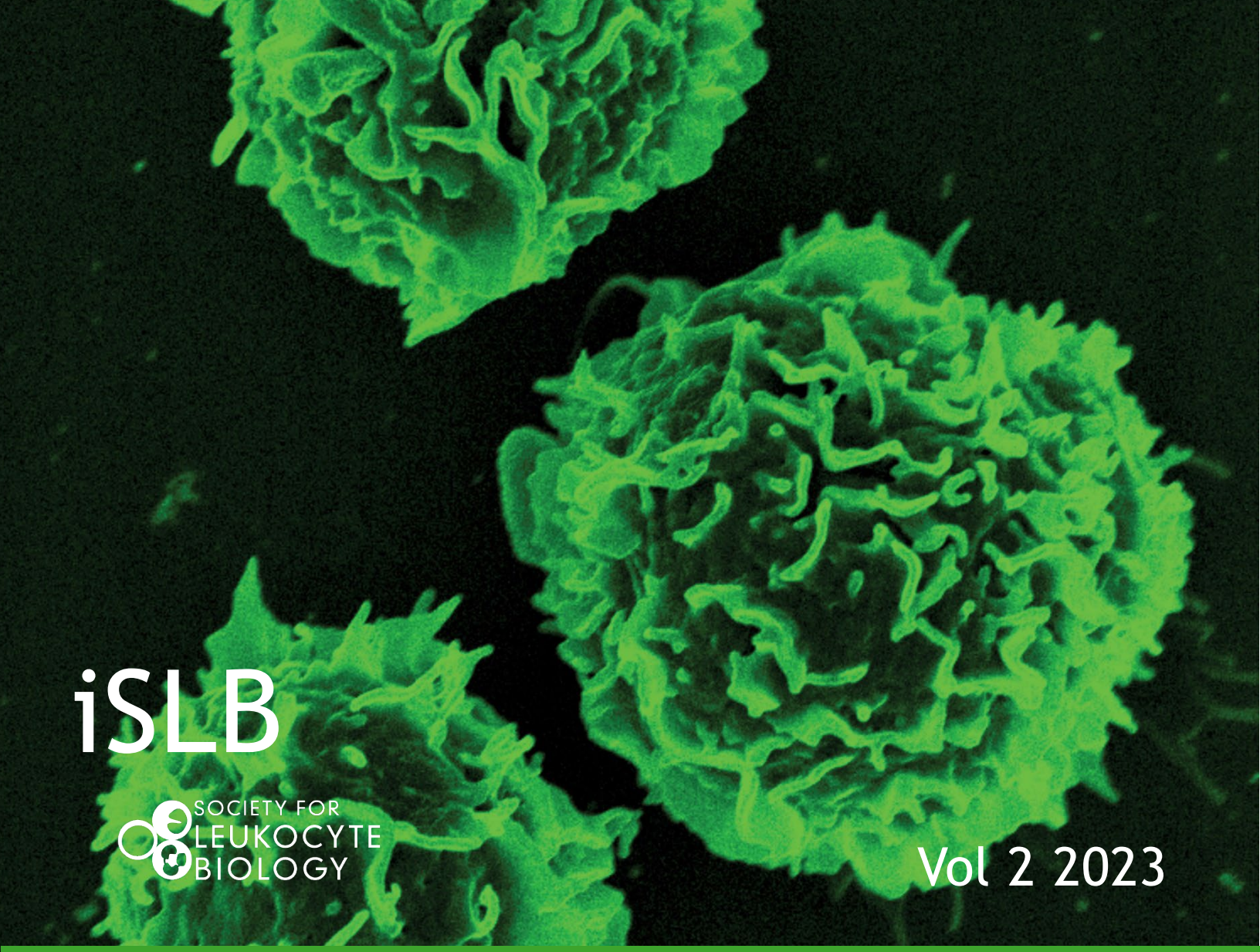


iSLB

SOCIETY FOR LEUKOCYTE BIOLOGY

Vol 2 2023

In this issue…..

A Message from the President

This year has been filled with transitions and new horizons for SLB. As planning is ongoing for SLB 2023, a conference with many new features, the society and journal continue to evolve with the changing landscape.

A milestone transition is that of our incoming Editor-in-Chief, Michael Schnoor, taking the reins on July 1st. You can read a special message from Michael in this issue. At the same time that we welcome Michael, we extend our deepest appreciation to Luis Montaner for his incredible service to JLB over the last decade and a half. In addition to this leadership transition, JLB's new partnership with Oxford University Press (OUP) continues to flourish and we look forward to facing the new adventures that lie ahead with OUP at our side. There are many changes in store for our journal and the society is well positioned to pivot as needed to ensure our publication remains relevant and is a solid resource for our members; both as an outlet to publish and a resource to site. Look for ways to get involved with JLB including targeted science issues and other opportunities! Submissions to JLB are always welcome. JLB is your community journal and all proceeds of this non-profit venture go directly to support SLB as an organization including award programs, trainee support, workshops and more. With the newly announced **Impact Factor of 5.5**, the future is bright for JLB!

One of the many things that the pandemic taught us was the value of webinars. While SLB is excited to return to in-person events, we are not abandoning this valuable resource which has the power to reach members around the globe. We have expanded our efforts in this regard, already holding 3 sessions this year with many more in the works. You can read about some of these efforts in this newsletter and we always welcome ideas from the membership for new programs.

With the 2023 abstract and award deadline recently past, review is underway for these important 2023 program elements. If you haven't yet registered, there is still plenty of time and late breaking abstracts in all topical areas will be accepted July 17th to August 4th. We hope to see many of our members at this very affordable and accessible event.

SLB's volunteer led committees continue to work on behalf of the membership with this issue of iSLB just one shining example of the efforts of your fellow community members. Workshops at the meeting in September, ongoing Reviewer Training programs, a growing library of on-demand content and more are a testament to the strength of the SLB community. Our regular survey efforts have yielded even more ideas that the committees will be working on this year and into the future.

Please enjoy this issue of iSLB including some insightful interviews and great perspectives from scientists from around the globe. Also in this issue, we highlight the candidates for this year's elections when the membership will vote on their new volunteer leaders.

Thank you for your continued dedication in the lab, the clinic, the classroom, and in your scientific community of SLB– SLB runs on its volunteers! Please contact us if you want to get more involved or have any questions about the society or journal.

Coming this October – Building Bridges in Leukocyte Biology Webinar Series

Through volunteer efforts, SLB will be offering a monthly series of innovative talks spanning a width breadth of interests related to the field. Registration will be free for society members.

If you are a SLB member interested in presenting at our webinars and fall in AT LEAST 1 of the below groups, please contact Dr. Sofia de Oliveira.

- Senior PhD students or Postdocs.
- Scientists from underrepresented groups (e.g. women, persons with disabilities, and underrepresented racial and ethnic groups in your geographical area.)
- Scientists with major caregiver roles (young children, dependent person, etc).

Check back for more details coming this September and the chance to register. Our first speaker will present on October 25th and will be **Aminata Coulibaly from West Virginia University**, a basic immunologist that works on neuroscience.

FASEB DataWorks! Helping Researchers Manage, Share, and Reuse Data to Further Science

Presented in conjunction with SLB 2023!
Thursday, September 28, 8:30 – 10:00 am, Magnolia Ballroom

Launched in September 2021, FASEB DataWorks! is an initiative that brings the biological and biomedical research communities together to advance human health through data sharing and reuse. While prompted by the new National Institutes of Health data management and sharing policy that went into effect earlier this year, DataWorks! seeks to foster culture change around data sharing and reuse across biological disciplines to further research opportunity and discovery. During this workshop, you will explore how to engage with the different components of DataWorks!, including participating in the monthly Salons, building upon the experiences of Prize winners, and providing feedback to ensure our Help Desk resources support your research needs.

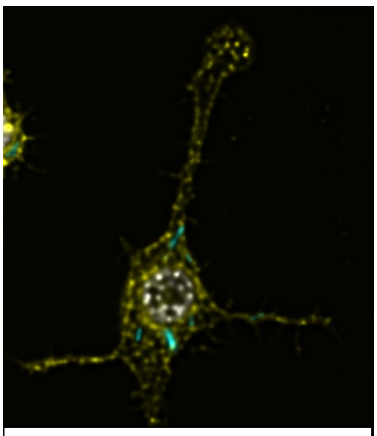
Learn more at https://faseb.org/dataworks and register for SLB 2023 to attend.

Spotlight on Macrophages

Please enjoy this new feature highlighting different cell types in each issue of iSLB. This issue features a look at Macrophages as provided by Bryan Heit. Contact us if you have an idea for a future feature!

While both macrophages and phagocytosis had been observed many times previously, it was Elie Metchnikoff in the 1880s who first determined that macrophages – along with microphages (neutrophils) – provide defence against pathogens[1]. The near-simultaneous discovery of humoral immunity by Paul Ehrlich led to over a decade of debate on whether immunity was humoral or cellular in nature. This debate was partially put to rest by Almroth Wright, who showed that humoral factors could enhance the phagocytosis of bacteria[2]. This "truce" paved the path for the awarding of the 1907 Nobel prize in medicine to Metchnikoff and Ehrlich and kicked off several decades of interest in macrophages, phagocytosis, and humoral immunity. In 1898 Tadeusz Browiecz identified Kupfer cells as the first tissue-specific macrophage population, characterized by a unique epithelial-like morphology and enrichment in stored fats, making them phenotypically distinct from hematopoietic macrophages while still retaining the hallmark capacity to perform phagocytosis[3]. Work in the 1920s and 1930s demonstrated that the link between cellular and humoral immunity was bi-directional, with inhibitors of phagocytosis impairing antibody formation[4]. But interest in macrophages waned as the role of B cells in antibody production was established and T cells were discovered. Despite this decreased interest, the 1940s through 1970s saw several important discoveries including the discovery of the oxidative burst[5,6] and of the catabolic enzymes involved in bacterial killing within the phagosome[7], and discovery of the leukocyte recruitment cascade[8]. Interest in macrophages was reinvigorated in the 1970's when, in a short series of papers, Alan Rosenthal, Ethan Shevach, William Paul, and Ira Green demonstrated that macrophages were required for the activation of T cells, that this activation required the antigen be presented in a non-soluble form on the macrophage cell surface, and that this presentation occurred on the Ir gene – now known as the MHC II complex[9–12]. Amazingly, this discovery in macrophages occurred in parallel with the first descriptions of dendritic cells – the cells today most strongly associated with antigen presentation on MHC II[13,14].

For much of this time macrophages were considered to be relatively "passive" cells whose responses were regulated by T cell-derived soluble factors. The concept that T cells control macrophage activity was turned on its head by Chakkalath and Titus in 1994, who demonstrated that macrophages from Leishmania-infected mice could drive the Th2-polarization of naive T cells in a cytokine-dependent manner[15]. This same period also saw a growing appreciation for the roles of macrophages in non-infective responses such as tissue repair, and of their role in inflammatory diseases including cancer and atherosclerosis. This growing appreciation of the complexity of macrophage responses, and their central role in the initiation and polarization of immune responses, led in the year 2000 to the proposal of the M1/M2 polarization paradigm by Mills and colleagues[16]. In this proposal, a polarization axis akin to the Th1/Th2 polarization of T cells was suggested, but with macrophages as the central "decision maker" rather than T cells. Since then, it has become apparent that macrophage polarization and the interactions of macrophages with adaptive immunity is more complex, with macrophages able to take on a broad spectrum of polarization states in response to ontological, environmental, and immunological cues—and that macrophages are able to drive similar changes in the phenotypes of neighboring immune cells. Indeed, macrophages are potent activators of T cells via antigen presentation on MHC II, interact with B cells to organize germinal centers, and can even obtain antigens acquired by B cells and present them to T cells[17,18]. As a result of this intertwining of macrophages with the adaptive immune system, macrophages often play an outsized role in the development of autoimmune disorders that are otherwise mediated by T cell or antibody-dependent mechanisms including multiple sclerosis and SLE[19,20].



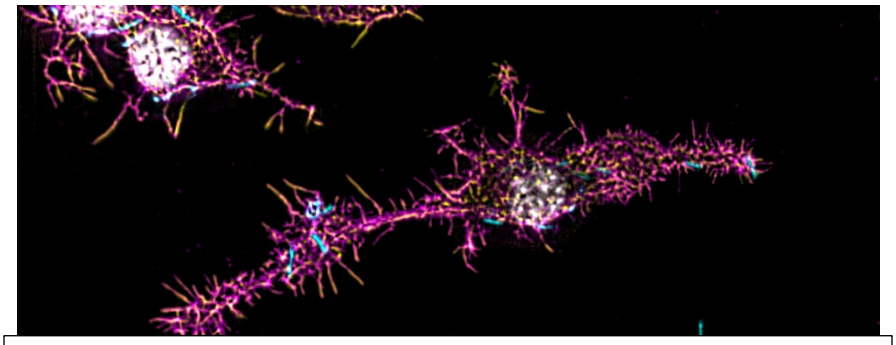
Super-resolution microscopy images of human macrophages that have phagocytosed E. coli, Colors: White: DNA; Yellow: Plasma membrane; Cyan: E. coli. Provided by Bryan Heit

The past decade has seen some incredible advances in our understanding of macrophage biology and function. Chief among these is a new understanding of how macrophage ontology affects macrophage function. Macrophages are now known to arise from three major developmental events[21]. First, primitive hematopoiesis—which occurs in the blood islands of the yolk-sac—gives rise to microglia, unipotent myeloid progenitors, and bipotent erythrocyte/megakaryocyte progenitors. While this phase of macrophage production produces many types of macrophages, only microglia persist into adult animals, leaving the role of other primitive macrophages largely unexplored. A second wave of macrophages also arises from the yolk sac, but from the yolk sac hemogenic endothelium, with this wave of hematopoiesis later propagating to the fetal liver. This second wave of macrophage production gives rise to most of the long-lived tissue-resident macrophage populations present in adults. Finally, bone marrow hematopoiesis gives rise to hematogenous monocyte-derived macrophages throughout adulthood. Importantly, the microglia and tissue-resident macrophages that arise during embryonic development are found in most tissues, where they form long-lived and self-renewing populations that are phenotypically distinct from hematogenous monocyte-derived macrophages. These hematogenous macrophages are formed from monocytes which infiltrate inflamed tissues, tend to be short-lived, and are often inflammatory in nature. For example, in the heart embryonic macrophages are the predominant cells involved in efferocytosis and antigen acquisition, while hematogenous macrophages play a minor role in these processes and instead dominate inflammatory responses[22].

Another recent discovery that has changed our perspective on macrophage function is the discovery that metabolic reprogramming is central to macrophage polarization and function. This alteration in metabolism is required to meet the energetic and catabolic requirements of macrophages as they respond to infectious versus homeostatic challenges[23]. When responding to infection, macrophages require the rapid production of ATP and NADPH to meet the high energy demands of the oxidative burst, vacuolar ATPase-mediated phagosome acidification, and other microbicidal pathways. Consequentially, the canonical microbicidal M1-like phenotype is characterized by a switch from oxidative phosphorylation to glycolysis—which, despite being less efficient on a per-glucose basis—produces APT and

NADPH much more quickly than oxphos, thereby meeting the high energetic demand. In contrast, following efferocytosis macrophages take on a M2-like polarization, switch to an oxphos-centric metabolism, and exhibit altered protein, lipid, nucleotide, and sterol metabolic pathways. While many of these metabolic changes simply allow macrophages to meet the metabolic burden created by engulfing another cell, some of these metabolic changes further promote their M2 function. As one example, the engulfment of apoptotic cells provides macrophages with an ample source of polyunsaturated fatty acids, while the signaling of efferocytic receptors promotes the redistribution of enzymes such as 5-LOX such that these fatty acids are metabolized into pro-resolving mediators including resolvins, protectins, and maresins[24–26].

The Challenge. The macrophage field is rapidly moving, with the ever-increasing diversity of identified macrophage phenotypes representing a significant challenge for understanding these cells homeostatic and immunological roles. While there are established pan-species markers for M1 and M2 polarization states, validated pan-species markers for primitive and fetal macrophages are lacking. Similarly, markers for many tissue-specific macrophage populations, or polarization states specific to certain disease states, are lacking or have only been identified in mouse models. This lack of markers makes identifying and studying macrophages challenging, especially as multiple distinct macrophage populations are typically present within single tissues or disease sites. Indeed, in many cases macrophage populations have been identified solely via transcriptomic single-cell sequencing approaches, with little-to-no functional analyses performed on the cells themselves. Similarly, understanding the roles of macrophages in disease processes is going to require that we integrate the varying roles these subsets play within a tissue or disease site, rather than treating the macrophages in a tissue as a monolithic population.



Super-resolution microscopy images of human macrophages that have phagocytosed E. coli, Colors: White: DNA; Yellow: Actin; Magenta: Plasma membrane; Cyan: E. coli Provided by Bryan Heit

Areas to develop significant knowledge: There are several areas in which we are poised to make rapid and important advances in our knowledge of macrophage phenotype and function. A major outstanding question is the extent to which embryonic (tissue resident) macrophages are replaced by hematogenous macrophages as we age. This likely varies by tissue – primitive-macrophage derived microglia do not appear to be appreciably replaced by hematogenous macrophages, whereas fetal-liver derived alveolar macrophages appear to be replaced by hematogenous macrophages during aging and after severe infection[27]. These age-related population dynamics may influence the progression of inflammatory disorders and may also be associated with inflammaging—the age-related increase in circulating levels of pro-inflammatory cytokines that can accelerate many ageing-associated diseases[28]. Likewise, while embryonic macrophages are known to have an important role in remodeling tissues during embryonic development[29], the transcriptomic profile of these cells, whether different subsets exist, and the relative roles of yolk sack versus fetal liver-derived populations is largely unexplored. A second area ripe for development is the manipulation of macrophages to induce desired polarization states or functionalities for use as cellular therapies. Genetic manipulation of macrophages to express specific chimeric antigen receptors has shown promise as a therapeutic approach for killing cancer cells expressing the target antigen[30]. Immune responses against tumors are often limited by the immunosuppressive actions of tumor-associated macrophages (TAMs), with the manipulation of TAM recruitment and polarization representing a major focus of current cancer immunotherapeutics development[31]. Enhancing the efferocytic capacity of macrophages through blocking inhibitory receptors such as CD47, and by expressing inactivation-resistant efferocytotic receptors such as protease-resistant MERTK, have shown potential as therapies for the treatment of atherosclerosis[32,33]. Given their broad ability to regulating immune responses and their central role in diseases ranging from cancer, to cardiovascular disease, to infection, macrophages represent a prime target for immunotherapy across a range of diseases. While the broad plasticity of macrophage phenotypes and function has been established, the identification of the specific environmental cues and transcription factors that create this diversity is poorly understood. Decoding the signaling and transcriptional networks which control macrophage polarization will be critical to understanding how macrophage phenotypes are generated, and for identifying approaches to manipulate these cells.

Macrophage Article References

2023 Honorary Life Members Inductees

Edgar Pick

Please join us in congratulating Edgar Pick and Lyle Moldawer, the newest inductees into the society's Honorary Life Member category. You can learn more about their contributions to our community and our science as well as see all of the awardee members over the years here.

Lyle Moldawer

A Message from the JLB EiC

Dear SLB members,

Today I write to you because on July 1st, I have officially taken over the JLB EIC position from Luis Montaner. Please direct all communications regarding JLB to me at mschnoor@cinvestav.mx from now on and I look forward to hearing from our members. I want to take this opportunity to thank Luis for all his hard work to make JLB the successful and high-quality journal it is today. Luis has provided excellent guidance during the transition period so that I feel ready to be at the helm and steer JLB into a hopefully even brighter future.

JLB is the society journal of SLB and therefore all SLB members are also an important part of the JLB family. In fact, JLB is your journal and JLB's success also depends on your participation. I encourage you to support JLB by submitting your best work, original or review, to JLB. By doing so, you will also support SLB and all its initiatives for the benefit of the leukocyte biologist community, i.e. awards, webinars and courses. I want to emphasize that JLB is a non-profit journal and all revenues only support SLB and its members, in contrast to the many for-profit journals that have reshaped the publishing landscape in recent years. With JLB you have the option to publish under different Open Access options, or under the subscription model; and for the latter you'll receive a 250$ discount as member benefit.

Much effort is currently being put into improving author satisfaction that is critical for attracting high-quality submissions. This depends heavily on quick decision making and an efficient submission system. Together with our fantastic managing editors, Michelle Gaffney and Nicola Smith, we are working hard on improving the submission system and the author/reviewer/editor experience during the entire peer-review process. Please don't hesitate to contact them at jlbstaff@leukocytebiology.org with comments, suggestions, and questions. They will be happy to hear from you. Moreover, together, with our outstanding new publishing partner Oxford University Press, a non-profit editorial house, we have launched several promotional and marketing initiatives to make JLB even more competitive and to promote its activities. To this end, our social media senior deputy editor Coy Allen is working hard to promote JLB content and initiatives via Twitter and other social media platforms.

Important goals for the near future are to attract more readers and thus potential future authors, and to increase the impact factor. To this end, we have established new manuscript categories, which we believe will attract more readers to JLB: News & Views articles focused on paradigm-shifting papers published in other high-impact journals; and Clinical Studies focused on the analysis of human diseases and patient samples. Deputy editor Melanie Scott is working with me to promote these new categories. We also aim to publish 1-2 invited reviews per issue as those articles are usually the most highly cited ones. They are critical, forward-thinking overviews of current hot topics with high relevance to leukocyte biologists written by renowned experts in the field. The review efforts are coordinated by our senior deputy editor Mike Cancro. But please remember, as a society journal, JLB is not solely dedicated to publishing high impact papers, JLB also exists to serve the community of SLB members and leukocyte biologists. Thus, JLB will also publish niche papers regardless of perceived impact if the studies are rigorously designed and executed. A society journal can only be successful if society members contribute. Please do so either by submitting your work to JLB, or by contacting me at mschnoor@cinvestav.mx with comments, ideas, and critiques to improve JLB performance at all levels.

I look forward to seeing you at the SLB meeting in Athens, GA in September.

With warmest regards,

Michael

Global Science: A Journey from Thailand to the US and Back

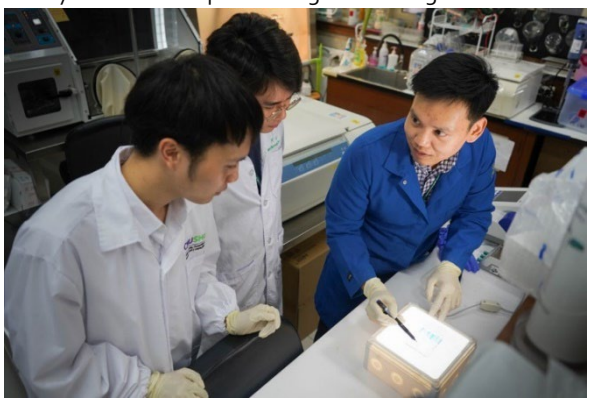
Dr. Somsakul (Pop) Wongpalee is an instructor in the Department of Microbiology, Faculty of Medicine at Chiang Mai University, where his research focuses on the identification and characterization of virulence factors in Burkholderia pseudomallei. Dr. Wongpalee is the recipient of the Royal Thai Scholarship, and earned his Bachelor of Science in Biology (with highest distinction) from the University of Virginia, and his Doctor of Philosophy in Molecular Biology from the University of California, Los Angeles. We sat down with Dr. Wongpalee to learn about his career journey and the academic track in Thailand.

Q: Tell us about your career journey.

A: My career journey can be traced back to my high school days when I enrolled in a specialized program for students interested in science and technology. This program played a pivotal role in shaping my career path. During that time, I had the opportunity to collaborate on a small high school project with a university professor, which exposed me to research work at an early stage compared to my high school peers.

I actively participated in numerous science camps, where I not only made new friends but also had a fantastic time learning. Those experiences were truly inspiring. After graduating from high school, I was fortunate to receive the Thai government scholarship to study in the United States. In 2005, I joined the College Science Scholar program at the University of Virginia.

During my second year, I became fascinated by the function of long non-coding RNA, an intriguing entity that was just beginning to be understood at that time. Driven by my curiosity and passion, I joined the lab of Professor Anindya Dutta to study the role of a specific long non-coding RNA in cell cycle progression. It was a gratifying experience to contribute to the scientific knowledge by uncovering the control of a key cell cycle regulator, p21, by long non-coding RNA. This work solidified my appreciation for RNA research.



For my graduate studies, I enrolled at the University of California, Los Angeles (UCLA), and joined the laboratory of Professor Douglas Black, a respected RNA biologist. My focus was on characterizing the mechanisms of splicing site pairing across introns and alternative exon usage. I employed reconstituted spliceosomal complexes and quantitative mass spectrometry to unravel the intricacies of these processes. My time in graduate school was exceptional, with a supportive and inspiring lab environment, an esteemed mentor, and a defining moment where I truly felt like a scientist.

Upon graduating in 2015, I decided to transition into the field of plant biology, believing that the training and knowledge in this area would be more applicable to Thailand upon my return. As a result, I left behind my passion for molecular biology and joined the laboratory of Professor Steve Jacobsen, a renowned plant epigeneticist, as a post-doctoral researcher. However, after three months, I realized that the nature of the work didn't resonate with me. Instead of conducting in vitro reactions and envisioning protein-protein and protein-RNA interactions, I found myself growing plants and tending to seeds in a greenhouse. It became clear that I had strayed from my true passion.

Fortunately, Steve was an incredibly supportive and understanding supervisor who allowed me to formulate my own research project aligned with both my passion and the lab's interests. Over the next two years in the Jacobsen lab, I delved into investigating a protein complex responsible for recruiting de novo DNA methylation machinery to DNA, and we successfully determined its cryo-electron microscopy (cryoEM) structures.

After spending 14 years in the United States, I made the decision to return to Thailand. I assumed a faculty position in the Department of Microbiology at Chiang Mai University's Faculty of Medicine.

Q: Tell us about your current research interests and the structure of your research program, including your university and department support.

A: The structure of my research program follows a similar model to that of the U.S., where faculty members have their own independent laboratory. In my, it's me and a research assistant working together. Our main focus is on studying the molecular aspects of Burkholderia pseudomallei—a dangerous bacterium that causes melioidosis, a severe infection. We specifically investigate two crucial virulence factors: BsaN, a transcription factor, and VgrG5, a secreted protein. To understand these factors better, we purify them from recombinant sources and study their properties in vitro.

Leveraging my background in RNA and protein research, we've also developed a rapid diagnostic method for melioidosis and other infections using CRISPR-Cas12a. This innovative tool enables us to quickly identify various tropical pathogens. It's a simple yet highly sensitive technique that rivals qPCR-based diagnostics.

Due to the size of my lab, we handle all aspects of our research ourselves. From conducting experiments and general lab duties to managing supplies, paperwork, grant writing, and publishing papers—we do it all. This is a common practice in many Thai laboratories, due to the size and limited funding. Some well-funded principal investigators (PI) are able to hire postdoctoral researchers or office assistants, but that's not the case for us.

One challenge we face is the declining number of graduate students in our department and university as a whole. Graduate students are a valuable asset to our research program, and their participation and contributions are essential. However, the decreasing enrollment puts additional pressure on a PI like me and impacts the overall research dynamics within our department.

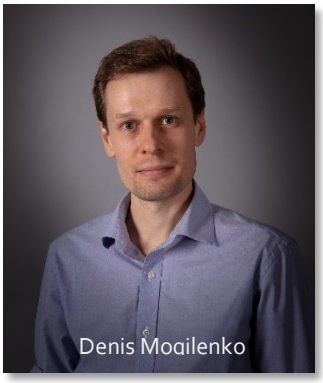
Q Tell us about the academic track in Thailand - how are the universities set up, how does tenure work, how does funding work, and what are your teaching responsibilities like?

A: In Thailand, the academic track differs from the system in the U.S. Typically, a new PI starts as an instructor and progresses through the ranks of assistant professor, associate professor, and full professor. In the past, many major universities in Thailand were government-funded, and employees were considered civil service officers, enjoying lifelong tenure from the start of their employment. However, with most universities now operating with limited government funding, tenure is only granted to full professors. As a result, every 5 years or so, academics are required to apply for promotion and if the promotion is not achieved by year 7, the position may be terminated. This creates significant pressure, particularly for new PIs who are in the process of establishing their academic careers.

Regarding support, young PIs in Thailand generally receive limited assistance from the universities. While obtaining research grants in Thailand is comparatively easier than in the U.S., the funding amounts are significantly smaller and come with various constraints. These constraints may include signing a contract committing to publish a paper, mandatory collaborations or research cluster formation, and limited project duration. For instance, my first grant of $20,600 required the completion of a project within one year, with a published paper as a deliverable.

In addition to research responsibilities, teaching plays a significant role for PIs in Thailand. We are required to teach every semester, although the number of teaching hours may vary. Alongside teaching, we are responsible for managing classes, supervising exams and labs, grading papers, and handling other administrative tasks, as support personnel and teaching assistants are limited.

New Faculty Aspirations and Challenges: An Interview with Denis Mogilenko


Denis Mogilenko

In this volume of the iSLB, Henrique Serezani interviews a newly hired assistant professor to learn the aspirations and challenges of new faculty in biomedical sciences. Denis Mogilenko, Ph.D. joined the Department of Medicine, Division of Rheumatology and Immunology faculty at Vanderbilt University Medical Center (VUMC). Dr. Mogilenko is an expert in immunometabolism and systems immunology. He did two postdocs focused on immune responses affected by preexisting conditions, such as obesity and aging.

Q: Why did you choose VUMC?

A: My dream was to start a lab in a research-intensive university focusing on biomedical sciences. When I visited VUMC, I was excited to see the collaborative environment that deeply resonated with my plans to develop an interdisciplinary program that connects different areas of immunology, metabolism, and aging biology. I also liked to learn from the faculty and trainees that they feel welcomed and supported at VUMC.

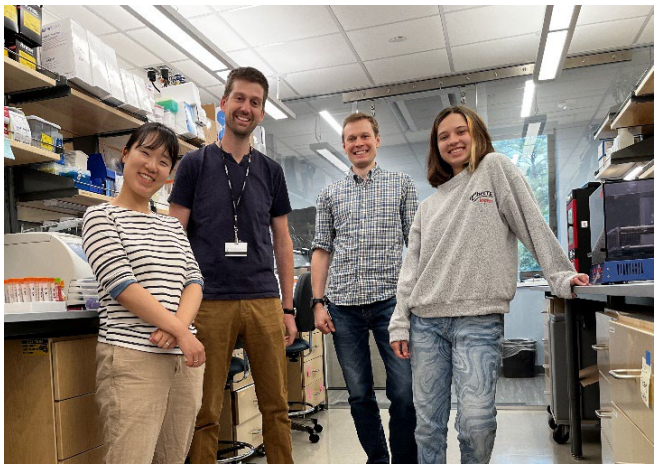
Q: What is the vision of your lab?

A: My lab combines experimental and computational approaches to understand how obesity and aging dysregulate immune responses and drive co-morbidities. We know that immune cells are sensitive to their metabolic environment, which affects immune functions. However, we still need to learn more about how the metabolism of immune cells triggers their malfunctions in overweight and older individuals. Our lab is an interdisciplinary space focused on molecular mechanisms connecting metabolic and old environments to immune cell functions. I hope to build a diverse team of immunologists and computational biologists working together and collaborating with basic and clinical researchers to answer these questions.

Q: Do you feel you have the support to make you successful?

A: I started my lab in October 2022. Even before I joined the faculty, I was introduced to many resources at VUMC that are helpful for new faculty. I am incredibly grateful for support from the Director of the Division of Rheumatology & Immunology, Dr. Leslie Crofford, and the Director of Vanderbilt Center for Immunobiology, Dr. Jeff Rathmell, and many other members of VUMC, who helped me to start my lab. I feel welcomed by faculty and staff, who are always happy to help and collaborate.

Q: What is your research program? What excites you?



A: Our research focuses on how obesity and aging reshape immune responses and lead to diseases. I am excited by the complexity of the immune system and its deep integration with other biological systems of the body, such as metabolism and tissue environment. To understand this complexity, we use the systems immunology approach – a way to learn fundamental biological mechanisms encoded in the structure and behavior of multimodal systems of immune cells. Our particular focus is currently on the immunometabolism of dendritic cells and T cells. We are interested in finding molecular mechanisms connecting immunology and metabolism in inflammatory diseases and tumors in aging and obesity.

Q: What are your short-term and long-term goals?

A: My short-term goal is to build a great team and start productive and fun collaborations. My long-term goal is to ensure it stays that way, so we can make exciting discoveries to understand better the mechanisms of immune dysfunctions in overweight and older individuals.

Q: Did you have any specific strategy to build your lab up?

A: I was privileged to learn from fantastic scientists at the French National Institute of Health and Medical Research (INSERM) and Washington University in St. Louis, including my mentors and colleagues. My strategy for building my lab is trying to replicate and adapt what I learned worked best in those environments and create a healthy and welcoming culture in my lab. However, each lab is unique, so my primary approach is to stay flexible and learn from my mentees and colleagues how to improve and make my lab a better place.

Q: Any advice for postdocs trying to get a faculty position?

A: Every path to a faculty role differs, so giving general advice is hard. I learned that almost nothing worked as expected during my faculty search time. My best advice is to embrace the chaos and keep your mind and options open.

FASEB CORNER

SLB joined FASEB – the nation's largest coalition of biomedical researchers, representing 26 scientific societies – in 2019. FASEB Corner is a regular feature providing updates on recent initiatives that demonstrate the Federation's dedication to its member societies.

Advocating on Behalf of Biomedical Research – FASEB's annual Capitol Hill Day returned to an in-person event for the first time since 2019. 45 scientists completed 75 meetings with House and Senate offices covering 27 states and 25 FASEB member societies. SLB was represented by Lee-Ann Allen and Nick Lukacs. Researchers emphasized that the biomedical enterprise is a multidisciplinary team-based effort that requires steady and sustainable funding year after year and urged legislators to provide significant funding increases for NIH and NSF in fiscal year 2024. FASEB also released updated fact sheets showing how much funding each state receives from federal research agencies.

New Animal Research Activism Report – FASEB issued a new report with the National Association for Biomedical Research, the Foundation for Biomedical Research, and Americans for Medical Progress that explores the evolving threat of animal rights activism on the biomedical research enterprise. By educating stakeholders about the ways animal rights groups discourage support for research, the report, Animal Research Activism: Update and Recommendations to Promote Communication, Transparency, and Public Outreach About Animal Research, shares how the community can work together to improve communication and openness about animal research.

Science Policy Round-Up – The FASEB Science Policy Committee (SPC) had a busy second quarter responding to a variety of topics including:

- NIH's Public Access Plan – submitted comments to a Request for Information (RFI) seeking stakeholder input on the agency's plan to enhance public access to the research resulting from NIH grants in response to the August 2022 memorandum issued by the White House Office of Science and Technology Policy to ensure free, immediate, and equitable access to federally funded research
- Improving Postdoc Training – submitted comments to NIH in response to its request for information (RFI) on re-envisioning U.S. postdoctoral research training and career progression within the biomedical research enterprise. FASEB emphasized that postdoctoral positions should be short-term, defined, and lead to independence in the chosen career
- Fellowship Review Criteria – submitted a response to a NIH request for information on recommendations for improving Ruth L. Kirschstein National Research Service Award (NRSA) fellowship application review

Early Career Task Force Report – A new report from FASEB details how scientific societies can better support early-career scientists and actively engage them in society activities. "Early Career Representative Engagement Task Force: Final Report and Recommendations" includes recommendations on offering networking and mentoring programs, facilitating career exploration and career transition readiness, promoting safe and inclusive environments, supporting international students in the U.S., and improving society structure and governance.
Additional information on FASEB's support for current scientists and the next generation of researchers can be found here.

New FASEB Advocacy Fellowship Accepting Applications – It is increasingly important for scientists to engage directly with elected representatives, policymakers, and the broader public. Skills development in this area is rarely included in graduate school curricula. To fill in this gap, the Howard Garrison Advocacy Fellowship will offer researchers at all career stages a cohort model experience that provides instruction and experience in advocacy, science policy, science communications, leadership development, and career exploration outside academia. Howard Garrison Fellows will engage in approximately 60 hours of virtual content and curriculum in addition to participating in FASEB's 2023 Science Policy Symposium and 2024 Capitol Hill Day in Washington, DC (travel costs will be covered by FASEB). The fellowship will begin in September 2023 and conclude in June 2024. Fellows who successfully meet the program's minimum time and participation commitment will receive a certificate of completion. Members of SLB working and/or studying in the United States can apply for the HGA Fellowship online. Applications are due by July 17, 2023. FASEB highly encourages applications from individuals from historically underrepresented groups within the life sciences community. Additional information, including a list of FAQs and the program schedule, is also available.

DEI Networking Event @ SLB 2023

The SLB Diversity, Equity, and Inclusion (DEI) committee looks forward to meeting you at the SLB Annual Meeting in Athens, Georgia, USA. We are hosting tables for open-ended breakfast-time discussions from 8-9 am on Friday, September 29, 2023. The DEI committee encourages members participate, build networks, and share advice and thoughts about not only DEI issues, but also careers, professional development, work/life balance, and/or various leukocyte-centric topics. We'll get Friday off to a great start with this low-pressure, laid-back opportunity to bounce around ideas and make new friends, all while getting revved up with some breakfast and coffee!

Behind the Science: An Interview with a JLB Author

by Alan Hsu

Read the full article in JLB

Selenoprotein I Deficiency in T Cells Promotes Differentiation into Tolerant Phenotypes While Decreasing Th17 Pathology

Chi Ma, FuKun W Hoffmann, Lance G Nunes, Frank Urena, Anastasia Andrukhiv, Mariana Gerschenson, Matthew W Pitts, Peter R Hoffmann

Contact Chi to learn about her work...

Q: Where did your journey in science begin (what inspired you to pursue a career in science)?

A: My journey in science began when I was a teenager, during a difficult time when my father developed hepatitis, which later progressed to liver cancer. Three years later, he passed away. At that time, my mother, who is a doctor, explored every possible solution, from traditional medicine to modern medical methods, in search of a solution to help my father. However, during the 80s, the only available medicine she could find was interferon, which unfortunately did not halt the progression of the disease, also caused severe side effects that my father could not bear.

Witnessing my father's immense suffering and feeling utterly powerless to change the situation had a profound impact on me. It was during this time that I began contemplating how I could make a difference and find alternative ways to treat such diseases. Even if a cure was not feasible, I wanted to provide more options and possibilities for patients to explore and try. This experience ignited my passion for science and motivated me to pursue a career in the field.

Q: How did you choose your current research topic and interest?

A: When I joined the lab, Dr. Hoffmann had been dedicated to researching selenoproteins for decades. Selenoproteins are proteins that contain selenium (Se), an essential nutritional trace mineral with various implications for human health. Selenium exerts its effects primarily through its incorporation into selenoproteins as the amino acid selenocysteine. In humans, twenty-five selenoprotein genes have been identified, and several of these selenoproteins are categorized as antioxidant enzymes, playing a crucial role in our normal physiological processes. The incorporation of selenium into selenocysteine, although a seemingly minor change compared to cysteine, significantly enhances the enzymatic activity involved in antioxidation.

When I first encountered this field of research, it felt as if a whole new world had opened up before me. The remarkable impact of selenium and selenoproteins on cellular processes and their potential therapeutic applications fascinated me, and I became deeply interested in exploring this area further. The opportunity to contribute to the understanding of selenoproteins and their importance in human health motivated me to choose this as my current research topic and area of interest.

Q: Could you use a few lay sentences to describe/summarize your findings in this paper?

A: In our research, we focused on a unique selenoprotein called SELENOI, which is involved in regulation of our immune system, especially a type of immune cells called T cells. We studied different types of T cells, specifically Th17 cells and Treg cells. Th17 cells are important for fighting certain bacteria and fungi but can also cause problems in autoimmune diseases like rheumatoid arthritis and multiple sclerosis (MS). On the other hand, Treg cells help to control the immune response and maintain a balance, countering the effects of Th17 cells to protect against autoimmune disorders. Our research showed that when we activated T cells, SELENOI played a role in directing them towards the Treg subtype and away from the Th17 subtype. We also found that mice without SELENOI in their T cells were protected from an MS-like disease in the lab. This suggests that targeting SELENOI in T cells could be a potential approach for treating MS. Although there are challenges in interfering with SELENOI activity to influence the balance of Th17 and Treg cells, it could offer a new way to develop cell-based therapies for autoimmune disorders like MS. This research opens up possibilities for developing strategies to treat diseases, including autoimmune disorders, by regulating T cell metabolism and optimizing the immune response.

Q: What was the most exciting or memorable moment(s) during the process of this research?

A: The most exciting and memorable moment for us was when we discovered that by manipulating SELENOI, the severity of the MS-like disease significantly decreased. Realizing the potential application of this finding and how it could potentially benefit numerous patients filled us with great excitement. The entire team was overjoyed and thrilled by this breakthrough.

Q: Besides your PI is there anyone that significantly helped on your path to become a scientist?

A: When reflecting on my journey, I realized that I have received significant help from many individuals who played crucial roles in shaping my career. Among them, I would like to highlight the influence of my mother. Being a doctor herself, she instilled in me the belief that science was the right path for me. From a young age, our conversations often revolved around her patients and the efforts she made to improve their lives. She shared stories of patients she could help and those for whom the disease had progressed too far. I witnessed her unwavering dedication to caring for each patient and her relentless pursuit of finding more effective treatments.

Whenever I encountered difficulties along my own scientific path, I drew inspiration from my mother's commitment and her desire to expand the available treatment options. Thinking of her has always been a source of encouragement, motivating me to persevere and continue on this journey. I am grateful for her guidance and the profound impact she has had on my development as a scientist.

Q: What would your advice be for junior or incoming Ph.D. Students who want to pursue a career in science and perhaps your field?

A: The first thing that comes to mind is finding your passion. Take your time to explore different areas within your field of interest and discover the specific topics or research questions that genuinely spark your curiosity and enthusiasm. Passion will serve as the driving force behind your motivation and assist you in overcoming challenges along the way.

The second advice is to train yourself in scientific critical thinking and problem-solving skills. Science involves continually questioning key aspects and seeking answers. Develop your critical thinking abilities by discerning which questions are more crucial and refine your problem-solving skills to identify appropriate approaches for solving them. Don't let the multitude of questions and potential answers overwhelm you.

The third piece of advice is to be prepared for lifelong learning. Science is a field that constantly evolves, and it's crucial to maintain a sense of curiosity and openness to new ideas and perspectives. Seek opportunities for continuous professional development and growth throughout your career.

I hope that each of you can make a positive impact in your chosen field.

Webinar Reviews:

Neutrophil talk by Dr Michael Schnoor

Originally broadcast on May 21st and organized by the MTTC

The Neutrophil talk titled "Neutrophil extravasation requires endothelial cortactin degradation by neutrophil serine proteases" was delivered by the incoming Editor-in-Chief of the Journal of Leukocyte Biology, Dr Michael Schnoor. Dr Schnoor showed some recent findings in his lab that focusses on understanding the molecular mechanisms regulated by actin-binding proteins under inflammatory conditions. Specifically, Michael showed in his talk that during neutrophil recruitment, proteases referred to as neutrophil serine proteases (NSP) are released by the neutrophils onto endothelial cells. These NSP are then internalized by the endothelial cells via a yet unknown mechanism. Additionally, he explained that NSP are able to recognize and degrade cortactin in the cytosol and at the cell junctions. Subsequently, the loss of the actin-binding protein cortactin increases actomyosin contractility allowing the opening of endothelial contacts. In an interesting twist, a second pool of cortactin interacting with ICAM-1 are protected from degradation and hence supports the neutrophil-endothelial interactions for extravasation to occur. Watch the on-demand video (*member login required*).

Life Beyond Academia: Career webinar with Daniela Cipolletta and Ramya Ganesan

Originally broadcast on April 20th and organized by the MTTC

A career webinar hosted two professionals from industry sharing their experiences and how they navigated their careers. Dr. Cipolletta, who has been in the biopharmaceutical and biotech industry for over a decade shared how she was always inclined to a career in industry from her graduate days, while Dr. Ganesan who is new to industry shared what motivated her to make the jump. Dr. Cipolletta gave insight into the modus operandi for a biopharma vs a startup biotech company. She shared her experiences on how the lockdown in 2020 gave her the time to take a step back and determine what she really enjoyed about the different jobs she held and what she wanted for the next step of her career. On the other hand, Dr. Ganesan shared her professional experience in academia, what expertise she gained from there to find a job in industry. She also shared her thoughts on how the industry is a very fast paced work environment and that finding a position that is the right fit for you is the key to a successful career. The webinar was very interactive with several questions from the audience, who learned a lot about a career in industry from their interactions with Drs. Cipolletta and Ganesan. Watch the on-demand video (*member login required*).

Financial Management for the Lab

Originally broadcast on June 21st and organized by Kelley Cooper and Vijay Sai Josyula

You've just received your first funding award! .....Now what?

SLB's recent webinar on Financial Skills for Lab Management featured three panelists: Dr. Ilhem Messaoudi, PhD; Dr. Irving Coy Allen, PhD, MBA; and Dr. Elsa Bou Ghanem, PhD. Based on their own experiences, our panelists provided management strategies and tips for success in managing lab financials as a principal investigator.

Get to know the financial/grant management personnel in your department.

As scientists, we are not always trained to maneuver financial lingo, policies, and regulations. Develop and maintain a relationship with your internal financial personnel! All three of our panelists agree, institutional financial/grant management personnel are lifesavers when it comes to knowing the rules of your money, but YOU must take the initiative.

**Tip from the pros:* Set up regular meetings with them. Whether these are quarterly like Dr. Allen, or monthly like Dr. Messaoudi, these regular meetings can help keep up with exactly what's going on with your budget as it evolves over time.

**Tip from the pros:* Always know the start and end dates for your funding sources – some may run on a calendar year, while others follow

the fiscal year. Additionally, our panelists warn that some institutional regulations may halt your spending prior to the end of a fiscal year. The financial folks at your institution can help navigate this!

Have a plan.

Managing financials for a lab can be like running a small (non-profit) business. You must think strategically about where you want to be 1, 3, 5, 10 years in the future to help strategize where to spend money now, what grants to apply for in the future, personnel to bring in and when, etc. Dr. Allen recommends using a small business plan template (available online) to help with strategizing your budget. Additionally, tracking funds as they come in and expenditures with a living document can help keep track of your money as your lab grows and evolves over time. Our panelists agree that Excel spreadsheets work well for this; however, some institutions provide great tools for financial management and tracking. Don't be afraid to ask your friends in the financial office.

**Tip from the pros:* Tracking personnel costs can be tricky. Our panelists recommend taking personnel costs out up front when you receive an award, then you are left with a sum that can be allocated for equipment, reagents, etc.

**Tip from the pros:* Don't forget to budget for publication costs!

Consider the science first!

"It's easier to cut than to create" says Dr. Allen, so when strategizing and planning, start with the fun part, the science! What are your aims and major research questions? What experiments do you have planned to address your research questions? Once you have a scientific strategy, then strategize with your budget and determine if all your science will fit within it. Be realistic! You may have to opt for an alternative (cheaper) strategy for some experiments to fit budget constraints or cut some things to include in subsequent proposals.

Other factors to consider include your personal strengths and the size of your lab. Do you have experience with some of the proposed experimental techniques? Do you have the manpower to complete the proposed work, or would you need funds to support additional personnel? Dr. Messaoudi recommends taking all of this into consideration when budgeting.

**Tip from the pros:* Avoid one of the most common mistakes – under/over budgeting. It's a balancing act! To help avoid underbudgeting, look at the current cost of performing your proposed experiments and account for increasing prices over time. On the other hand, be realistic in the science and budget you are proposing and don't overreach in your budget.

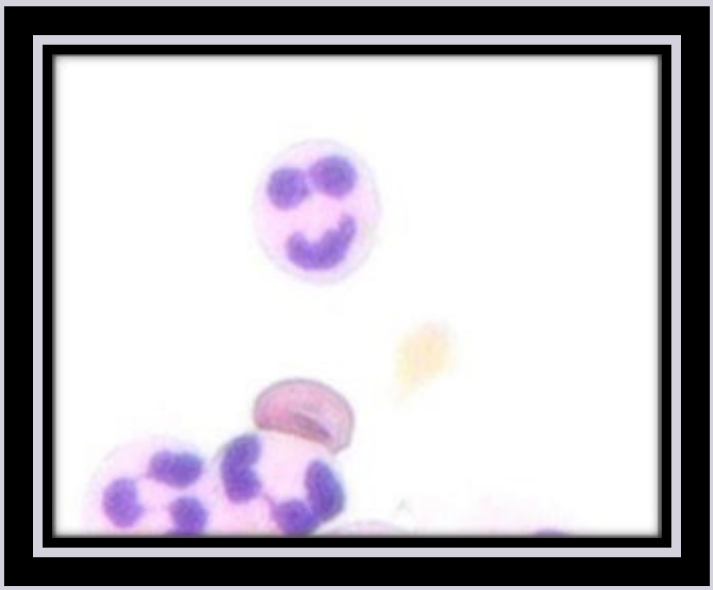
**Tip from the pros:* Dr. Bou Ghanem says that when starting your lab, it may make sense to find a collaborator who has more experience on the experimental techniques you are proposing. Setting up a collaboration and submitting a proposal as co-PIs can help to get experiments going.

In addition to these tips, our panelists shared some things that surprised them, so that up-and-coming PIs are prepared when starting their labs. When strategizing about your lab finances, keep the following in mind:

1) The *actual* cost of personnel. It's more than just salary! Consider additional personnel-related costs such as cost of health benefits for your lab personnel, as well as tuition and class fees for students.
2) Strategizing and planning a budget takes TIME! Our panelists recommend dedicating at least a week, if not more (especially if it is one of your first grant proposals), to planning your budget.
3) Don't underestimate the amount of time it will take to receive the funds you are awarded. Grant review, re-submissions, release of funds, it all may take longer than you expect! Make sure to plan grant submissions ahead of when you will need the funding.

Keep these tips in mind so you can make the most of your hard-earned funding!

A heartfelt thank you to each of our panelists for their participation in this webinar! Check out the recording on-demand.



SLB's Annual Image Contest

Thank you to our members who participated in the annual SLB Image Contest in celebration of the International Day of Immunology. Congratulations to our first place winner, Carol Gardner and her image titled "Hey PMN - Smile, you're on candid camera". Look for another opportunity in our annual image contest next April, 2024.

2023 SLB Elections

SLB is your society. This year, the membership will elect a new President Elect, Secretary, and 2 Councilors. Review the candidates, learn why they want to serve, and look for your invitation to vote in August!

For the Office of President Elect (1 position)

Cynthia Leifer

Full Bio

I have been an active member of SLB since I joined in 2015. I immediately joined the membership committee and then while I was chair of the committee, we implemented initiatives that resulted in a nearly 20% increase in membership. Later, as a member of the 2017 SLB task force, I assisted in developing programs to continue to grow and benefit our diverse membership and creating a plan to keep the society financially sound. I transitioned from the chair of the membership committee to a member of the SLB council where I have continued to contribute to the effective running of the society during especially challenging times that included a transition in the journal's publisher, a change in the journal's editor-in-chief, and a pandemic. I am also a member of the Nominations and Awards committee and was involved in the restructuring and renaming of our major research awards given at the annual meeting, which I regularly attend. I present my lab's research at the meeting, but I also actively participate in the other workshops and activities. For example, I was a panelist at a workshop on science communication and even helped organize a plenary session where we recorded my podcast, Immune, in front of a live SLB audience in 2022. I am excited to give back to this community of amazing collegial scientists that has provided so much support, networking, and has recognized my research. I am Dolph Adams Award recipient, and my students are recipients of excellence in research travel awards. Through all of these experiences, I feel that I have gained extensive insight about the many components of the society and thus believe I have the knowledge and passion that make me qualified to be president elect. As president elect, I would continue to support the many activities that have benefitted me as a member of SLB but would also encourage creative growth in new directions to adapt to changing science and provide the best support for our current membership. These include:

1. Providing fiscally responsible input for key decisions.
2. Encouraging inclusiveness both within our membership and by expanding our membership and increasing opportunities for researchers around the world.
3. Encouraging development of opportunities for SLB to become more active in science communication and in lobbying for science and science funding, for example, through our partnership with FASEB.
4. Supporting initiatives for trainees that provide allow development in their current training as well as prepare them for careers in biomedical science, in both academic and non-academic positions.
5. Encouraging creative ideas that address issues that will affect the society in the coming years including the impact of open access publishing and new AI programs like ChatGPT on our members and our society journal.

Late breaking abstracts in ALL TOPICS accepted from July 17th to August 4th

For the Office of President Elect *continued* (1 position)

Ilhem Messaoudi

Full Bio

I am humbled and honored by the opportunity to be considered for the position of president elect for the Society for Leukocyte Biology (SLB). I have been a member of SLB since 2012 when Dr. Liz Kovacs, a wonderful mentor and sponsor, invited me to present our findings at the ARIG meeting that was held in conjunction with the SLB meeting in Hawaii. I was overwhelmed by the collegiality, the ease of networking, and the warm welcome I received from the SLB family. The friendships I formed that year are still growing deeper a decade later. For the past ten years, I have stayed involved with SLB as a council member, program chair for 2020 meeting with Dr. Justement, membership on the Women and Diversity committee (now called DEI committee), and JLB editorial board. These activities have made me appreciate areas of SLB excellence as well as opportunities for further growth. I am grateful for the valuable role SLB has played in my career and I am eager for the opportunity to give back to the society that has done so much for me and my research group over the years. If chosen, I will ensure that SLB continues to play a key role in keeping leukocyte biology a vibrant and exciting discipline while expanding the scope of our Society in community outreach, mentoring, networking, DEIA, and partnerships with the pharmaceutical industry as outlined below:

1. Promoting excellence in research focused on the role of leukocytes: I will work with Council Members, JLB Editorial Board Members, and Program Chairs to ensure that our annual meeting and society journal continue to feature cutting edge research in a wide array of topics, from basic fundamental research to translational/clinical work, conducted by a diverse group of investigators.
2. Promoting the study of leukocyte biology by young investigators: One of the cornerstones of SLB is the support of trainees and early-stage investigators. I will build on and promote the excellent initiatives that SLB has already undertaken to expand access to trainees such as the formation of and investment in the Members in Training and Transition Committee (MTTC) and the recent introduction of a deeply discounted undergraduate registration fee to strengthen the pipeline for developing a diverse pool of talented young investigators. I will also champion initiatives aimed at increasing engagement amongst early-stage investigators such as webinars focused on securing career development awards, navigating job searches (interviews, negotiations) and the ever-changing landscape of higher education institutions.
3. Promoting a safe environment for inclusive excellence: I will work to uphold and expand the culture of belonging that is already a trademark of SLB to give every member an equitable opportunity to grow and thrive in our community. I will continue our strong tradition of mindful and purposeful work to increase diversity, equity, inclusion, and accessibility. Some of the initiatives I would champion are building/strengthening partnerships with Hispanic serving institutions and Historically Black Colleges and Universities to increase participation in the annual meeting and submissions to our society journal; joining forces with initiatives such as Black in Immuno; celebrating heritage months (e.g., Women's history/ Pride/ Arab American/Asian American, etc.).
4. Increasing outreach and involvement with science policy: The COVID-19 pandemic followed by the unprecedented Mpox outbreak, and the resurgence of polio and measles have served as a stark reminder of the consequences that arise when science-driven policy is overshadowed by dis-information and mistrust of science. SLB has a critical role to play in restoring public's faith in science and promoting the importance of research in immunology and infectious diseases. This goal can be achieved with partnering with sister societies working towards the same goals, notably FASEB, ASM and AAI.
5. Growing collaboration with biotechnology: building on the wonderful concept of "acapreneurial environment" coined by Dr. Butts, I will work to increase interactions and partnerships with biotech and pharmaceutical companies to stimulate discussions that can increase engagement in translational research and bench to bedside collaborations by our members.

These initiatives will be carried out while continuing to grow SLB membership both nationally and internationally, deepening our collaborations with other immunology societies in multiple continents, an initiative first launched by Dr. Montaner as EiC of JLB.

In summary, I have the passion and the knowledge to help SLB grow in new and exciting directions while upholding its current ideals and would be honored to give back to the society that has given all of us so much.

PostDoc Resources

Through SLB's partnership with the National Postdoctoral Association, we are pleased to bring your attention to various resources made available by this great organization. Learn more.

For the Office of Secretary (1 position)

Claire Doerschuk

Full Bio

The Society of Leukocyte Biology is an important professional society that serves many purposes, including to dispense scientific information, to offer platforms for discussion and collaboration, to provide an outstanding journal that is continually gaining in growth and impact, and to offer opportunities for young scientists to present their work, to meet other scientists, and to interact with outstanding leukocyte biologists. I have been a member for decades and very much appreciate the goals of this Society. I am very committed to the training of young scientists and have served as PI of training grants (including a T32 award presently), K12 awards and all types of individual K awards. The COVID-19 pandemic did provide us with new ways of connecting, and we are presently in an interesting time of determining which of these are here to stay and how to make them work most effectively. My previous experience on the Council for four years provided familiarity with most of the infrastructure of the Society and the roles of each leadership position. I have never served as secretary for a scientific society, but have for several non-profits. I would be honored to do this for the SLB. My goals will be to contribute to enhancing the health of the Society, in part through:

1. Providing opportunities for young scientists to learn about academic and biotech career opportunities and to see how they might fit.
2. Increasing communication with departments of immunology and other relevant disciplines to increase membership but importantly, also to provide the opportunities for their students that they feel are missing.
3. Developing translational research and translational science, including opportunities to learn about and become involved in technologies that bridge the gap between basic and clinical investigation.
4. Working toward eliminating racial, socioeconomic and accessibility biases in our programs, meeting and conferences, and

Darren Lee

Full Bio

Darren has been a member of SLB since 2013 and attended every meeting since then. From his first SLB meeting Darren has established collaborations and networked amongst immunologists from all around the world. He immediately joined the website committee and assisted with the organization of the new website in 2014. As Chair of the website committee he was able to encourage the implementation of Whova, the conference app, and accomplish another redesign of the website, so understands the importance for SLB to have a virtual presence and how to lobby for the implementation of new technologies. He has also had the opportunity as a Program co-chair of the 2018 meeting to plan and organize the annual meeting in Chandler, Arizona, so understands the mechanics of putting together a meeting.

As Secretary for SLB he would like to accomplish several goals. First, to help with the continued growth of SLB membership and meeting attendance. Second, to expand his knowledge about the decision-making process that goes into SLB. Finally, he would like to assist in promoting the Society at local, national, and international levels.

ICYMI

See the top 10 JLB downloads for the first half of 2023 HERE.

For the Office of Councilor (2 positions)

Jadwiga Jablonska

Full Bio

I believe that the long-term successful research can only be sustained by the intensive promotion of young scientists. Having held research and non-research positions in academia, and looking back at my immigrant background, I also appreciate the value of diversity and see a tremendous opportunity in the exchange of knowledge and values across diverse partners to drive science forward. Moreover, as women continue to be severely underrepresented in science and medicine, which is particularly noticeable at later career stages, I found it of extreme importance to offer mentoring and practical guidance to female young scientist and clinicians. Being a member of SLB Membership Committee made me realize that our community would strongly benefit from attracting young scientist and from expanding in order to support exchange of knowledge and to foster scientific cooperation and diversity.

As a member of the SLB Council, I would focus on the support of young scientific community, diversity and equal career opportunities in science, and more creative educational and funding approaches; as outlined in the following:

1. Providing a supportive environment for young scientist in terms of training and funding, with special emphasis on the diversity and inclusion.
2. Expanding our scientific community to support efficient exchange of knowledge.
3. Develop strategies for better cooperation between scientists and clinicians, to encourage cooperation and to expose scientists from different environments to opportunities beyond their niche.

I believe it will be important to foster more scientific diversity and to develop innovative approaches to attract and support young scientist, and that SLB provides the perfect environment for it.

Matt Lawrenz

Full Bio

I attended my first Society for Leukocyte Biology (SLB) Annual Meeting in 2018. At that time, research in my lab was transitioning into investigating infectious disease in the context of direct interactions with the host immune system, after many years of studying bacterial pathogenesis solely from the microbe's perspective. I found the SLB community very welcoming, and I appreciated the willingness of long-time SLB members to provide constructive feedback to improve my lab's new forays into leukocyte research. Since then, my mentees and I have benefitted enormously from our SLB membership by becoming more embedded in the leukocyte research community through the annual meeting, career development workshops, and networking opportunities with leaders in the field. I have seen first-hand how these resources help guide and energize trainees to prepare them for their own careers in leukocyte research.

As a member of the SLB Council, I will work toward achieving four overall goals:

1. Continue to foster the Society's inclusionary environment;
2. Build and support career development opportunities for both trainees and junior faculty;
3. Bring my experiences serving on conference boards for other organizations to support the excellence of the SLB Annual Meeting by integrating new approaches to sustain membership and enthusiasm; and
4. Leverage my deep network of microbiologists to expand awareness of the Society and bridge the fields of infectious disease and leukocyte biology to build new opportunities for collaborative research.

Great Opportunity

Janssen Immunology is launching the Scholars of Immunology Diversity Engagement Program. Learn more and apply by August 15th.

For the Office of Councilor *continued* (2 positions)

Liwu Li

Full Bio

Being an active member of SLB in the last two decades, I can attest to the highly collegial community with supportive colleagues conducive for scientific exchange and career development of members at all stages. I would like to give back what the society has enriched me by serving on the council, and further promote the wellbeing of SLB community. With my extensive experience in leading an academic research team; directing an inter-disciplinary graduate program; promoting integrated education of undergraduates, graduates, and professional students; and presiding an industry-academic partnership society, I would be glad to bring to the SLB council team the following areas of interest.

1. To further promote supportive dialogues and interactions among scientists and trainees at all career stages starting at the undergraduate level, through additional venues of flexible and inclusive communications.
2. To expand scientific exchanges incorporating interdisciplinary themes that integrate computational and experimental expertise.
3. To bridge scientific discussions of translational medicine related to leukocyte biology and inflammatory diseases.
4. To facilitate integrated collaborations among data scientists and bench-side investigators to fully harness the potential of informatics in the better understanding of leukocyte biology.
5. To open doors for career development in diverse settings that include academic, industry R&D, and government agencies

Henrique Serezani

Full Bio

As an Associate Professor, I have been involved in mentoring trainees and faculty at different levels. I also have been offered leadership positions within my home department can relate to the struggles and excitements junior faculty are exposed to throughout their careers. I greatly advocate mentoring young PIs and helping postdocs find academic and non-academic jobs and develop successful research programs. My interest in assisting young investigators to become the best scientists can be noted by attending several career round tables in the AAI meetings and NHLBI K-R01 transition symposiums. And now as a standing member of a K and T32 award NIH study section. As an underrepresented (UR) scientist, I have been heavily committed to fostering the careers of UR trainees and faculty, and many of my former students are working in either academic or industry settings.

As a part of the SLB Council, my significant interests will be 1) in providing resources to boost postdoc guidance in applying for faculty positions and grant writing for junior faculty and trainees. 2) tailor strategies to help assistant professors successfully navigate different phases of their careers. With the help of senior faculty, we could also provide resources for recently promoted individuals to associate professors. 3) Specifically, work with UR junior faculty to help them understand the work environment and how-to best transit in academic and industry settings. 4) As a current communications committee chair, I want to keep helping SLB increase its outreach to the layperson population, iSLB newsletter, and expanding Twitter engagement.

I believe SLB is a magnet for junior investigators, and by investing in the early-career and UR scientists, we will further improve the SLB mission to "…provide support for career development…; 2) promote education in leukocyte biology to a wide variety of constituencies…" and 3) "to foster effective interactions among investigators" from different career stages.

iSLB

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SOCIETY FOR LEUKOCYTE BIOLOGY

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Meetings
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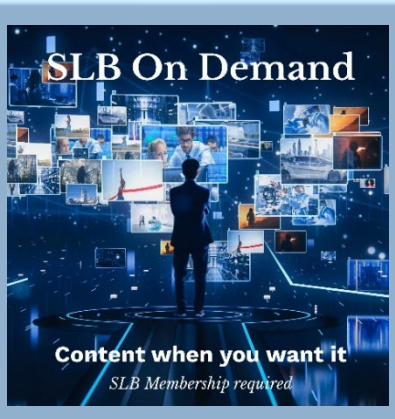

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