse, a new mouse model of Crohn's Disease-like intestinal inflammation that

we described, along with Bill Kerr's lab in 2011. In my lab, we always keep our eyes open for opportunities to identify and validate new drug targets or new therapeutic strategies to treat inflammatory diseases. I love this quote from Albert Szent-Gyorgi, who won the Nobel Prize in Physiology or Medicine in 1937. “Discovery consists of seeing what everybody has seen and thinking what nobody else has thought.”

### Q. During your graduate and post-doc years did you have mentor(s) that helped guide you along the way?

**A.** I have been really fortunate to have had tremendous and supportive mentors through my entire research career. I have been in four different labs through my MSc, PhD, and two postdoctoral fellowships. Each supervisor that I have had has been a unique model of success and I have tried to incorporate aspects from each of my lab experiences into my own research program. My hope is that in doing this, I will be able to share some of the best parts of my training experiences with my own trainees.

As a relatively new principal investigator at the University of British Columbia, I actually still have a mentor and actively seek out advice and mentorship from specific colleagues as needed. For me, I envision that being a mentee will be a life-long experience that will allow me to continue to grow and improve throughout my career. I have sometimes been surprised by the sources of mentors as they have not been restricted to immediate supervisors and I have consistently been impressed with the generosity of the scientific community in offering their time and insight as mentors.

### Q. What was (were) the biggest challenge(s) you faced in pursuing your career?

**A.** I think that a big challenge that I faced and that will be faced by more of our trainees over time is the competition for relatively few jobs as Principal Investigators. I was really fortunate to have been in some great labs and to have had some great opportunities that allowed me to be here. My strategy to deal with that challenge was simply to work hard and keep my nose to the grindstone but I am sure that there was definitely

some luck involved for me. I think that today, we need to be creative and open-minded about how we are going to make our contributions and look broadly for the wide range of opportunities that our science expertise provides.

**Q. Do you feel that being a woman in science came with advantages or disadvantages? What were they?**

**A.** I think that there have been both advantages and disadvantages to being a woman in science. It is sometimes hard to separate out what is “being a woman” from what is “being me” when I think about the advantages. However, I do think that we, as women, bring a different perspective and approach to science than our male colleagues and it is really important to have our voices in the conversation. The women that I work with are consistently creative and nurturing. That is also true of some men that I work with but it seems to me that it is less often “the rule.”

A disadvantage that I have faced is a lack of role models. There were very few female PIs when I was training and many of them had different life trajectories than I was planning. My partner and I always planned to have children and figuring out the timing of that without role models was tough. We ended up just doing what worked for our family and that turned out to be a great decision for us. I had a daughter toward the end of my PhD and a son during my second post-doctoral fellowship. For some reason, women are still under-represented in senior positions in science. For e.g., even though many women are completing PhDs and post-doctoral fellowships, there still seem to be fewer women applying for faculty positions. I often joke that women are just too smart to want this job (it is a lot of work) but there is obviously much more to it than that. It is everyone’s responsibility to help determine what the barriers are that women are facing and to keep moving forward to break down those barriers. I hope that the conversation can start and continue in forums like this one.

A second disadvantage that I have faced is sexism. This has been subtle, rather than blatant. Fortunately, there are a number of resources to help support women through these sorts of challenges. For me, I have focused on surrounding myself with good people that I want to work with.

**Q. What strategies do you use to maintain balance in your life?**

**A.** I have no solution to this and this is a constant struggle for me. I will share that when my son was 8, he was asked by his teacher to write a report outlining the hobbies and interests of his family members. My husband and daughter came off as very interesting people. On the other hand, my evening hobby was catching up on work that I did not get done during the day and my weekend hobby was catching up on work that I did not get done during the week. In all fairness, I think that it was right in the middle of grant writing season. I enjoy my family time very much and really make sure that I am engaged when I am at home with my family. I also enjoy quilting with a group of girlfriends that meet twice per month from September through June.

**Q. What advice would you give to female graduate students that are interested in a career as an academic scientist?**

**A.** I really love my job and sincerely think that we are among luckiest people in the world. We get to pursue our interests and challenge ourselves and our thinking constantly. I also sincerely feel that what we do is critically important and I think that careers that can make all of those claims are rare. You have to know that this career choice is not without its challenges. I feel that the past 5 years of my life as an independent Principal Investigator have been the busiest and most challenging of my life. However, if you are interested in taking the plunge, I would say go for it and jump in with both feet. While full of challenges, these past 5 years have also been extraordinarily rewarding.

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**Thank you to our  
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Lesley A. Doughty  
Richard Kew  
Charles Rinaldo  
Joathan Reichner  
John Gallin

Early Bird registration deadline, award and abstract deadline June 25th! Submit today!



October 20-22, 2013

Newport Marriott, Newport, Rhode Island



# 46th Annual Meeting of the Society for Leukocyte Biology

## Regulators of Innate Cell Plasticity

### Plenary Sessions

1. Unique approaches to Dissecting Innate Cell Microbial Interactions  
– Christian Stehlik, Leonard Shultz & Fiona Powrie
2. Myeloid Subset as Contributors to Pathology  
– Liwu Li, Lisa Coussens, & Alberto Mantovani
3. Life at the Leukocyte: Epi-/Endo-thelial Cell Interface  
– Mark Miller, Paul Kubes & Claire Doerschuk
4. Novel Prospective on Co-Inhibitor Function and Modulation in Inflammation and Disease  
– Andrew Lichtman, Al Ayala, & Carol Miller-Graziano
5. Leukocyte Function/Significance in the Aging Host  
– Ruth Montgomery, Elizabeth Kovacs, & Carlos Orihuela



### Concurrent Sessions

1. Lymphocyte roles in Innate Immunity – Dana Philpott
2. Under Appreciated Leukocyte Roles in Immunity – Joel Ernst
3. Novel Leukocyte regulators – Bonnie Dittel
4. Negative signaling regulators of Lymphocyte and Leukocyte Differentiation – Francisco Quintana
5. Regulatory Mechanisms in Leukocyte Trafficking – Minsoo Kim
6. Leukocyte Mediators in Inflammation/Infection – Dan Remick
7. Novel Adjuvants/Activators of Leukocyte Function – Jonathan Reichner
8. Mechanisms of Immune Privilege and/or Tolerance – Rachel Caspi



Visit [www.leukocytebiology.org](http://www.leukocytebiology.org) for more information

## SLB 2013 Elections

Please review the following candidate bios in consideration of how to cast your vote this August for the SLB Council positions.

### For the Office of President Elect (2014-2015)



**Robert A. Clark, MD**, Professor of Medicine / Infectious Diseases, Assistant Vice President for Clinical Research, University of Texas Health Science Center at San Antonio (UTHSCSA).

*Education:* AB (magna cum laude), Syracuse University, 1963; MD (Alpha Omega Alpha), Columbia University, College of Physicians and Surgeons, 1967; Intern in Medicine, University of Washington, 1967-68; Resident in Medicine, Columbia-Presbyterian Medical Center, 1968-69; Clinical Associate and Senior Staff Fellow, National Institute of Allergy and Infectious Diseases, 1969-72; Chief Resident in Medicine, University of Washington, Harborview Medical Center, 1972-73.

*Professional Experience:* Assistant VP for Clinical Research, 2006-present; Director, Institute for Integration of Medicine & Science (NIH Clinical and Translational Science Award academic home), 2006-present; Professor and Chair, Department of Medicine and Dan F. Parman Distinguished Chair in Medicine, UTHSCSA, 1994-2006; Professor of Medicine, Associate Chair for Academic Programs, and Director of Infectious Diseases, University of Iowa, 1983-94; Professor and Chief of Infectious Diseases, Department of Medicine, Boston University, 1977-83; Assistant and Associate Professor of Medicine, University of Washington, 1973-77.

*Honors and Awards:* MERIT Award from NIH (Neutrophil Activation of the Oxidative Burst), 1990-2000; Medical Investigator Research Career Award, Department of Veterans Affairs, 1985-91; Research Career Development Award, NIH, 1975-81; American Society for Clinical Investigation, 1981; Association of American Physicians, 1985; Fellow, American Association for the Advancement of Science, 1993; Chair, Gordon Research Conferences, 1997 (Phagocytes) and 2012 (NOX Family NADPH Oxidases); Distinguished Achievement Award, Department of Medicine, University of Iowa, 1998; Master, American College of Physicians, 2005; Presidential Distinguished Senior Scholar Award, UTHSCSA, 2011.

*Professional Activities:* Director, Infectious Diseases Training Program, University of Iowa, 1983-94; Founding Director, Graduate Training Program in Immunology, University of Iowa, 1993-94; Invited guest scientist, University of Geneva, Switzerland, 1990-91; Director, Howard Hughes Medical Institute Research Resources Program,

UTHSCSA, 1996-2004; Councilor, Society for Leukocyte Biology, 2004-07, Fund-raising chair for 2010 SLB meeting (Vancouver); Director, Institute for Integration of Medicine & Science, UTHSCSA, 2006-present. Peer review and editorial activities: Journal of Biological Chemistry, Editorial Board, 2001-06; JAMA, Consulting Editor, 1995-2001; Blood, Editorial Board, 1986-90; Journal of Leukocyte Biology, Section Editor, 1985-93, Editorial Board, 1993-95; Journal of Immunology, Associate Editor, 1982-86, Section Editor, 1986-90, Deputy Editor, 1992-94; Hematology Study Section, NIH, 1992-96; Immunology and Microbiology Study Section, American Heart Association, 1988-92; Infectious Diseases Merit Review Board, VA, 1980-83.

*Research interests:* Inflammation, neutrophil activation, phagocyte antimicrobial systems, NADPH oxidases, biology of aging, neurodegenerative diseases, host genetics of HIV/AIDS. Current grant support: Clinical and Translational Science Award (PI), NIH; Redox Regulation of Phagocyte NOX2 in Inflammation and Aging (PI), VA; Macrophage-Mediated Gene Delivery of Neurotrophic Factors for Parkinson's Disease (Co-I), VA; Biology of Aging and Pathobiology of Occlusive Vascular Disease, T32 Training Grants (Mentor), NIH. Primary research mentor for 7 graduate students and 14 post-doctoral fellows. Publications: 152 peer-reviewed research papers; 2 books; 29 chapters. Biotechnology activities: Co-Founder and Scientific Advisory Board member of GenKyoTex, SA, a Swiss limited liability company; two issued US patents.



**Alfred Ayala, Ph.D.**, M.S., Professor of Surgery (Research), Dept. of Surgery, Alpert School of Medicine Brown University & Sr. Res. Sci., Div. of Surgical Res., Rhode Island Hospital, Providence, RI, USA

*Education:* B.S. in Applied Microbiology, Bowling Green State Univ., Bowling Green, Ohio, USA, 1976; M.S. in Biology, Cleveland State Univ., Cleveland, Ohio, USA, 1979; Ph.D. in Regulatory Cell Biology, Cleveland State Univ., Cleveland, Ohio, USA, 1985; NIH Post-doctoral fellow (Minority Program), Dept. of Micro. & Pub. Hlth., Michigan State Univ., 1985-88; Res. Assoc., Dept of Surgery, Michigan State Univ., 1988-89; Grad Teaching Assist (Biol.), Cleveland State Univ., 1980-85 & 1976-78; Res. Assist, Biochemistry, Veterans Admin. Hosp., 1978-80;

*Professional Experience:* (Presently) Professor, Dept. of Surgery, Alpert School of Medicine Brown University & Sr. Res. Sci., Div. of Surgical Res., Rhode Island Hospital; adjunct faculty appointment, Dept. of Biochem., Micro. & Mol. Biol., Univ. of Rhode Island. (Prior) Associate Professor, Dept. of Surgery, Brown University & Res. Sci., Ctr. for Surgical Res., Rhode Island Hospital, 1996-2000; Assoc. Professor, Dept.

## Coming to JLB in July 2013! Bridging the gap...

Journal of Leukocyte Biology will help bridge the gap between the bench and bedside by launching a new review format: Paired Basic-Translational Reviews. For this new feature, a clinical researcher will write a “bedside review” for basic science researchers, while a basic science researcher will write a “at the bench review” for clinicians. The goal of these reviews is to foster interaction between basic science and clinical professionals and will include tables that contain important questions for each group. What makes this feature different from broad-spectrum reviews is that it will serve as an explicit bridge toward future human translational-basic research, in addition to being a review of the topic. The first pair of articles will focus on anti-PD-1 and anti-CTLA-4 as an anti-cancer therapy.

We hope you enjoy this feature in fostering research going forward. The July 2013 issue of the Journal of Leukocyte Biology will feature:

- Basic Transitional Review: Margaret K. Callahan and Jedd D. Wolchok. At the bedside: CTLA-4- and PD-1-blocking antibodies in cancer immunotherapy. *J Leukoc Biol*; doi:10.1189/jlb.1212631
- Basic-Translational Review: Andrew M. Intlekofer and Craig B. Thompson. At the bench: Preclinical rationale for CTLA-4 and PD-1 blockade as cancer immunotherapy. *J Leukoc Biol*; doi:10.1189/jlb.1212621

### SLB Election Bios continued

of Surgery, Michigan State Univ., 1992-95; Assist. Professor, Dept. of Surgery; Adjunct Appointment, Dept. of Micro. & Pub. Hlth., Michigan State Univ., 1989-92;

*Honors and Awards:* Surgical Infection Society (SIS)-Joseph Susman Awardee (1994), recipient of Shock Soc-10th annual Scientific Achievement Awardee (2007); recipient of Shock Soc-15th annual Distinguished Service Awardee (2011).

*Professional Activities:* [Society of Leukocyte Biology (SLB)] – member since 1997; SLB councilor (2011-present); Co-Organizer/Chair of the 46th annual meeting of the SLB (Newport, RI)(2012-present); Council liaison to SLB website comm. (2011-present); SLB Woman & Diversity workshop panel member 2012; Symposium Chair &/or participant (2004, 2013); organizer of SLB guest-societal workshop @ Shock 2006 (Broomfield, CO); member local organizing-fund raising comm. for 34th SLB meeting (Boston, 2000); ad hoc reviewer for Journal of Leukocyte Biology (2000-present); [Other Societal] - Surgical Infection Society (SIS)-Recorder [meeting organizer] (2005-07), SIS local arrangements comm. chair for SIS meeting (Providence, RI 2000); Shock Society-President (2004-05), Shock Society-Treasurer (2002-04), Shock Society-Scientific Program/Meeting Chair SHOCK 2001 (Marco Island, FL); Sci. Comm. member of 5th-8th world congress on Trauma, Shock, Inflammation & Sepsis [TSIS] (2000-10); [Other Professional-Res.] – Editorial board member: Shock (1993-present), *J Immunology* (Associate Editor 2003-07), *Inter J Clin Exp Med.* (2007-present); Study Sections: standing member NIH-CRS Surgery Anesthesia & Trauma [SAT](2003-07), NIH-CRS Lung Cellular Molecular & Immunology [LCMI] (2013-present) and Shrine Hospital's-Burn Res. prog. (2008-present); ad hoc NIH-NIDDK (1996),

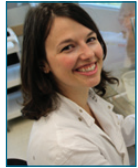
NIH-NCRR (1997; 1998), VA-DoD Merit Rev Comm. (1998), PRMRP-DoD Panel Review (2002), NIH-CSR SEP (2002; 2008-10), NIH-CRS LCMI (2012); [Other Professional-Edu.] –Fac./Mentor-Brown Univ. Grad. Pathiobiol. Prog.; Co-Dir./Fac. NIH-NIGMS T32-Trauma & Inflammation Res. Train. (resident/Post-doc. level); Fac./Mentor NIH-NIGMS Initiative to Maximize Student Development prog. (grad. level) & Leadership Alliance (diversity prog.)/NIH-NHLBI Short Term Training Program (undergrad. level).

*Research interests:* The work in our laboratory has centered on understanding the patho-physiological effects of shock/ tissue injury/ sepsis that lead to immune dysfunction and subsequent multiple organ failure in the critically ill trauma patient (through animal modeling and collaborative clinical studies). We have described, over the years, numerous deficits in both components of cell-mediated (T-cell, NKT-cell, gd T-cell, Treg-cell, etc) and innate (macrophage, neutrophil, dendritic cells) immune responsiveness induced by shock or sepsis, which are underpinned by alterations in cell signaling, protein translation and transcription patterns. Particular emphasis has been directed at defining the role of soluble mediators (e.g., IL-4, IL-10, IL-16, MCP-1, MIP-2/KC/IL-8, TGF-b, PGE2, NO, steroids, etc.), inhibitory receptors (e.g., PD-1:PD-L1/L2, BTLA:HVEM, FasL:Fas, etc.) and/or cellular pathways (e.g., p38 MAPKs, STAT 1/4/6, SOCS 1/3, Shp1/2, Rip1/3, NFkB, etc.) involved in orchestrating these changes in mouse models and critically ill patient. We have also found evidence of alterations of the immune cell's apoptotic process, present in these animals and are actively examining the contribution of this pathway. It is our hope that, by understanding the cellular/molecular mechanisms



which control these alterations in the traumatized or septic animal/patient, we will improve our ability to treat them. We are fortunate to have been continuously funded by NIH since 1991 and have published over 280 manuscripts/review articles. Finally, during my tenure at Brown Univ. and previously at Mich. St. Univ. I have had the privilege of mentoring students ranging from undergraduates, graduates and medical students to residents, post-doctoral fellows as well as jr. faculty.

### For the Office of Councilor (2014-2017)



**Dawn M.E. Bowdish, Ph.D.** Assistant Professor, McMaster University

*Education:* PDF, University of Oxford 2009, Ph.D., University of British Columbia, 2005. BSc, University of Guelph, 2000.

*Professional Experience:* Assistant Professor, Department of Pathology and Molecular Medicine, McMaster University, Canada 2009-present. Post-doctoral Fellow, Sir William Dunn School of Pathology, University of Oxford, 2005-2009.

*Honors and Awards:* Ontario Lung Association-Pfizer Canada Research Award (2012), G. Jeanette Thorbecke New Investigator Award (Society of Leukocyte Biology, Kansas City, 2011), ASPIRE, Pfizer Young Investigator Award for study of post-influenza pneumonia in the elderly (2011), JMH Junior Research Fellowship (Linacre College, University of Oxford 2006-2008), Cangene Gold Award, Awarded by the Canadian Society of Microbiologists for the highest ranked PhD thesis in Microbiology (2006), Post-doctoral Fellowship awarded by the Canadian Institutes of Health Research (2005-2008).

*Professional Activities:* Reviewer for Journal of Immunology, European Journal of Immunology, PLoS ONE, Journal of Innate Immunity and others. Grant reviewer for the Canadian Institute of Health Research Microbiology and Infectious Disease Panel, the National Science and Engineering Panel and the Multiple Sclerosis Society of Canada. Area co-ordinator for the Infection & Immunity Medical Sciences graduate program at McMaster University.

*Research interests:* macrophages, monocytes, myeloid cells, host-pathogen interactions, Streptococcus pneumoniae colonization and infection, scavenger receptors, phagocytosis evolution of the innate immune response, immunosenescence, the interplay between age, chronic inflammation and susceptibility to infectious disease, immunomodulators, large dataset analysis, microbiome of the upper respiratory tract.



**Julian G. Cambroner, Ph.D.** Professor, Biochemistry and Molecular Biology, Wright State University, Ohio

*Education.* Born in Spain, he received his PhD from Complutense University of Madrid (cum laude). He then moved to the U.S. to the University of Connecticut Health Center, to study Signal Transduction in Neutrophils (post-doc); was appointed Instructor in 1991, then Research Assistant in 1992; he moved to Wright State University School of Medicine; was Assistant Professor, 1995-00; Associate Professor 2000-04; Professor (tenured) 2004-present. He was a Visiting Professor at Dr. Mary Dianuer's lab at Indiana University Medical School in 2006.

*Research Interests* (PubMed: J. Gomez-Cambroner). His laboratory uses biochemical, molecular, cell biology and immunological tools to elucidate the molecular pathways involved in leukocyte migration in normal physiology – inflammation- and disease -ischemia/reperfusion injury-. He pioneered the studies of the molecule phospholipase D (PLD) in cell signaling during chemotaxis and visualized its activation in living, motile, cells. His team was the first to uncover that a lipase can act as a major guanine-nucleotide exchange factor (GEF) with key roles in chemotaxis, phagocytosis and leukocyte biology. In recent years, his research interests have expanded into understanding cancer cell metastasis. He has published 82 peer-reviewed papers and 9 book chapters.

*Other Professional Experience.* Ad-hoc reviewer for J Leukocyte Biol. Blood, JBC, J Lipid Res, JI, Blood, Gene, PNAS, MCB, FASEB J., Oncogene, MCB; Grant reviewer, National Science Foundation, ad hoc, 2005, 2010; NIH study section (ad hoc) Erythrocyte and Leukocyte Biology (ELB), 2004; Cell Development and Function (CDF-2), 2004; Innate Immunity and Inflammation (III), 2005; AHA Panel Reviewer, [Full Member] Molecular Signaling, Basic Cell and Mol Biol, 2005-present; NIH study section [Full Member] Innate Immunity and Inflammation (III), 2009-13; NIH study section, Special Emphasis Panel ZRG1 CB-P (02) 2011. Chair, Cell/Molecular Biologist faculty search committee, NCBP, WSU 2006-2007. Chair, Promotion and Tenure Committee (Department of Biochemistry and Molecular Biology) 2011-present.

*Teaching.* Developed/Director of the Hematology Course (since 2001) for the School of Medicine (Wright State University), year II. Director, Molecular Cell Signaling for the Graduate School, 2009-2012.

*Involvement in the Society for Leukocyte Biology.* Member since 1988. Dr. Cambroner is Chair of the Professional Development Committee (2009-) <http://www.nature.com/>

## 2013 Women and Diversity Session Update!

Don't forget to register for the Women and Diversity committee (W&D) Round Table Discussion at the 46th Annual Meeting of Society for Leukocyte Biology in Newport Rhode Island. Our keynote speaker will be Dr. Ann Richmond, Professor of Cancer Biology, Vanderbilt University Medical Center, Nashville, TN. Dr. Richmond's talk --"Keys to Success: Creating a Mentor Network" will be followed by an open discussion of issues surrounding mentoring and networking. Our panel will consist of Dr. Ann Richmond, Dr. Rachel Caspi, Dr. Christine Biron and Dr. Liwu Li. The lunch session will be held Monday Oct 21st from 12:30-2:00 pm. Register for the meeting (link to <http://leukocytebiology.org/Registration.aspx>) and be sure to RSVP "yes" to this special session and bring your questions / insights to join in the discussion.

### SLB Election Bios continued

[ni/journal/v13/n2/full/ni.2183.html](http://leukocytebiology.org/ni/journal/v13/n2/full/ni.2183.html) and the organizer of the Workshop on "How to write a research Grant" for junior scientists, Kansas'11 and Hawaii'12, (<http://leukocytebiology.org/Categories/Archives/Media.aspx>).

**Funding.** Dr. Cambroneró has received continuous funding from the National Institutes of Health (NIH-NHLBI) since 1997; the American Cancer Society (ACS); the American Heart Association (National Program and Great Rivers Chapter); the American Physiological Society; the Ohio Board of Regents; the University of Connecticut School of Medicine; and Wright State University School of Medicine.

**Awards.** Connecticut Chapter Leukemia Society of America (LSA) 1990; New Investigator Research Award, Donaghue Medical Research Foundation, 1992; Expert Scientist (Science Curriculum Board), Connecticut Public School System, 1994; Frontiers in Physiology Research Award, National, 1996; Stars Scholar Distinguished Service Award Ohio University, Statewide Conference, 1998; Sembrador Award (Professional Achievement), The City of Manzanara (C.R.) Spain 2005; Outstanding Achievement in Medical Ed/Research, Academy of Medicine, Dayton, OH 2007; Honorary Professor, Southern Medical University, Guangzhou, China, 2012.

**Beyond Science...** Dr. Cambroneró has written science fiction articles and science divulgation for the general public (in Spanish). Following his Astronomy hobby, he came up with the idea and designed a scale model of our Solar System, that was built in a City Park in Manzanara (La Mancha) Spain, as an example of his interests in the crossroads between Science and Art. (see: [www.paseodelsistemasolar.manzanara.es](http://www.paseodelsistemasolar.manzanara.es) also <http://webapp2.wright.edu/web1/newsroom/tag/julian-gomez-cambroneró/>). He is married to Teresa Madrid and has two children, David and Julia.



**Bruce D. Levy M.D.** Associate Professor of Medicine, Brigham and Women's Hospital/Harvard Medical School

**Education:** M.D., University of Pennsylvania School of Medicine,

Philadelphia, PA, 1988; Internship and Residency in Internal Medicine, Brigham and Women's Hospital, Boston, MA, 1991; Pulmonary and Critical Care Medicine, Brigham and Women's and Beth Israel Hospitals, Boston, MA, 1994.

**Professional Experience:** Associate Professor, Pulmonary and Critical Care Medicine Division, Department of Internal Medicine, Brigham and Women's Hospital/Harvard Medical School, Boston, MA, 2006-present; Director of the Internal Medicine Residency for Academics and Career Development, Brigham and Women's Hospital, 2000 – present; Assistant Professor of Medicine, Brigham and Women's Hospital/Harvard Medical School, 1999-2006; Instructor of Medicine, Brigham and Women's Hospital/Harvard Medical School, 1993-1999; Post-Doctoral Research Fellow in Biochemistry, Center for Experimental Therapeutics and Reperfusion Injury, Brigham and Women's Hospital in Dr. Charles N. Serhan's laboratory, 1994-1998; Chief Medical Resident, Department of Internal Medicine, Brigham and Women's Hospital, 1993-1994.

**Honors and Awards:** Member, Interurban Clinical Club for physician-scientists, 2012 - present; Member, NIAID Expert Panel on Food Allergy Clinical Guidelines, 2008; Member, American Society for Clinical Investigation, 2007 – present; Member, Faculty of 1000 Medicine, Asthma Section, 2007 – present; Member, Allergy and Clinical Immunology Assembly, European Respiratory Society, 2004 – present; George Thorn Award, Internal Medicine, Brigham and Women's Hospital, 2003; Paul Dudley White Research Fellow, American Heart Association, 1994;

Research Career Development Award (K08), NHLBI, 1993; Member, Society of Leukocyte Biology, 2001 – present; Fellow, American College of Physicians, 2000 – present; Invited speaker or chairman in numerous national or international congresses, including Gordon Research Conferences on the Biology of Acute Respiratory Infection, Periodontal Diseases and Mucosal Health and Disease, and International Congresses of the American Thoracic Society, American Academy of Allergy Asthma & Immunology, Asian Pacific Society of Respiriology International Conference, Eicosanoid Research Foundation, European Academy of Allergy and Clinical Immunology, European Respiratory Society, International Society for the Study of Fatty Acids & Lipids and Winter Eicosanoid Conference; Reviewer for: American Journal of Pathology, American Journal of Physiology-Lung Cellular and Molecular Physiology, European Respiratory Journal, FASEB Journal, JAMA, Journal of Biological Chemistry, Journal of Clinical Investigation, Journal of Experimental Medicine, Journal of Immunology, Journal of Leukocyte Biology, Nature Medicine, PLoS One, Proceedings of the National Academy of Sciences USA, Prostaglandins, Leukotrienes and Essential Fatty Acids; Funded with Research Grants from the National Institutes of Health and DARPA

*Professional Activities:* American Journal of Respiratory and Critical Care Medicine, Associate Editor, 2010 – present; New England Journal of Medicine, Associate Editor for Interactive Clinical Problem Solving Series, 2009 – present; Frontiers in Respiratory Pharmacology, Associate Editor, 2009 – present; American Journal of Respiratory Cell and Molecular Biology, Editorial Board, 2003-2009; Ad Hoc Member of several grant review study sections, including for the National Institutes of Health, Health Research Board, Medical Research Council, Telethon, Volkswagen Foundation and Wellcome Trust

*Research interests:* resolution of inflammation, tissue injury and infection; specialized pro-resolving mediators

and their cellular mechanisms; cell-cell interactions in inflammation; mechanisms for activation of neutrophil NADPH oxidase; NK cell biology; regulation of innate lymphoid cell activation; asthma pathobiology; acute respiratory distress syndrome



**Silvia M. Uriarte, Ph.D.** Instructor of Medicine, Research, Molecular Signaling Group

*Education:* Biologist, Facultad de Ciencias Exactas y Naturales (FCEN), University of Buenos Aires, Argentina, 1996; MS, Master in Clinical Microbiology, Universidad Católica Argentina (UCA), Buenos Aires, Argentina 2000; Ph.D., School of Medicine, University of Buenos Aires, Argentina, 2003.

*Professional Experience:* Assistant Professor (Tenure-Track), Department of Medicine, Molecular Signaling Group, Kidney Disease Program, University of Louisville, KY, USA, 2009-present; Instructor in Medicine, Department of Medicine, Molecular Signaling Group, Kidney Disease Program, University of Louisville, KY, USA, 2007-2009; Senior Research Associate in Dr. Kenneth R. McLeish's laboratory, Department of Medicine, Molecular Signaling Group, Kidney Disease Program, University of Louisville, KY, USA, 2005-2007; Postdoctoral fellow in Dr. Shirish Barve and Dr. Craig McClain's laboratories, Department of Medicine, GI Division, University of Louisville, KY, USA, 2003-2005; graduate training for my Ph.D. in Dr. James Summersgill's laboratory, Department of Medicine, Infectious Diseases Division, University of Louisville, KY, USA, 2000-2002; Teaching Assistant in Cellular Biology, Department of Biology, Ciclo Básico Común, University of Buenos Aires, Argentina, 1994-1999; Biology Professor, International Baccalaureate (Cardiff, England). Padre Luis Etcheverry Boneo School – Buenos Aires, Argentina, 1996-1997.

**SLB NEWS**  
email [jholland@faseb.org](mailto:jholland@faseb.org) to post your news today and share your knowledge with the rest of the SLB Community!  
**New Web Feature!**

**47th Annual Meeting of The Society for Leukocyte Biology & The International Endotoxin and Innate Immunity Society**

**Innate Immunity Development**

**October 23-25, 2014**  
Salt Lake City Sheraton, Salt Lake City, Utah  
Organizers: Daniel Remick (SLB) & Ofer Levy (IEIS)

**Honors and Awards:** First Place Society of Leukocyte Biology Presidential Award (Post-Doc/Junior Faculty), presented at the Tri-Society Conference: Cellular and Cytokine Interactions in Health and Disease, Lisbon, Portugal 2009; Society of Leukocyte Biology Travel Award, Tri-Society Conference: Cellular and Cytokine Interactions in Health and Disease, Lisbon, Portugal 2009; Carl Storm Underrepresented Minority Fellowship, Conference Planning Associate, Gordon Research Conferences on Phagocytes, Smithfield, RI, USA 2007; Honorable Mention, Postdoctoral Research Fellows. Research Louisville, University of Louisville, Kentucky, USA 2003; Young Investigator's Travel Grant, awarded by the Committee of the 20th International Congress of Chemotherapy, Sydney, Australia 1997.

**Professional Activities:** Invited Speaker to the International Conference on Clinical and Cellular Immunology, October 22-24, Chicago, Illinois, USA, 2012; Invited talk at Phagocytes Gordon Research Conference: The Many Faces of Phagocytes: Inflammation, Infection and Homeostasis. Davidson, NC, USA, 2011; Invited Speaker to the Division of Surgical Research Seminar Series, Division of Surgical Research, Brown University Medical School, Providence, Rhode Island, USA, 2010; Invited Speaker to the 2nd World Conference on Magic Bullets-Celebrating the 100th Anniversary of the Nobel Prize Award to Paul Ehrlich. Nürnberg, Germany, 2008; Session Chairman at the 2nd World Conference on Magic Bullets-Celebrating the 100th Anniversary of the Nobel Prize Award to Paul Ehrlich. Nürnberg, Germany, 2008; Session Chairman at the World Conference on Magic Bullets-To celebrate Paul Ehrlich's

150th Birthday-. Nürnberg, Germany, 2004; Invited speaker at the World Conference on Magic Bullets-To celebrate Paul Ehrlich's 150th Birthday-. Nürnberg, Germany, 2004.

Member of the Publication Committee of the Society for Leukocyte Biology (2009-2012); Editor of the electronic newsletter (iSLB) of the Society for Leukocyte Biology (2010-2012); Member of the Website Committee of the Society for Leukocyte Biology (2013-present).

**Research Interests:** My research interest has always been in the area of microbiology and immunology. In 2005 I was introduced to the fascinating world of neutrophil biology working in the laboratory of Dr. McLeish. In 2011 I was able to start my independent line of research, and currently in my laboratory we are interested in studying the interaction between neutrophils and pathogens. In particular, pathogens that causes periodontitis, a biofilm-induced chronic inflammatory disease that affects the gingival tissues supporting the tooth. Chronic inflammatory infectious diseases such as periodontitis can occur because the pathogens are able to evade or disable the innate immune system. Our research interest is focused on identifying the mechanisms that allow two oral pathogenic bacteria, one Gram positive and one Gram negative, to evade neutrophil killing and promote inflammation.

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