Linking Gut and Liver Inflammation

Meteorin-like Immunoregulator

Gasdermin D Promotes AIM2 Inflammasome Activation

A Different Fate for Leukemia

Curbing Colitis

Review: The Goldilocks Zone of Type I IFNs
IN THIS ISSUE

3477  Linking Gut and Liver Inflammation  See article p. 3558
Gasderrmin D Promotes AIM2 Inflammasome Activation  See article p. 3662
Meteorin-like Immunoregulator  See article p. 3669
Curbing Colitis  See article p. 3683
A Different Fate for Leukemia  See article p. 3759

BRIEF REVIEWS

3479  The Goldilocks Zone of Type I IFNs: Lessons from Human Genetics
Justin Taft and Duwan Bogunovic

CUTTING EDGE

3487  Cutting Edge: Transcriptional Profiling Reveals Multifunctional and Cytotoxic Antiviral Responses of Zika Virus–Specific CD8+ T Cells

3492  Cutting Edge: B Cells Expressing Cyclic Citrullinated Peptide–Specific Antigen Receptor Are Tolerized in Normal Conditions
Hisakazu Yamasaki, Tatsuhiko Osawa, Hiroshi Kikbi, Seiji Okada, Yasuharu Nakashima, Asochi Muraguchi, and Yasunori Yoshikai

3497  Cutting Edge: FHR-1 Binding Impairs Factor H–Mediated Complement Evasion by the Malaria Parasite Plasmodium falciparum
Timo Roto, Thana F. de A. Rosa, Katharina Blatinis, Rebecca P. Bobbey, Peter F. Zapfel, Christine Sherka, and Gabriele Pradel

On the cover: Pocket 4 of HLA-DRB4*01:01 with anchor residue Gln (space-filling). DRB4 residues are in stick form with transparent surfaces colored according to atom charge. This pocket is quite restrictive (favoring Gln/Glu), but in one scenario accepts Thr, allowing presentation of a unique proinsulin epitope. James, E. A., L. Gillette, I. Durinovic-Bello, C. Speake, G. P. Bondinas, A. K. Moustakas, C. J. Greenspan, G. K. Papadopoulos, and W. W. Kwok. 2018. DRB4*01:01 has a distinct motif and presents a proinsulin epitope that is recognized in subjects with type 1 diabetes. J. Immunol. 201: 3524–3533.
ALLERGY AND OTHER HYPERSENSITIVITIES

3503 TLR-7 Stress Signaling in Differentiating and Mature Eosinophils Is Mediated by the Prolyl Isomerase Pin1
Zhong-Jian Shen, Jie Hu, Venkatesh Kashi, Yury A. Bechkov, James E. Gern, and James S. Malter

AUTOIMMUNITY

3514 Blocking Matrix Metalloproteinase-9 Abrogates Collagen-Induced Arthritis via Inhibiting Dendritic Cell Migration
Juan He, Xing Li, Jian Zhuang, Juanochan Han, Guishu Luo, Fangjuan Yang, Yan Sun, Fan Liao, Yaping Han, Yi Ho, Hui Shi, and Ercui Sun

3524 DRB4*01:01 Has a Distinct Motif and Presents a Proinsulin Epitope That Is Recognized in Subjects with Type 1 Diabetes
Eddie A. James, Laurel Gillette, Ivana Durinovic-Bello, Cate Speake, George P. Baddoo, Antoni M. Mustakas, Carl I. Greenbaum, George K. Papadopoulos, and William W. Kwok

CLINICAL AND HUMAN IMMUNOLOGY

3534 Placenta Specific 8 Suppresses IL-18 Production through Regulation of Autophagy and Is Associated with Adult Still Disease
Seiji Segawa, Yuya Kondo, Yuki Nakai, Akira Izaka, Shunta Kaneko, Masahiro Yokosawa, Katana Furuyama, Hiroto Tsukai, Delinke Goto, Ito Matsunaga, and Takeyuki Sunida

3546 Surveillance of Myelodysplastic Syndrome via Migration Analyses of Blood Neutrophils: A Potential Prognostic Tool
Marc Schuster, Mischa Muller, Lea Bornemann, Clara Besen, Charlyn Soyes, Saskia Schmitz, Laura Witjes, Katja Knuthoff, Christina Kohn, Olga Jast, Andrea Kändgen, Norren Pardis, Benedikt Felser, Christophe Ampe, Marleen Van Trayn, Astrid Nusch, Raizer Haas, Ulrich Gemming, Lennart Martens, Karl-Heinz Jüchel, and Matthias Gunzer

IMMUNE REGULATION

3558 Colitis Promotes a Pathological Condition of the Liver in the Absence of Foxp3+ Regulatory T Cells
Franziska Mathies, Nikola Seifens, Doerte Kleinschmidt, Friederike Stohlfamm, Francis J. Huber, Ursula Rey, Thomas Meyer, Marc Luegeheinmann, Mareike von Petersdorff, Oliver Seix, Johannes Herkel, Christoph Schramm, Richard A. Flavell, Nicola Gagliani, Christian Krebs, Ulf Panzer, Zeinab Abdullah, Till Strewing, Tanja Baek, and Samuel Huber

3569 Nonredundant Roles of IL-21 and IL-4 in the Phased Initiation of Germinal Center B Cells and Subsequent Self-Renewal Transitions
David G. Gonzalez, Christine M. Cote, Jaymin R. Patel, Colin B. Smith, Yauqi Zhang, Kevin M. Nickerson, Tingting Zhang, Steven M. Kerfoot, and Ann M. Haberman

IMMUNE SYSTEM DEVELOPMENT

3580 Essential Role of Canonical NF-kB Activity in the Development of Stromal Cell Subsets in Secondary Lymphoid Organs
Dana Bogdanova, Arata Tsuchia, Madosha Osawa, Yasuhiro Kanda, M. Azizur Rahman, Burkhard Ludewig, Taisuo Kinoshita, and Tetsuya Kataoka

IMMUNOTHERAPY AND VACCINES

3587 Brief Exposure of Skin to Near-Infrared Laser Modulates Mast Cell Function and Augments the Immune Response
Yasuharu Kinouchi, Wataru Katagiri, Joseph J. Locascio, Ayako Shigeta, Yuri Satuki, Mait Shihi, Kaitsun Morie, Ruxandra F. Sbirulecu, Misaki Miyake, Patrick Reyes, Makoto Suematsu, Jeffrey Gefand, Timothy Braun, Mark C. Poznansky, Kanako Tsukada, and Satoshi Kashiwagi

3604 Suppression of Th1 Priming by TLR2 Agonists during Cutaneous Immunization Is Mediated by Recruited CCR2+ Monocytes
Christopher T. Johnsson, Michael F. Goldberg, Alison J. Johnson, Tony W. Ng, Shojo Kumazaki-Vedeholten, Gregoire Latour, Daniel H. Kaplan, Graceh H. Gauel, Ulrich D. Kadoslky, Andrew J. Yates, John Chan, William R. Jacobs, Jr., and Steven A. Porcelli
INFECTION AND HOST RESPONSE

3617 Deregulated AUFI Assists BMP-EZH2–Mediated Delayed Wound Healing during Candida albicans Infection
Kamrui Mahadik, Preeti Yadav, Bharat Bhat, Riyaz Ahmed Shab, and Kirshiganabhuli Narayanaswamy Balaji

3630 Induction of a Long Noncoding RNA Transcript, NR_045064, Promotes Defense Gene Transcription and Facilitates Intestinal Epithelial Cell Responses against Cryptosporidium Infection
Min Li, Ai-Yu Gong, Xin-Tian Zhang, Yang Wang, Nicholas W. Matthy, Gillaine A. Maritim, Julie Anne K. Strauss-Soukup, and Xuan-Ming Chen

3641 Programming of CD8 T Cell Quantity and Polyfunctionality by Direct IL-1 Signals
Saroj Sarkar, Yevgeniy Vysotsky, Hauzi Xiao, Florian M. Baumann, Soon Yim, David J. Lee, Dominik Schenken, and Vanda Kalia

INNATE IMMUNITY AND INFLAMMATION

3651 Talin1 Methylation Is Required for Neutrophil Infiltration and Lipopolysaccharide-Induced Lethality
Thomas Jan Feng Lim and I-Hsin Su

3662 Gasdermin D Promotes AIM2 Inflammasome Activation and Is Required for Host Protection against Francisella novicida
Qifan Zhu, Min Zheng, Arjun Balakrishnan, Rajendra Karki, and Thirumala-Dewi Kanneganti

3669 Meteorin-like/Meteorin-β Is a Novel Immunoregulatory Cytokine Associated with Inflammation
Irina Usheva, Gerardo Arrevidales-Boni, Gina N. Heller, Egeist Pone, Marcella Hernandez-Ruiz, Josuhi Catalan-Dibene, Peter Hovesi, and Alber Zlotnik

MOLECULAR AND STRUCTURAL IMMUNOLOGY

3677 The Transcription Factors PU.1 and IRF4 Determine Dendritic Cell–Specific Expression of RALDH2
Takuya Yoshino, Masaki Yamauchi, Yutaka Watanuki, Kazumi Kasahara, and Chibaru Nishiyama

MUCOSAL IMMUNOLOGY

3683 Indole-3-Pyruvic Acid, an Aryl Hydrocarbon Receptor Activator, Suppresses Experimental Colitis in Mice
Riiji Aoki, Ayako Aoki-Yoshida, Chie Suzuki, and Yoshihito Takayama

SYSTEMS IMMUNOLOGY

3694 Filtering Next-Generation Sequencing of the Ig Gene Repertoire Data Using Antibody Structural Information
Aleksandr Kovalev, Konrad Kreuzwych, Sebastian Kelm, James Snowden, and Charlotte M. Deane

3705 The Length Distribution and Multiple Specificity of Naturally Presented HLA-I Ligands
David Gelfer, Philippe Guillaumne, Justine Michaux, Hui-Song Pak, Ray T. Daniel, Julien Rakel, George Cukor, and Michal Bassani-Sternberg

TRANSPLANTATION

3717 Complement Inhibitor CR1g/PH Ameliorates Renal Ischemia Reperfusion Injury via Activation of PI3K/AKT Signaling
Chao Hu, Long Li, Peipei Ding, Ling Li, Xiaowen Ge, Long Zheng, Xiaochuan Wang, Jina Wang, Wei Tao Zhang, Na Wang, Hongyu Gu, Fan Zhong, Ming Xu, Ruiming Rong, Tongyu Zhu, and Weiguo Hu

3731 Critical Role of Macrophage FcγR Signaling and Reactive Oxygen Species in Alloantibody-Mediated Hepatocyte Rejection
Jason M. Zimmerer, Xin L. Liu, Alexia Blaszcak, Christina L. Atila, Thomas A. Pham, Robert T. Warren, and Ginny L. Bumgardner

TUMOR IMMUNOLOGY

3741 High FcγR Expression on Intratumoral Macrophages Enhances Tumor-Targeting Antibody Therapy
Hendrik Benamison, Hong Sheng Su, Cor Brekel, Jill Clesseaux, Canny Brouwer, Margot M. Lim, Marielle F. Frauven, Marjolein Sluijter, Ferry Osendarp, Thorvald van Hall, and J. Stijn Verbeek
Sialic Acid–Dependent Inhibition of T Cells by Exosomal Ganglioside GD3 in Ovarian Tumor Microenvironments
Gautam N. Shetty, Jenni Loyall, Charles S. Berenson, Raymond J. Kelleher, Jr., Vandana Iyer, Sathy V. Bahu-Iyer, Kanle Otunnu, and Richard B. Bankert

CD8α+ Dendritic Cells Dictate Leukemia-Specific CD8+ T Cell Fates
Douglas E. Kline, Brendan W. MacNabb, Xiaofen Chen, Wen-Ching Chen, Dominick Ficcia, and Justin Kline

IL-33 Released in the Liver Inhibits Tumor Growth via Promotion of CD4+ and CD8+ T Cell Responses in Hepatocellular Carcinoma
Ziqi Jin, Lei Lei, Dandan Liu, Yonghao Liu, Yuan Song, Huanle Gong, Ying Zhu, Ya Mei, Bo Hu, Yan Wu, Guangbo Zhang, and Haiyan Liu

NOVEL IMMUNOLOGICAL METHODS

Predicting Humoral Alloimmunity from Differences in Donor and Recipient HLA Surface Electrostatic Potential
Dermot H. Mallon, Christiane Kling, Matthew Robb, Eva Ellingham, J. Andrew Bradley, Craig J. Taylor, Dieter Kabelitz, and Vasilis Kosmidis

Myeloid-Specific Deletion of Mcl-1 Yields Severely Neutropenic Mice That Survive and Breed in Homozygous Form
Janka Zsófia Csépegi, Anita Orosz, Erik Zajic, Orolyfi Kása, Tamás Németh, Edina Simon, Szabina Fodor, Katalin Csontka, Balázs L. Baráth, Dorottya Kovács, Yen-Wen He, Anila Gácsér, and Attila Móczai

Multiplexed FluoroSpot for the Analysis of Dengue Virus- and Zika Virus-Specific and Cross-Reactive Memory B Cells

Rapid and Efficient Production of Human Functional Mast Cells through a Three-Dimensional Culture of Adipose Tissue–Derived Stromal Vascular Cells
Jenny Pausper, Eric Espinosa, Nicolas Cense, Virginie Robert, Patrick Labarague, Solène M. Enard, Louis Casteilla, Anne Lorsignal, and Beatrice Cousin

AUTHOR INDEX

AD HOC REVIEWERS

AUTHOR INDEX TO VOLUME 201