This information is current as of August 1, 2021.

190 (3)

J Immunol 2013; 190:845-1383; ;
http://www.jimmunol.org/content/190/3

Why The JI? Submit online.

• **Rapid Reviews! 30 days** from submission to initial decision
• **No Triage!** Every submission reviewed by practicing scientists
• **Fast Publication!** 4 weeks from acceptance to publication

*average

**Subscription** Information about subscribing to The Journal of Immunology is online at:
http://jimmunol.org/subscription

**Permissions** Submit copyright permission requests at:
http://www.aai.org/About/Publications/JI/copyright.html

**Email Alerts** Receive free email-alerts when new articles cite this article. Sign up at:
http://jimmunol.org/alerts
### IN THIS ISSUE

#### PILLARS OF IMMUNOLOGY

<table>
<thead>
<tr>
<th>Page</th>
<th>Topic</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>847</td>
<td>Converging Discoveries: The First Reports of IL-4</td>
<td>Robert L. Coffman</td>
</tr>
<tr>
<td>849</td>
<td>Pillars Article: T Cell-Derived B Cell Differentiation Factor(s). Effect on the Isotype Switch of Murine B Cells.</td>
<td>Peter C. Isakson, Ellen Pur, Ellen S. Vitetta, and Peter H. Krammer</td>
</tr>
</tbody>
</table>

#### BRIEF REVIEWS

<table>
<thead>
<tr>
<th>Page</th>
<th>Topic</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>875</td>
<td>The Paradoxical Functions of B Cells and Antibodies in Transplantation</td>
<td>Marilia I. Cascalho, Brian J. Chen, Mandy Kain, and Jeffrey L. Platt</td>
</tr>
</tbody>
</table>

#### CUTTING EDGE

<table>
<thead>
<tr>
<th>Page</th>
<th>Topic</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>881</td>
<td>Cutting Edge: IL-6–Dependent Autoimmune Disease: Dendritic Cells as a Sufficient, but Transient, Source</td>
<td>Melanie D. Leech, Tom A. Barr, Darryl G. Turner, Sheila Brown, Richard A. O’Connor, David Gray, Richard J. Mellanby, and Stephen M. Anderton</td>
</tr>
<tr>
<td>886</td>
<td>Cutting Edge: Type I IFN Drives Emergency Myelopoiesis and Peripheral Myeloid Expansion during Chronic TLR7 Signaling</td>
<td>Matthew B. Buechler, Thomas H. Teal, Keith B. Elkon, and Jessica A. Hamerman</td>
</tr>
</tbody>
</table>

---

892 Cutting Edge: Endothelial-Specific Gene Ablation of CD99L2 Impairs Leukocyte Extravasation In Vivo
Ruth Seelige, Christiane Natsch, Sigrid März, Ding Jing, Maike Frye, Stefan Butz, and Dietmar Vestweber

ALLERGY AND OTHER HYPERSENSITIVITIES
897 Aeroallergen Challenge Promotes Dendritic Cell Proliferation in the Airways
Tibor Z. Veres, Sabrina Voedisch, Emma Spies, Joona Valtionen, Frauke Prenzler, and Armin Braun

904 Thymic Stromal Lymphopoietin Amplifies the Differentiation of Alternatively Activated Macrophages
Hongwei Han, Mark B. Headley, Whitney Xu, Michael R. Comeau, Baohua Zhou, and Steven F. Ziegler

913 Antigen-Specific Regulation of IgE Antibodies by Non-Antigen–Specific γδ T Cells
Yafei Huang, M. Kemal Aydintug, Joshua Losinis, Megan K. MacLeod, Amy S. McKee, Greg Kirchenbaum, Claudia V. Jakubzick, Ross M. Kedl, Deming Sun, Jordan Jacobelli, Rebecca L. O’Brien, and Willi K. Born

ANTIGEN RECOGNITION AND RESPONSES
922 Lamprey Variable Lymphocyte Receptors Mediate Complement-Dependent Cytotoxicity
Fenfang Wu, Liyong Chen, Xin Liu, Huaying Wang, Peng Su, Yinglin Han, Bo Feng, Xu Qiao, Jing Zhao, Ning Ma, Huijie Liu, Zhen Zheng, and Qingwei Li

931 CD8⁺ TCR Repertoire Formation Is Guided Primarily by the Peptide Component of the Antigenic Complex

940 Transfer of CD8⁺ T Cell Memory Using Bcl-2 as a Marker
Alexis Dunkle, Ivan Dzhagalov, Claire Gordy, and You-Wen He

948 TLR7 Triggering with Polyuridylic Acid Promotes Cross-Presentation in CD8⁺ Conventional Dendritic Cells by Enhancing Antigen Preservation and MHC Class I Antigen Permanence on the Dendritic Cell Surface
María I. Crespo, Estefanía R. Zacca, Nicolás G. Núñez, Romina P. Ranocchia, Mariana Maccioni, Belkys A. Maletto, Marta C. Pistoresi-Palencia, and Gabriel Morón

AUTOIMMUNITY
961 The B7-Independent Isoform of CTLA-4 Functions To Regulate Autoimmune Diabetes
Melanie Stumpf, Xuyu Zhou, and Jeffrey A. Bluestone

IMMUNE REGULATION
970 Recirculating Memory T Cells Are a Unique Subset of CD4⁺ T Cells with a Distinct Phenotype and Migratory Pattern
Shannon K. Bromley, Sha Yan, Michio Tomura, Osumi Kanagawa, and Andrew D. Luster

977 Varicella Zoster–Specific CD4⁺Foxp3⁺ T Cells Accumulate after Cutaneous Antigen Challenge in Humans

987 Mouse IgM Fc Receptor, FCMR, Promotes B Cell Development and Modulates Antigen-Driven Immune Responses
Seung-Chul Choi, Hongsheng Wang, Linjie Tian, Yousu Marakami, Dong-Mi Shin, Francisco Borrego, Herbert C. Morse, III, and John E. Coligan

997 Deficiency of Annexin A1 in CD4⁺ T Cells Exacerbates T Cell–Dependent Inflammation
Yuan H. Yang, Wuqi Song, James A. Deane, Wenping Kao, Joshua D. Ooi, Devi Ngo, A. Richard Kitching, Eric F. Morand, and Michael J. Hickey

1008 Helios Induces Epigenetic Silencing of Il2 Gene Expression in Regulatory T Cells
Ian Baine, Samik Basu, Rachel Ames, Rani S. Sellers, and Fernando Macian
1017 Aurintricarboxylic Acid Ameliorates Experimental Autoimmune Encephalomyelitis by Blocking Chemokine-Mediated Pathogenic Cell Migration and Infiltration
Feifei Zhang, Wei Wei, Hui Chai, and Xin Xie

1026 Mnk1 and 2 Are Dispensable for T Cell Development and Activation but Important for the Pathogenesis of Experimental Autoimmune Encephalomyelitis
Balachandra K. Gorentla, Sruti Krishna, Jinwook Shin, Makoto Inoue, Mari L. Shinohara, Jason M. Grayson, Rikiro Fukunaga, and Xiao-Ping Zhong

1038 Chronic Exposure to *Plasmodium falciparum* Is Associated with Phenotypic Evidence of B and T Cell Exhaustion
Joseph Illingworth, Noah S. Butler, Sophie Roetynck, Jedida Mwacharo, Susan K. Pierce, Philip Bejon, Peter D. Crompton, Kevin Marsh, and Francis M. Ndungu

1048 Inflammatory Monocytes Are Critical for Induction of a Polysaccharide-Specific Antibody Response to an Intact Bacterium
Quanyi Chen and Clifford M. Snapper

1056 Transcription Factors GATA-3 and RORγt Are Important for Determining the Phenotype of Allergic Airway Inflammation in a Murine Model of Asthma
Satoshi Atno, Yuko Morishima, Yukio Ishii, Keigyou Yoh, Yaichi Yageta, Shigeo Ohtsuka, Masashi Matsuyama, Mio Kawaguchi, Satoru Takahashi, and Nobuyuki Hizawa

1066 Intrinsic Role of FoxO3a in the Development of CD8⁺ T Cell Memory

1076 TNFR2 Is Critical for the Stabilization of the CD4⁺Foxp3⁺ Regulatory T Cell Phenotype in the Inflammatory Environment
Xin Chen, Xueqiang Wu, Qiang Zhou, O. M. Zack Howard, Mihai G. Netea, and Joost J. Oppenheim

**IMMUNE SYSTEM DEVELOPMENT**

1085 An Organotypic Coculture Model Supporting Proliferation and Differentiation of Medullary Thymic Epithelial Cells and Promiscuous Gene Expression
Sheena Pinto, Katrin Schmidt, Stefanie Egle, Hans-Jürgen Stark, Petra Boukamp, and Bruno Kyewski

1094 Focal Adhesion Kinase Regulates the Localization and Retention of Pro-B Cells in Bone Marrow Microenvironments
Shin-Young Park, Peter Wolfram, Kimberly Canty, Brendan Harley, Céar Nombela-Arrieta, Gregory Pivarnik, John Manis, Hilary E. Beggs, and Leslie E. Silberstein

1103 Nick Recruitment to the TCR Required for ZAP70 Activation during Thymic Development
Aldo Borroto, Irene Arellano, Elaine P. Dopfer, Marek Prouza, Miloslav Suchánek, Manuel Fuentes, Alberto Orfao, Wolfgang W. Schamel, and Balbino Alarcón

**IMMUNOTHERAPY AND VACCINES**

1113 A Synthetic Codon-Optimized Hepatitis C Virus Nonstructural 5A DNA Vaccine Primes Polyfunctional CD8⁺ T Cell Responses in Wild-Type and NS5A-Transgenic Mice
Fredrik Holmström, Anna Pasetto, Veronica Nähr, Anette Brass, Malte Kriegs, Eberhard Hildt, Kate E. Broderick, Margaret Chen, Gustaf Ahlén, and Lars Frelin

1125 Triggering of B7h by the ICOS Modulates Maturation and Migration of Monocyte-Derived Dendritic Cells
Sergio Ochipinti, Chiara Diamanzi, Annalisa Chiocchetti, Elena Boggio, Nausicaa Clemente, Caímiro Luca Gigiotti, Maria Felicia Solari, Rosalba Minelli, Roberto Fantozzi, Jungi Yagi, Júlio Maria Rojo, Daniele Sblattero, Mirella Giovarelli, and Umberto Dianzani

1135 Assessment of Immune Interference, Antagonism, and Diversion following Human Immunization with Biallelic Blood-Stage Malaria Viral-Vectored Vaccines and Controlled Malaria Infection
Sean C. Elias, Katharine A. Collins, Fenella D. Halstead, Prateek Choudhary, Carly M. Bliss, Katie J. Ewer, Susanne H. Sheehy, Christopher J. A. Duncan, Sumi Biswas, Adrian V. S. Hill, and Simon J. Draper
Macrophage-Specific TLR2 Signaling Mediates Pathogen-Induced TNF-Dependent Inflammatory Oral Bone Loss
George Papadopoulos, Ellen O. Weinberg, Paola Masari, Frank C. Gibson, III, Lee M. Wetzler, Elise F. Morgan, and Caroline A. Genco

Regulatory B Cell (B10 Cell) Expansion during Listeria Infection Governs Innate and Cellular Immune Responses in Mice

CD70 Deficiency Impairs Effector CD8 T Cell Generation and Viral Clearance but Is Dispensable for the Recall Response to Lymphocytic Choriomeningitis Virus
Ivana Munitec, Mirela Kuka, Atef Allam, Jonathan P. Sowill, and Jonathan D. Ashwell

Pro-Apoptotic Protein Noxa Regulates Memory T Cell Population Size and Protects against Lethal Immunopathology
Felix M. Wensveen, Paul L. Klarenbeek, Klaas P. J. M. van Gisbergen, Maria F. Pascutti, Ingrid A. M. Derks, Barbara D. C. van Schaik, Anja ten Brinke, Niek de Vries, Durdica Cekinovic, Stjepan Jonji, Ren A. W. van Lier, and Eric Eldering

Biphasic RLR–IFN-α Response Controls the Balance between Antiviral Immunity and Cell Damage
Sun-Young Hwang, Kye-Yeon Hur, Jeong-Rae Kim, Kwang-Hyun Cho, Seung-Hwan Kim, and Joo-Yeon You

Salmonella Downregulates Nod-like Receptor Family CARD Domain Containing Protein 4 Expression To Promote Its Survival in B Cells by Preventing Inflammasome Activation and Cell Death
Araceli Perez-Lopez, Roberto Rosales-Reyes, Celia Mercedes Alpuche-Aranda, and Vianney Ortiz-Navarrete

Micro-RNA 155 Is Required for Optimal CD8+ T Cell Responses to Acute Viral and Intracellular Bacterial Challenges
Evan F. Lind, Alisha R. Elford, and Pamela S. Ohashi

Neutrophil Extracellular Trap–Associated Protein Activation of the NLRP3 Inflammasome Is Enhanced in Lupus Macrophages
J. Michelle Kahlenberg, Carmelo Carmona-Rivera, Carolyne K. Smith, and Mariana J. Kaplan

Rescue of Dysfunctional Autophagy Attenuates Hyperinflammatory Responses from Cystic Fibrosis Cells
Matthew L. Mayer, Christoph J. Blombke, Reza Falsafi, Chris D. Fjell, Laurence Madera, Stuart E. Turvey, and Robert E. W. Hancock

Inflammasome-Independent NLRP3 Augments TGF-β Signaling in Kidney Epithelium
Wenjie Wang, Xiangyu Wang, Justin Chun, Akousa Vilaayane, Sharon Clark, Gabrielle French, Nathan A. Bracey, Kiril Tripkov, Shirin Bonni, Henry J. Duff, Paul L. Beck, and Daniel A. Muruve

Regulation of TLR2-Mediated Tolerance and Cross-Tolerance through IRAK4 Modulation by miR-132 and miR-212
Md A. Nahid, Bing Yao, Paul R. Dominguez-Gutierrez, Lakshmya Kesavalu, Minoru Satoh, and Edward K. L. Chan

Endothelial MKK3 Is a Critical Mediator of Lethal Murine Endotoxemia and Acute Lung Injury
Praveen Mannam, Xuchen Zhang, Peiying Shan, Yi Zhang, Amanda S. Shinm, Yitao Zhang, and Patty J. Lee

Flagellin Induces Myeloid-Derived Suppressor Cells: Implications for Pseudomonas aeruginosa Infection in Cystic Fibrosis Lung Disease
Nikolaus Rieber, Alina Brand, Andreas Hector, Ute Graepel-Mainka, Michael Ost, Iris Schäfer, Irene Wecker, Davide Neri, Andreas Wirth, Lauren Mays, Sabine Zundel, Jörg Fuchs, Rupert Handgretinger, Martin Stern, Michael Hogarding, Gerd Döring, Joachim Riethmüller, Michael Kormann, and Dominik Hartl

TLR4 Activation Under Lipotoxic Conditions Leads to Synergistic Macrophage Cell Death through a TRIF-Dependent Pathway
Joel D. Schilling, Heather M. Macbkove, Li He, Abhinav Diwan, and Jean E. Schaffer
Regulation of DNA Methylation in Rheumatoid Arthritis Synoviocytes
Kazuhisa Nakano, David L. Boyle, and Gary S. Firestein

The Crystal Structure of Human Soluble CD14 Reveals a Bent Solenoid with a Hydrophobic Amino-Terminal Pocket
Stacy L. Kelley, Tiit Lukk, Satish K. Nair, and Richard I. Tapping

Dynein Light Chain LC8 Inhibits Osteoclast Differentiation and Prevents Bone Loss in Mice
Hyeryeon Kim, Seungha Hyeon, Hojin Kim, Yoohee Yang, Ji Young Hub, Doo Ri Park, Hyejung Lee, Dong-Hyun Seo, Han-Sung Kim, Soo Young Lee, and Woosjin Jeong

Identification of SERPINB1 As a Physiological Inhibitor of Human Granzyme H
Li Wang, Qian Li, Lianfeng Wu, Shenggu Liu, Yong Zhang, Xuan Yang, Pingping Zhu, Honglian Zhang, Kai Zhang, Jizhong Lou, Pingheng Liu, Liang Tong, Fei Sun, and Zusen Fan

Functional Characterization of T Cell Populations in a Mouse Model of Chronic Obstructive Pulmonary Disease
Bryan L. Eppert, Brian W. Wortham, Jennifer L. Flury, and Michael T. Borchers

Granzyme B–Mediated Damage of CD8+ T Cells Impairs Graft-versus-Tumor Effect
Guanglin Bian, Xiilai Ding, Nicholas D. Leigh, Youzhou Tang, Maegan L. Capitano, Jingxin Qiu, Philip L. McCarthy, Hong Liu, and Xuefang Cao

Graft-versus-Host Disease Impairs Vaccine Responses through Decreased CD4+ and CD8+ T Cell Proliferation and Increased Perforin-Mediated CD8+ T Cell Apoptosis
Christian M. Capitini, Nicole M. Nasholm, Brynn B. Duncan, Martin Guimond, and Terry J. Fry

Heat Shock Protein 90 Is Critical for Regulation of Phenotype and Functional Activity of Human T Lymphocytes and NK Cells
Jooeun Bae, Aditya Munshi, Cheng Li, Mehmet Samur, Rao Prabhala, Constantine Mitsiades, Kenneth C. Anderson, and Nikhil C. Munshi

The Receptor for Advanced Glycation End Products Promotes Pancreatic Carcinogenesis and Accumulation of Myeloid-Derived Suppressor Cells
Philip J. Vernon, Tara J. Loux, Nicole E. Schapiro, Rui Kang, Ravi Mathuswaamy, Pawel Kalinski, Daolin Tang, Michael T. Lotze, and Herbert J. Zeh, III

Correction: GPR105 Ablation Prevents Inflammation and Improves Insulin Sensitivity in Mice with Diet-Induced Obesity
Jianfeng Xu, Hidetaka Morinaga, Dayoung Oh, Pingping Li, Ai Chen, Satwata Talukdar, Eduardo Lazarowski, Jerrold M. Olefsky, and Jane J. Kim

Correction: Cutting Edge: FcγRIII (CD16) and FcγRI (CD64) Are Responsible for Anti-Glycoprotein 75 Monoclonal Antibody TA99 Therapy for Experimental Metastatic B16 Melanoma
Marcello Albanesi, David A. Mancardi, Lynn E. Macdonald, Bruno Iannascoli, Laurence Zitvogel, Andrew J. Murphy, Jeanette H. Leusen, and Pierre Bruhns

Correction: Novel Role for Surfactant Protein A in Gastrointestinal Graft-versus-Host Disease
Kymberly M. Goudy, Diana M. Cardona, Julia L. Nugent, Charles Giamberardino, Joseph M. Thomas, Sambudho Mukherjee, Tereza Martinu, W. Michael Foster, Scott E. Pleva, Amy M. Pastva, Jo Rae Wright, and Scott M. Palmer
Correction: Antibody Repertoire Development in Fetal and Neonatal Piglets. XI. The Relationship of Variable Heavy Chain Gene Usage and the Genomic Organization of the Variable Heavy Chain Locus
Tomoko Eguchi-Ogawa, Nancy Wertz, Xiu-Zhu Sun, Francois Puimi, Hirohide Uenishi, Kevin Wells, Patrick Chardon, Gregory J. Tobin, and John E. Butler

AUTHOR INDEX