

% Welcome to the Spring Newsletter, FOCIS Members! 袋

We're thrilled to present the spring edition of our newsletter, brimming with captivating updates and exciting news from the FOCIS community.

In this edition, alongside our regular features, we are delighted to share highlights for the upcoming <u>FOCIS 2024 Annual Meeting</u>, where leaders and innovators will converge to explore groundbreaking advancements in immunology. From cuttingedge research presentations to insightful discussions, we'll bring you the pulse of this pivotal event shaping the future of our field.

Additionally, we're excited to showcase the latest news and achievements from our FCE Community. From remarkable research projects to award winners, we celebrate the spirit of collaboration and excellence that defines our collective efforts.

### Happy reading!

#### In this issue...

- FOCIS 2024 Registration Reminders
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# **FOCIS 2024 Registration Reminder!**

We are now only one month away from the <u>FOCIS 2024 Annual Meeting!</u> Don't miss out on your chance to attend THE meeting in translational immunology. Registration prices go up next month, and the hotel room block is filling up fast.



 Registration for the FOCIS 2024 Annual Meeting Closes on June 10, 2024!



 Discounted room rates are available until May 26, 2024 (or until the room block fills).

**Register Now** 

**Hotel Rates** 

# **FOCIS 2024 Program Inside Look!**

### **FOCIS 2024 Thematic Symposia:**

The full thematic symposia program is now available for you to preview! Below you will find the topics for each day, but you can review all of the speakers and individual presentation titles on our <u>program here!</u>

### Wednesday, June 19

- <u>Inborn Errors of</u> <u>Immunity</u>
- Immune Responses to GT/Therapeutics
- <u>Systems</u> <u>Immunology & Al</u>

### Thursday, June 20

- Organoid Modeling & Therapeutics
- <u>Cellular & Stem Cell</u> Therapeutics
- Host Defense and Vaccinology

### Friday, June 21

- Metabolic Regulation of Inflammation
- Immuno-oncology
- Behavioral Immunology and Neuroimmunology



Some of the speakers you can look forward to are <u>Helen Su, MD, Kei Kishimoto, PhD, Jose Ordovas-Montanes, PhD, Megan Levings, PhD, Linqi Zhang, PhD, and many more!</u>

### **FOCIS 2024 Oral Abstract Sessions:**

The oral abstract sessions have also been announced, check them out on our program here!

Wednesday, June 19

Oral Abstract Sessions 3:15 PM - 5:15 PM

- Immunogenetics
- Autoimmunity and Transplantation
- Late-Breaking Abstracts

Thursday, June 20

Oral Abstract Sessions 3:15 PM - 5:15 PM

- Immuno-oncology
- <u>Immunoengineering and</u> Therapeutics
- Immune Mechanisms

**View the Program** 

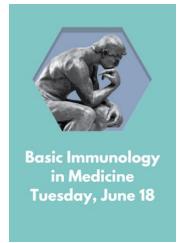
# **FOCIS Member Society Announcement**

FOCIS is proud to announce that we will be having 12 Member Society





2024 FOCISed Course Agendas - Now Available!



**Basic Immunology in Medicine:** A Review of Basic Immunology

- Tuesday, June 18, 2024, 8:00 am-5:15 pm
- San Francisco Marriott Marquis

This course emphasizes recent advances in the pathogenesis and treatment of immune-mediated diseases.

After the course, attendees will be able to:

- Describe the major advances in basic immunology most relevant to human diseases.
- Recognize the fundamental mechanisms underlying immunologic diseases and the commonality among diverse organ-specific disease states.
- Identify the basic principles underlying therapeutic modulation of the immune system, and the mechanisms of action of the major classes of immune modulators.

Learn more and view the program here>>

Register Here



### Big Data in Immunology: Agenda Announced

- Tuesday, June 18, 2024, 7:30 am-12:00 pm
- San Francisco Marriott Marquis

Are you interested in exploring public datasets? Or using shared immunology study results to further facilitate your research and gain insights into discoveries? Strengthen your funding requests? Want to develop analytical skills and hear from those who have done it?

The open-access ImmPort database provides publicly available clinical trial and immunology research datasets and bioinformatics tools for analyses. ImmPort is an NIAID-funded data repository created to share immunology-related research data with the scientific community. ImmPort currently shares over 900 studies with new data released monthly.

Attend the ImmPort workshop to hear from scientists who have published on repurposed data. Plus, attend a hands-on introduction to the ImmPort database and become familiar with mining the ImmPort data. Experts from the Immunology Database and Analysis Portal (ImmPort) will teach the workshop.

Click here to see the agenda and learning objectives>>

**Register Here** 

### **Enhanced Membership with FOCIS**

Have you been considering becoming a <u>FOCIS member</u>? Are you planning on attending the FOCIS 2024 Annual Meeting?

We've made it easy for you to do both with Enhanced Registration to the Annual Meeting. During the registration process simply choose the Enhanced Registration type and complete the registration form as normal.

Why Enhanced Registration?

Current FOCIS members have told us that a one-stop shopping experience for membership dues and Annual Meeting registration is always appreciated and makes the experience much more convenient.

Now, when registering for the Annual Meeting, individuals new to FOCIS have the option of joining FOCIS and paying both member dues and registration fees with one click.



We've combined both fees into one registration rate to make it easier for you to get started on your FOCIS journey!

Sign Up for Your Enhanced Registration

Just wait...it doesn't end there! You'll also enjoy additional savings throughout the year via discounted event registrations, complimentary abstract submissions, free career center postings, and more!

**Exciting News from the FOCIS FCE Community** 



Stay up to date with the latest news and updates from our FCEs! FOCIS FCE: Benaroya Research Institute

Researchers From Benaroya Research Institute and the University of Washington Discover New Gene, LITAF, That Provides Resistance To Pore-Forming Toxin-Induced Cell Death

In a recent publication featured in Science Immunology, entitled "LITAF Protects Against Pore-Forming Protein-Induced Cell Death by Promoting Membrane Repair." researchers from Benaroya Research Institute and the University of Washington found that endo-lysosomal protein LITAF is a mediator of cell resistance to poreforming toxins (PFTs). The research team, led by Adam Lacy-Hulbert, PhD, Caroline Stefani, PhD, and Lynda Stuart, MD, PhD, conducted a transposon-based mutagenesis screen to identify genes inducing resistance to the PFT alpha-toxin from Staphylococcus aureus. Among other targets, they identify the gene LITAF as necessary and sufficient to promote resistance to alpha-toxin as well as to other PFTs and proteins. The team demonstrated that the LITAF gene protects cells from pores by orchestrating the sequestration of the damaged membrane in intracellular vesicles and the expulsion of the pore from the cell via exosomes. They showed that LITAF interacts with the endosomal sorting complexes required for transport (ESCRT) to orchestrate the repair process in the multivesicular bodies, in a process distinct from the ESCRT-mediated repair mechanisms that act directly at the plasma membrane. In addition, they found that this repair mechanism is initiated by the sensing of potassium efflux at the plasma membrane via the activation of the ubiquitin ligase NEDD4. The BRI team plans to extend their studies of LITAF and other genes identified in this genetic screen to better understand how cells respond to damage caused by infection and immune attack and find ways to harness these responses to combat inflammation and autoimmunity.





**FOCIS FCE: Yale School of Medicine** 

Yale School of Medicine - Human and Translational Immunology Program Yale School of Medicine Recognitions:

David Martinez: Recipient of a 2024 AAI ASPIRE Award

Learn More >>

David Hafler: Named an AAI Distinguished Fellow

Learn More >>

**Prashanth Vallabhajosyula:** Has published a paper on a novel T-cell extracellular vesicle platform and its potential relevance in transplant organ rejection.

### **Abstract Summary:**

Allograft surveillance for acute rejection is a critical mainstay of post-transplant patient care, as acute rejection and its associated complications remain the principal drivers of morbidity and mortality in transplant patients. There remains a critical need for noninvasive biomarkers of acute rejection as surgical biopsy of the transplanted organ remains the gold standard for acute rejection monitoring. We proposed that extracellular vesicles released by T cells into the peripheral circulation would carry protein and RNA cargoes that would dynamically reflect acute rejection, and thus serve as a novel biomarker for allograft surveillance for rejection. In a rodent heart transplantation model of acute rejection, we demonstrated that changes in circulating T cell specific extracellular vesicle profiles enabled noninvasive detection of acute rejection with high diagnostic accuracy. Furthermore, T cell extracellular vesicle enriched from allogeneic transplant recipients mediated targeted cytotoxicity of donor cells, implicating a functional role for T cell extracellular vesicles in acute rejection. We successfully translated this novel T cell extracellular vesicle platform to the clinical setting and demonstrated that T cell extracellular vesicle profiles are dynamically altered during acute cellular rejection episodes in heart transplant

patients. Collectively, our findings suggest that T cell extracellular vesicle platform may serve as a novel biomarker platform for acute rejection monitoring.

#### Citation:

Korutla L, Hoffman JR, Rostami S, Hu R, Korutla V, Markmann C, Mullan C, Sotolongo A, Habertheuer A, Romano C, Acker M, Sen S, Agarwal D, Jayaraman A, Li B, Davis ME, Naji A, Vallabhajosyula P. Circulating T cell specific extracellular vesicle profiles in cardiac allograft acute cellular rejection. Am J Transplant. 2024 Mar;24(3):419-435. doi: 10.1016/j.ajt.2023.10.021. Epub 2023 Oct 30. PMID: 38295008.

Learn More >>

# FOCIS Highlights in Science Immunology

# Science Immunology

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FOCIS publishes exceptional and interesting immunological research articles in every *Science Immunology* issue. The free articles are published under the 'Editors' Choice' article category. Browse and read the recent Editors' Choice articles linked below.

Science Immunology is a monthly, online-only, peer-reviewed research journal designed to facilitate understanding of the immune system by showcasing innovative advances in the expanding field of immunology. It draws from studies in all organisms and model systems, including humans.

**Editors' Choice Articles** 

### **VOLUME 9 | ISSUE 92 | FEB JAN 2024**

### Throwing IL-1β for a loop

BY NOAH JACOBS, GABRIEL K. GRIFFIN

The IncRNA AMANZI exerts cis-regulatory control of IL-1β–mediated inflammation.

### Promoting (and targeting) alternative expression

BY ASHA PILLAI

Lineage-specific effects of upstream promoters affect ST2 expression and effector function in  $T_H1$  cells.

### **VOLUME 9 | ISSUE 93 | MAR 2024**

B cells on the brink
BY RACHAEL A. CLARK

Type 2–polarized memory B cells sustain food allergy and allergic rhinitis by rapidly differentiating into pathogenic IgE-producing plasma cells.

### An e-Xist-ential two-edged sword for women

BY ZHENRUI ZHANG, SHIV PILLAI

Xist-containing ribonucleoproteins drive autoimmunity in women.

### **VOLUME 9 | ISSUE 94 | APR 2024**

### Un-BAFFling gray matter pathology in multiple sclerosis

BY DANE FORD-ROSHON, ANDREW S. MENDIOLA

BAFF mediates the neuroprotective effects of B cell depletion therapy in multiple sclerosis.

### Mutations spike in a reservoir of compromised immunity

BY JUNGHWA SEO, DAVID R. MARTINEZ

The hierarchy of immunosuppression predicts SARS-CoV-2 time to clearance and intrahost viral evolution.

# FOCIS Upcoming Community Events IL-2 2024 PARIS

## **The Promise of Interleukin-2 Therapy**

Wednesday, September 4, 2024 – Saturday, September 7, 2024 International Conference Center at Sorbonne University

The 3<sup>rd</sup> edition of "The Promise of Interleukin-2 Therapy" will take place from September 4<sup>th</sup> to 7<sup>th</sup>, 2024, at the International Conference Center at Sorbonne University, located in the heart of Paris. Take advantage of the early bird registration: https://www.il-2-2024.com. The Organizing Committee would be delighted to receive your abstract which can be completed online: <a href="https://www.il-2-2024.com/abstract-submission.">https://www.il-2-2024.com/abstract-submission.</a> Please note that the deadline for abstract submission is June 15<sup>th</sup>, 2024.



# TTS 2024: The 30th International Congress of The Transplantation Society

Sunday, September 22, 2024 – Wednesday, September 25, 2024 The Istanbul Congress Center (ICC), Istanbul, Turkey.

Their inaugural lineup of Thematic Session speakers represents the forefront of transplantation research and practice. Engage with trailblazing minds, gain insights, and explore cutting-edge advancements in the field. Don't miss this unparalleled opportunity at TTS 2024! Find more information here: https://tts2024.org/



The Society for Immunotherapy of Cancer's 39th Annual Meeting and Pre-Conference Programs (SITC 2024)

Wednesday, November 6 – Sunday, November 10, 2024 Houston, Texas or Virtually

Advance the science and discover the latest breakthroughs while networking with international leaders at SITC 2024. Attendees gain access to scientific sessions led by experts during the premier conference in the field. Learn more: https://www.sitcancer.org/2024/home.

**FOCIS Related Events** 

# **FOCIS Career Opportunities**

Postdoctoral Fellow/Research Scientist Seattle, WA View Now>>

Supervisory Physician (Section Chief)
United States
View Now>>



Open Rank Faculty Search at the La Jolla Institute for Immunology United States
View Now>>

### **Funding Opportunities**

2024 Michelson Prizes: Next Generation Grant Opportunity

The Human Immunome Project (HIP) is supporting the next generation of innovators in human immunology in partnership with the <u>Michelson Medical Research</u> <u>Foundation</u>. The \$150,000 Michelson Prizes are awarded annually to support early-career investigators working to advance human immunology, vaccine discovery, and immunotherapy research for major global diseases. <u>Apply now</u>. The portal for the 2024 Michelson Prizes is open April 1, 2024-June 9, 2024.

**Learn More and Apply** 

Thank you for reading and supporting FOCIS as we advance immunology together!

