

TABLE OF CONTENTS

SPOTLIGHT

Articles of Significant Interest Selected from This Issue by the Editors	1019–1020
--	-----------

MOLECULAR PATHOGENESIS

Diverse Genetic Regulon of the Virulence-Associated Transcriptional Regulator MucR in <i>Brucella abortus</i> 2308	Clayton C. Caswell, Ahmed E. M. Elhassanny, Emilie E. Planchin, Christelle M. Roux, Jenni N. Weeks-Gorospe, Thomas A. Ficht, Paul M. Dunman, R. Martin Roop II	1040–1051
Characterization of BcaA, a Putative Classical Autotransporter Protein in <i>Burkholderia pseudomallei</i>	Cristine G. Campos, Luke Borst, Peggy A. Cotter	1121–1128
RfaL Is Required for <i>Yersinia pestis</i> Type III Secretion and Virulence	Andrew S. Houppert, Lesley Bohman, Peter M. Merritt, Christopher B. Cole, Adam J. Caulfield, Wyndham W. Lathem, Melanie M. Marketon	1186–1197
Ferric Uptake Regulator and Its Role in the Pathogenesis of Nontypeable <i>Haemophilus influenzae</i>	Alistair Harrison, Estevan A. Santana, Blake R. Szelestey, David E. Newsom, Peter White, Kevin M. Mason	1221–1233
Phospholipase C of <i>Cryptococcus neoformans</i> Regulates Homeostasis and Virulence by Providing Inositol Trisphosphate as a Substrate for Arg1 Kinase	Sophie Lev, Desmarini Desmarini, Cecilia Li, Methee Chayakulkeeree, Ana Traven, Tania C. Sorrell, Julianne T. Djordjevic	1245–1255
Promoter Polymorphisms in the ATP Binding Cassette Transporter Gene Influence Production of Cell-Derived Microparticles and Are Highly Associated with Susceptibility to Severe Malaria in Humans	Upasana Sahu, Biranchi N. Mohapatra, Shantanu K. Kar, Manoranjan Ranjit	1287–1294
<i>Staphylococcus aureus</i> Nuclease Is an SaeRS-Dependent Virulence Factor	Michael E. Olson, Tyler K. Nygaard, Laynez Ackermann, Robert L. Watkins, Oliwia W. Zurek, Kyler B. Pallister, Shannon Griffith, Megan R. Kiedrowski, Caralyn E. Flack, Jeffrey S. Kavanaugh, Barry N. Kreiswirth, Alexander R. Horswill, Jovanka M. Voyich	1316–1324

CELLULAR MICROBIOLOGY: PATHOGEN-HOST CELL MOLECULAR INTERACTIONS

Role of Host Xanthine Oxidase in Infection Due to Enteropathogenic and Shiga-Toxicogenic <i>Escherichia coli</i>	John K. Crane, Tonniele M. Naeher, Jacqueline E. Broome, Edgar C. Boedeker	1129–1139
The Type VI Secretion System Encoded in <i>Salmonella</i> Pathogenicity Island 19 Is Required for <i>Salmonella enterica</i> Serotype Gallinarum Survival within Infected Macrophages	Carlos J. Blondel, Juan C. Jiménez, Lorenzo E. Leiva, Sergio A. Álvarez, Bernardo I. Pinto, Francisca Contreras, David Pezoa, Carlos A. Santiviago, Inés Contreras	1207–1220
A Novel Class of Lipoprotein Lipase-Sensitive Molecules Mediates Toll-Like Receptor 2 Activation by <i>Porphyromonas gingivalis</i>	Sumita Jain, Stephen R. Coats, Ana M. Chang, Richard P. Darveau	1277–1286

Quorum-Sensing Systems LuxS/Autoinducer 2 and Com Regulate <i>Streptococcus pneumoniae</i> Biofilms in a Bioreactor with Living Cultures of Human Respiratory Cells	Jorge E. Vidal, Kristen E. Howery, Herbert P. Ludewick, Porfirio Nava, Keith P. Klugman	1341–1353
BACTERIAL INFECTIONS		
RNA Interference-Mediated Silencing of <i>Atp6i</i> Prevents Both Periapical Bone Erosion and Inflammation in the Mouse Model of Endodontic Disease	Junqing Ma, Wei Chen, Lijie Zhang, Byron Tucker, Guochun Zhu, Hajime Sasaki, Liang Hao, Lin Wang, Hongliang Ci, Hongbing Jiang, Philip Stashenko, Yi-Ping Li	1021–1030
RegR Virulence Regulon of Rabbit-Specific Enteropathogenic <i>Escherichia coli</i> Strain E22	Yogitha N. Srikhanta, Dianna M. Hocking, Judyta Praszkiar, Matthew J. Wakefield, Roy M. Robins-Browne, Ji Yang, Marija Tauschek	1078–1089
Sulfatide Attenuates Experimental <i>Staphylococcus aureus</i> Sepsis through a CD1d-Dependent Pathway	Jakub Kwiecinski, Sara Rhost, Linda Löfbom, Maria Blomqvist, Jan Eric Månsson, Susanna L. Cardell, Tao Jin	1114–1120
Pathology and Pathophysiology of Inhalational Anthrax in a Guinea Pig Model	Vladimir Savransky, Daniel C. Sanford, Emily Syar, Jamie L. Austin, Kevin P. Tordoff, Michael S. Anderson, Gregory V. Stark, Roy E. Barnewall, Crystal M. Briscoe, Laurence Lemiale-Biérix, Sukjoon Park, Boris Ionin, Mario H. Skiadopoulos	1152–1163
Role of Enteroaggregative <i>Escherichia coli</i> Virulence Factors in Uropathogenesis	Erik J. Boll, Carsten Struve, Nadia Boisen, Bente Olesen, Steen G. Stahlhut, Karen A. Krogfelt	1164–1171
Pathogenicity of <i>Yersinia pestis</i> Synthesis of 1-Dephosphorylated Lipid A	Wei Sun, David A. Six, C. Michael Reynolds, Hak Suk Chung, Christian R. H. Raetz, Roy Curtiss 3rd	1172–1185
The Surface Layer of <i>Tannerella forsythia</i> Contributes to Serum Resistance and Oral Bacterial Coaggregation	Naohiro Shimotahira, Yuichi Oogai, Miki Kawada-Matsuo, Sakuo Yamada, Kenji Fukutsuji, Keiji Nagano, Fuminobu Yoshimura, Kazuyuki Noguchi, Hitoshi Komatsuzawa	1198–1206
An Improved Recombination-Based <i>In Vivo</i> Expression Technology-Like Reporter System Reveals Differential <i>cyA</i> Gene Activation in <i>Bordetella</i> Species	Matthew S. Byrd, Eliza Mason, Michael W. Henderson, Erich V. Scheller, Peggy A. Cotter	1295–1305
Epicutaneous Model of Community-Acquired <i>Staphylococcus aureus</i> Skin Infections	Ranjani Prabhakara, Oded Foreman, Roberto De Pascalis, Gloria M. Lee, Roger D. Plaut, Stanley Y. Kim, Scott Stibitz, Karen L. Elkins, Tod J. Merkel	1306–1315
Impact of the <i>Listeria monocytogenes</i> Protein InlC on Infection in Mice	Nelly Leung, Antonella Gianfelice, Scott D. Gray-Owen, Keith Ireton	1334–1340
Host Defense Proteins Derived from Human Saliva Bind to <i>Staphylococcus aureus</i>	Seok-Mo Heo, Kyoung-Soo Choi, Latif A. Kazim, Molakala S. Reddy, Elaine M. Haase, Frank A. Scannapieco, Stefan Ruhl	1364–1373
HOST RESPONSE AND INFLAMMATION		
Increased Accumulation of Regulatory Granulocytic Myeloid Cells in Mannose Receptor C Type 1-Deficient Mice Correlates with Protection in a Mouse Model of Neurocysticercosis	Pramod Kumar Mishra, Elizabeth G. Morris, Jenny A. Garcia, Astrid E. Cardona, Judy M. Teale	1052–1063

The Contraceptive Depot Medroxyprogesterone Acetate Impairs Mycobacterial Control and Inhibits Cytokine Secretion in Mice Infected with <i>Mycobacterium tuberculosis</i>	Léanie Kleynhans, Nelita Du Plessis, Nasiema Allie, Muazzam Jacobs, Martin Kidd, Paul D. van Helden, Gerhard Walzl, Katharina Ronacher	1234–1244
FUNGAL AND PARASITIC INFECTIONS		
Myeloid Dendritic Cells (DCs) of Mice Susceptible to Paracoccidioidomycosis Suppress T Cell Responses whereas Myeloid and Plasmacytoid DCs from Resistant Mice Induce Effector and Regulatory T Cells	Adriana Pina, Eliseu Frank de Araujo, Maira Felonato, Flávio V. Loures, Claudia Feriotti, Simone Bernardino, José Alexandre M. Barbuto, Vera L. G. Calich	1064–1077
Altered Immune Response Differentially Enhances Susceptibility to <i>Cryptococcus neoformans</i> and <i>Cryptococcus gattii</i> Infection in Mice Expressing the HIV-1 Transgene	Kassandre Leongson, Vincent Cousineau-Côté, Mathieu Goupil, Francine Aumont, Serge Sénéchal, Louis Gaboury, Paul Jolicoeur, James W. Kronstad, Louis de Repentigny	1100–1113
5-Lipoxygenase Activity Increases Susceptibility to Experimental <i>Paracoccidioides brasiliensis</i> Infection	Fabrine Sales Massafra Tristão, Fernanda Agostini Rocha, Ana Paula Moreira, Fernando Queiroz Cunha, Marcos Antonio Rossi, João Santana Silva	1256–1266
SR-Like RNA-Binding Protein Slr1 Affects <i>Candida albicans</i> Filamentation and Virulence	Chaiyaboot Ariyachet, Norma V. Solis, Yaoping Liu, Nemani V. Prasadarao, Scott G. Filler, Anne E. McBride	1267–1276
Transcriptional Profiling of <i>Candida glabrata</i> during Phagocytosis by Neutrophils and in the Infected Mouse Spleen	Yuichi Fukuda, Huei-Fung Tsai, Timothy G. Myers, John E. Bennett	1325–1333
Participation of MyD88 and Interleukin-33 as Innate Drivers of Th2 Immunity to <i>Trichinella spiralis</i>	Lisa K. Scalfone, Hendrik J. Nel, Lucille F. Gagliardo, Jody L. Cameron, Shaikha Al-Shokri, Cynthia A. Leifer, Padraic G. Fallon, Judith A. Appleton	1354–1363
MICROBIAL IMMUNITY AND VACCINES		
Antibodies to <i>Escherichia coli</i>-Expressed C-Terminal Domains of <i>Plasmodium falciparum</i> Variant Surface Antigen 2-Chondroitin Sulfate A (VAR2CSA) Inhibit Binding of CSA-Adherent Parasites to Placental Tissue	Tracy Saveria, Andrew V. Oleinikov, Kathryn Williamson, Richa Chaturvedi, Joe Lograsso, Gladys J. Keitany, Michal Fried, Patrick Duffy	1031–1039
Killer Cell Lectin-Like Receptor G1 Deficiency Significantly Enhances Survival after <i>Mycobacterium tuberculosis</i> Infection	Joshua C. Cyktor, Bridget Carruthers, Paul Stromberg, Emilio Flaño, Hanspeter Pircher, Joanne Turner	1090–1099
CD11a Regulates Effector CD8 T Cell Differentiation and Central Memory Development in Response to Infection with <i>Listeria monocytogenes</i>	Tina O. Bose, Quynh-Mai Pham, Evan R. Jellison, Juliette Mouries, Christie M. Ballantyne, Leo Lefrançois	1140–1151
Phase Variation of PorA, a Major Outer Membrane Protein, Mediates Escape of Bactericidal Antibodies by <i>Neisseria meningitidis</i>	Isfahan Tauseef, Youssif M. Ali, Christopher D. Bayliss	1374–1380

Cover photograph (Copyright © 2013, American Society for Microbiology.): *Streptococcus pneumoniae* biofilms (purple) formed, for 8 h, on living cultures of human lung A549 cells were visualized by scanning electron microscopy. Unidentified fibers surrounding those bacteria appear to embrace pneumococcal cells within the biofilm matrix. Otitis media and pneumonia caused by *S. pneumoniae* strains, and persistence in the nasopharynx, are related to biofilm structures produced on human epithelia. In this study, a bioreactor was developed to demonstrate that *S. pneumoniae* produces more-robust biofilms on human respiratory cells, and this phenomenon was controlled by quorum-sensing molecules. The image was pseudocolored using Adobe Photoshop software. (See related article on p. 1341.)