IN THIS ISSUE

3971 Teaching an Old Peptidase New Tricks See article p. 4020
3980 The Price of Internalizing Inhibition See article p. 4130
3990 mAbs To Manage Metastasis See article p. 4165
4000 Complementing Infection See article p. 4235
4010 Breaking the Epithelial Barrier See article p. 4246
4020 Tcf7 Regulates ILC Subsets See article p. 4383

BRIEF REVIEWS

3973 TGF-β: Guardian of T Cell Function
Soyoung A. Oh and Ming O. Li

CUTTING EDGE

3981 Cutting Edge: NK Cell Licensing Modulates Adhesion to Target Cells
L. Michael Thomas, Mary E. Peterson, and Eric O. Long

3986 Cutting Edge: Mouse NAIP1 Detects the Type III Secretion System Needle Protein
Manira Rayamajhi, Daniel E. Zak, Joseph Chavarria-Smith, Russell E. Vance, and Edward A. Miao

3990 Cutting Edge: CD4 T Cells Reactive to an Islet Amyloid Polypeptide Peptide Accumulate in the Pancreas and Contribute to Disease Pathogenesis in Nonobese Diabetic Mice
Rocky L. Baker, Thomas Delong, Gene Barbour, Brenda Bradley, Maki Nakayama, and Kathryn Haskins

3995 Cutting Edge: TLR Signaling Licenses IRAK1 for Rapid Activation of the NLRP3 Inflammasome
Teresa Fernandes-Alnemri, Seokwon Kang, Connor Anderson, Junji Sagara, Katherine A. Fitzgerald, and Emad S. Alnemri

ALLERGY AND OTHER HYPERSENSITIVITIES

4001 Disruption of the Complement Anaphylatoxin Receptor C5L2 Exacerbates Inflammation in Allergic Contact Dermatitis
Ruobing Wang, Bao Lu, Craig Gerard, and Norma P. Gerard

On the cover: H&E staining of a section of the proximal colon 8 d after oral infection with Citrobacter rodentium.
<table>
<thead>
<tr>
<th>Antigen Recognition and Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4010 Defining CD8+ T Cell Determinants during Human Viral Infection in Populations of Asian Ethnicity</td>
</tr>
<tr>
<td>Laura Rivino, Anthony T. Tan, Adeline Chia, Emmanuelle A. P. Kumaran, Gisbert M. Grotenbreg, Paul A. MacArly, and Antonio Bertolotti</td>
</tr>
<tr>
<td>4020 New Role of Signal Peptide Peptidase To Liberate C-Terminal Peptides for MHC Class I Presentation</td>
</tr>
<tr>
<td>Cláudia C. Oliveira, Bianca Querido, Marjolein Sluijter, Anne F. de Groot, Reno van der Zee, Martijn J. W. E. Rabelink, Rob C. Hoeben, Ferry Osendorp, Sjoerd H. van der Burg, and Thorwald van Hall</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Autoimmunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4029 Ablation of Peroxiredoxin II Attenuates Experimental Colitis by Increasing FoxO1-Induced Foxp3+ Regulatory T Cells</td>
</tr>
<tr>
<td>Hee Yoon Won, Eun Jung Jang, Kihyun Lee, Sera Oh, Hyo Kyung Kim, Hyun Ae Woo, Sang Won Kang, Dae-Yeul Yu, Sue-Goo Rhee, and Eun Sook Hwang</td>
</tr>
<tr>
<td>4038 Fatal Eosinophilic Myocarditis Develops in the Absence of IFN-γ and IL-17A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immune Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4048 Ezrin Tunes the Magnitude of Humoral Immunity</td>
</tr>
<tr>
<td>Debasish Pore, Neetha Parameswaran, Ken Matsui, Matteo B. Stone, Ichiko Saotome, Andrea I. McClatchey, Sarah L. Veatch, and Neetu Gupta</td>
</tr>
<tr>
<td>4059 Activated Platelets Enhance IL-10 Secretion and Reduce TNF-α Secretion by Monocytes</td>
</tr>
<tr>
<td>Sif Gudbrandsdottir, Hans C. Haselbach, and Claus H. Nielsen</td>
</tr>
<tr>
<td>4068 Heat Shock Transcription Factor 1 Is Activated as a Consequence of Lymphocyte Activation and Regulates a Major Proteostasis Network in T Cells Critical for Cell Division During Stress</td>
</tr>
<tr>
<td>Siva K. Gandhapudi, Patience Murapa, Zachary D. Threlkeld, Martin Ward, Kevin D. Sarge, Charles Snow, and Jerold G. Woodward</td>
</tr>
<tr>
<td>4080 LAT1 Is a Critical Transporter of Essential Amino Acids for Immune Reactions in Activated Human T Cells</td>
</tr>
<tr>
<td>Keitaro Hayashi, Promsuk Jutabha, Hitoshi Endou, Hironori Sagara, and Naohiko Anzai</td>
</tr>
<tr>
<td>4086 IL-21 Enhances the Activity of the TLR–MyD88–STAT3 Pathway but Not the Classical TLR–MyD88–NF-κB Pathway in Human B Cells To Boost Antibody Production</td>
</tr>
<tr>
<td>Bi-Sheng Liu, Jeroen N. Snoep, Tom W. Huizinga, and Rene E. M. Toes</td>
</tr>
<tr>
<td>4095 Cholera Toxin Directly Enhances IL-17A Production from Human CD4+ T Cells</td>
</tr>
<tr>
<td>Hsing-Chuan Tsai and Reen Wu</td>
</tr>
<tr>
<td>4103 Both MC5r and A2Ar Are Required for Protective Regulatory Immunity in the Spleen of Post–Experimental Autoimmune Uveitis in Mice</td>
</tr>
<tr>
<td>Darren J. Lee and Andrew W. Taylor</td>
</tr>
<tr>
<td>4112 Pneumococcal Components Induce Regulatory T Cells That Attenuate the Development of Allergic Airways Disease by Deviating and Suppressing the Immune Response to Allergen</td>
</tr>
<tr>
<td>Alison N. Thorburn, Alexandra C. Brown, Prema M. Nair, Nina Chevalier, Paul S. Foster, Peter G. Gibson, and Philip M. Hansbro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immunotherapy and Vaccines</th>
</tr>
</thead>
<tbody>
<tr>
<td>4121 Human T Cells Engineered To Express a Programmed Death 1/28 Costimulatory Retargeting Molecule Display Enhanced Antitumor Activity</td>
</tr>
<tr>
<td>Chen Ankri, Katerina Shamalov, Miryam Horovitz-Fried, Shmuel Mauer, and Cyrille J. Cohen</td>
</tr>
<tr>
<td>4130 Immunotherapy Targeting Inhibitory Fcγ Receptor IIB (CD32b) in the Mouse Is Limited by Monoclonal Antibody Consumption and Receptor Internalization</td>
</tr>
</tbody>
</table>
Inhibition of Breast Cancer Metastasis by Resveratrol-Mediated Inactivation of Tumor-Evoked Regulatory B Cells
Catalina Lee-Chang, Monica Bodogai, Alejandro Martin-Montalvo, Katarzyna Wejksza, Mitesh Sanghvi, Ruin Moaddel, Rafael de Cabo, and Arya Biragyn

Anti-Human CD73 Monoclonal Antibody Inhibits Metastasis Formation in Human Breast Cancer by Inducing Clustering and Internalization of CD73 Expressed on the Surface of Cancer Cells
Mikkel G. Terp, Kristina A. Olesen, Eva C. Arupsgaard, Rikke R. Lund, B. Christoffer Lagerholm, Henrik J. Ditzel, and Rikke Leth-Larsen

Agonist Anti-Human CD27 Monoclonal Antibody Induces T Cell Activation and Tumor Immunity in Human CD27–Transgenic Mice
Li-Zhen He, Naseem Prostak, Lawrence J. Thomas, Laura Vitale, Jeffrey Weidlick, Andrea Crocker, Catherine D. Pilsmaker, Sarah M. Round, Alison Tutt, Martin J. Glennie, Henry Marsh, and Tibor Keler

IL-12–Based Vaccination Therapy Reverses Liver-Induced Systemic Tolerance in a Mouse Model of Hepatitis B Virus Carrier
Zhutian Zeng, Xiaohui Kong, Fenglei Li, Haiming Wei, Rui Sun, and Zhigang Tian

INFECTIOUS DISEASE AND HOST RESPONSE

The Roles of IRF-3 and IRF-7 in Innate Antiviral Immunity against Dengue Virus
Hui-Wen Chen, Kevin King, Jui Tu, Marisa Sanchez, Andrew D. Luster, and Sujan Shresta

Regulation of the Development of the Hepatic B Cell Compartment during Schistosoma mansoni Infection
Keke C. Fairfax, Bart Everts, Amber M. Smith, and Edward J. Pearce

CD8+ Memory T Cells Appear Exhausted within Hours of Acute Virus Infection
Martin P. Hooking, Claudia T. Flynn, Jason Botten, and J. Lindsay Whitton

Identifying the Initiating Events of Anti-Listeria Responses Using Mice with Conditional Loss of IFN-γ Receptor Subunit 1 (IFNGR1)

An Alternative Role of C1q in Bacterial Infections: Facilitating Streptococcus pneumoniae Adherence and Invasion of Host Cells
Vaibhav Agarwal, Jonas Ahl, Kristian Riesbeck, and Anna M. Blom

HIV-1 gp120 Induces TLR2- and TLR4-Mediated Innate Immune Activation in Human Female Genital Epithelium

Increased Susceptibility to Pulmonary Pseudomonas Infection in Splunc1 Knockout Mice
Yanyan Liu, Marissa E. Di, Hong Wei Chu, Xinyu Liu, Ling Wang, Sally Wenzel, and Y. Peter Di

CD4+ T Cell Expression of MyD88 Is Essential for Normal Resolution of Chlamydia muridarum Genital Tract Infection
Lauren C. Frazer, Jeanne E. Sullivan, Matthew A. Zurenuki, Margaret Mintus, Tammy E. Tomasak, Daniel Prantner, Uma M. Nagarajan, and Toni Darville

RON Receptor Tyrosine Kinase, a Negative Regulator of Inflammation, Is Decreased during Simian Immunodeficiency Virus–Associated Central Nervous System Disease
Daniele C. Cary, Janice E. Clements, and Andrew J. Henderson
INNATE IMMUNITY AND INFLAMMATION

4288 Maresin 1, a Proresolving Lipid Mediator Derived from Omega-3 Polyunsaturated Fatty Acids, Exerts Protective Actions in Murine Models of Colitis
Rodrigo Marcon, Allison F. Bento, Rafael C. Dutra, Maira A. Bicca, Daniela F. P. Leite, and João B. Calixto

4299 The p38-MSK1 Signaling Cascade Influences Cytokine Production through CREB and C/EBP Factors in Human Neutrophils
Thomas Z. Mayer, François A. Simard, Alexandre Cloutier, Harsh Vardhan, Claire M. Dubois, and Patrick P. McDonald

4308 Inflammatory Responses Induced by Lipopolysaccharide Are Amplified in Primary Human Monocytes but Suppressed in Macrophages by Complement Protein C5a
Vernon Sew, Junxian Lim, Abishek Iyer, Jacky Y. Suen, Juliana K. Ariffen, Daniel M. Hohenhaus, Matthew J. Sweet, and David P. Fairlie

4317 IL-33 Markedly Activates Murine Eosinophils by an NF-κB–Dependent Mechanism Differentially Dependent upon an IL-4–Driven Autoinflammatory Loop
Carine Bouffi, Mark Rochman, Christopher B. Zust, Emily M. Stucke, Andrey Kartashov, Patricia C. Fulkerson, Artem Barski, and Marc E. Rotshberg

4326 Conjugated Linoleic Acid Targets β2 Integrin Expression To Suppress Monocyte Adhesion
Monica de Gaetano, Eugene Dempsey, Simone Marcone, William G. James, and Orina Belton

4337 Inflammasome-Mediated Secretion of IL-1β in Human Monocytes through TLR2 Activation; Modulation by Dietary Fatty Acids
Ryan G. Snodgrass, Shurong Huang, Il-Whan Choi, John C. Rutledge, and Daniel H. Hwang

4348 IL-17 Promotes Neutrophil Entry into Tumor-Draining Lymph Nodes following Induction of Sterile Inflammation
Craig M. Brackett, Jason B. Muhitch, Sharon S. Evans, and Sandra O. Gollnick

4358 The Mitochondrial Antiviral Protein MAVS Associates with NLRP3 and Regulates Its Inflammasome Activity
Sangjun Park, Christine Juliana, Sujeong Hong, Pinaki Datta, Ianhwa Huang, Teresa Fernandes-Alnemri, Je-Wook Yu, and Emad S. Alnemri

4367 The Complement Anaphylatoxin C5a Receptor Contributes to Obese Adipose Tissue Inflammation and Insulin Resistance
Julia Phiel, Kyung-Jan Chung, Antonios Chatzigeorgiou, Anne Klotszche-von Ameln, Ruben Garcia-Martín, David Sprott, Mario Moisidou, Theodora Tzanavari, Barbara Ludwig, Elena Baraban, Monika Ehrhart-Bornstein, Stefan R. Bornstein, Hausan Mazait, Michele Solimen, Katrina P. Karalis, Matina Economoupoloi, John D. Lambris, and Triantafyllos Chavakis

4375 Annexin-A1 Regulates TLR-Mediated IFN-β Production through an Interaction with TANK-Binding Kinase 1
Pradeep Bis, Shinla Shu, Huiyin Lee, Sumitha Arora, Sunitha Nair, Jyue Yuen Lim, Jivanaah Dayalan, Stephan Gasser, Subhra K. Biswas, Anna-Marie Fairhurst, and Lina H. K. Lim

4383 TCF-1 Controls IL2C and NKP46 RORγt+ Innate Lymphocyte Differentiation and Protection in Intestinal Inflammation
Lisa A. Mielke, Joanna R. Groom, Lucille C. Rankin, Cyril Seillet, Frederick Masson, Tracy Putoczki, and Gabrielle T. Belz

4392 Lithium Attenuates IFN-β Production and Antiviral Response via Inhibition of TANK-Binding Kinase 1 Kinase Activity
Lijuan Wang, Lei Zhang, Xueying Zhao, Meng Zhang, Wei Zhao, and Chengjiang Gao

MOLECULAR AND STRUCTURAL IMMUNOLOGY

4399 Role of the IgH Intronic Enhancer Eμ in Clonal Selection at the Pre–B to Immature B Cell Transition
Cheng Peng and Laurel A. Eckhardt
MUCOSAL IMMUNOLOGY

4412 Important Role for FcγRIIB on B Lymphocytes for Mucosal Antigen-Induced Tolerance and Foxp3+ Regulatory T Cells
Jia-Bin Sun, Zou Xiang, Kenneth G. C. Smith, and Jan Holmgren

4423 Pre-existing Tolerance Shapes the Outcome of Mucosal Allergen Sensitization in a Murine Model of Asthma
Timothy J. Chapman, Jason A. Emo, Sara A. Knowlden, Fariba Rezaee, and Steve N. Georas

TRANSPLANTATION

4431 Role of Complement Activation in Obliterative Bronchiolitis Post–Lung Transplantation

4440 Double Deficiency for RORγt and T-bet Drives Th2-Mediated Allograft Rejection in Mice

4447 Interruption of Dendritic Cell–Mediated TIM-4 Signaling Induces Regulatory T Cells and Promotes Skin Allograft Survival
Melissa Y. Yeung, Martina M. McGrath, Masafumi Nakayama, Tetsunosuke Shimizu, Olaf Boenisch, Ciara N. Magee, Rozita Abdoli, Hisaya Akiba, Takuya Ueno, Laurence A. Turka, and Nader Najafian

TUMOR IMMUNOLOGY

4456 Identification of the Cellular Sentinels for Native Immunogenic Heat Shock Proteins In Vivo
Michelle Nicole Messmer, Joshua Pasmowitz, Laura Elizabeth Kropp, Simon C. Watkins, and Robert Julian Binder

4466 AUTHOR INDEX