

Stanford



Denise M. Monack

Professor of Microbiology and Immunology

Microbiology & Immunology

CONTACT INFORMATION

- **Alternate Contact**

Email dmonack@stanford.edu

Bio

ACADEMIC APPOINTMENTS

- Professor, Microbiology & Immunology
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Faculty Fellow, Stanford ChEM-H

HONORS AND AWARDS

- Terman Fellowship, Terman Fellows Program (10/1/08-9/30/11)
- Baxter Faculty Scholar Award, Baxter Foundation (May 2008)
- Sidney Raffel Award for Outstanding Accomplishment in Graduate Study, Stanford University (2001)
- G.J. Thorbecke Award, Society of Leukocyte Biology (2010)
- Burroughs Wellcome Fund Recipient in Infectious Disease, The Burroughs Wellcome Fund (11/01/09-10/31/15)
- American Academy of Microbiology Fellow, American Academy of Microbiology (02/18/2015)
- Max Planck Sabbatical Award, The Biology and Medicine Section of the Scientific Council of the Max Planck Society Honours (2018)
- Governor of American Academy of Microbiology, American Society of Microbiology (2020-2023)

PROFESSIONAL EDUCATION

- Ph.D., Stanford University, Microbiology & Immunology (2002)

LINKS

- MY LAB WEBSITE: <http://monacklab.stanford.edu>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The primary focus of our research is to understand the genetic and molecular mechanisms of intracellular bacterial pathogenesis.

We study how the interactions between enteric bacterial pathogens, the gut microbiota and the immune system influence chronic infection and transmission to new hosts. Salmonella is one of the model pathogens that we study. Salmonella typhi cause systemic diseases such as typhoid fever. We also explore interactions between Salmonella and immune cells, such as macrophages. We have shown that persisting Salmonella exploit the metabolic immune state of alternatively activated macrophages in order to cause chronic infections.

In addition, we study how the host recognizes and responds to intracellular bacterial pathogens. We have shown that cytosolic recognition of some bacteria leads to Type I Interferon signaling and Inflammasome activation. We take both a genetic and biochemical approach to understand the molecular mechanisms involved in host recognition pathways leading to inflammation and pathogen evasion mechanisms.

Teaching

COURSES

2019-20

- Advanced Pathogenesis of Bacteria, Viruses, and Eukaryotic Parasites: MI 210 (Spr)

2018-19

- Advanced Pathogenesis of Bacteria, Viruses, and Eukaryotic Parasites: MI 210 (Aut)

2017-18

- Advanced Pathogenesis of Bacteria, Viruses, and Eukaryotic Parasites: MI 210 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Abel Ferrel, Rebecca Gellman, Victoria Hernandez, Christine Peters, Medeea Popescu, Kim Vasquez

Postdoctoral Faculty Sponsor

Susan Brewer, Joy McKenna, Krystal Thomas-White, Benjamin Wang

Doctoral Dissertation Advisor (AC)

Oscar Diaz, Meagan Hamblin, Alvin Han, Sarah Ruddle, Ruth Schade

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)
- Microbiology and Immunology (Phd Program)

Publications

PUBLICATIONS

- **Repairing the "Leaky Pipeline" of Lost Talent** *CELL HOST & MICROBE*
Monack, D. M.
2020; 27 (3): 322
- **Genetic variation in the MacAB-TolC efflux pump influences pathogenesis of invasive Salmonella isolates from Africa.** *PLoS pathogens*
Honeycutt, J. D., Wenner, N. n., Li, Y. n., Brewer, S. M., Massis, L. M., Brubaker, S. W., Chairatana, P. n., Owen, S. V., Canals, R. n., Hinton, J. C., Monack, D. M.
2020; 16 (8): e1008763
- **Editorial overview: The fortunate students, a tribute to the fortunate professor.** *Current opinion in microbiology*
Monack, D. M., Brodsky, I. E.
2020

- **Salmonella-Driven Polarization of Granuloma Macrophages Antagonizes TNF-Mediated Pathogen Restriction during Persistent Infection.** *Cell host & microbe*
Pham, T. H., Brewer, S. M., Thurston, T., Massis, L. M., Honeycutt, J., Lugo, K., Jacobson, A. R., Vilches-Moure, J. G., Hamblin, M., Helaine, S., Monack, D. M.
2019
- **Salmonella Effector SteE Converts the Mammalian Serine/Threonine Kinase GSK3 into a Tyrosine Kinase to Direct Macrophage Polarization.** *Cell host & microbe*
Panagi, I., Jennings, E., Zeng, J., Gunster, R. A., Stones, C. D., Mak, H., Jin, E., Stapels, D. A., Subari, N. Z., Pham, T. H., Brewer, S. M., Ong, S. Y., Monack, et al
2019
- **What career advice do you give your grad students or postdocs?** *TRENDS IN MICROBIOLOGY*
Jensen, G., Merrih, H., Monack, D., Veening, J.
2019; 27 (6): 471–72
- **Western diet regulates immune status and the response to LPS-driven sepsis independent of diet-associated microbiome** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Napier, B. A., Andres-Terre, M., Massis, L. M., Hryckowian, A. J., Higginbottom, S. K., Cumnock, K., Casey, K. M., Haileselassie, B., Lugo, K. A., Schneider, D. S., Sonnenburg, J. L., Monack, D. M.
2019; 116 (9): 3688–94
- **A Gut Commensal-Produced Metabolite Mediates Colonization Resistance to Salmonella Infection.** *Cell host & microbe*
Jacobson, A., Lam, L., Rajendram, M., Tamburini, F., Honeycutt, J., Pham, T., Van Treuren, W., Pruss, K., Stabler, S. R., Lugo, K., Bouley, D. M., Vilches-Moure, J. G., Smith, et al
2018
- **Salmonella Typhimurium utilizes a T6SS-mediated antibacterial weapon to establish in the host gut.** *Proceedings of the National Academy of Sciences of the United States of America*
Sana, T. G., Flaughnatti, N., Lugo, K. A., Lam, L. H., Jacobson, A., Baylot, V., durand, e., Journet, L., Cascales, E., Monack, D. M.
2016; 113 (34): E5044-51
- **Intraspecies competition for niches in the distal gut dictate transmission during persistent Salmonella infection.** *PLoS pathogens*
Lam, L. H., Monack, D. M.
2014; 10 (12)
- **Role of disease-associated tolerance in infectious superspreaders** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Gopinath, S., Lichtman, J. S., Bouley, D. M., Elias, J. E., Monack, D. M.
2014; 111 (44): 15780-15785
- **Host transmission of Salmonella enterica serovar Typhimurium is controlled by virulence factors and indigenous intestinal microbiota** *INFECTION AND IMMUNITY*
Lawley, T. D., Bouley, D. A., Hoy, Y. E., Gerke, C., Relman, D. A., Monack, D. M.
2008; 76 (1): 403-416
- **A Salmonella Typhi RNA thermosensor regulates virulence factors and innate immune evasion in response to host temperature.** *PLoS pathogens*
Brewer, S. M., Twittenhoff, C., Kortmann, J., Brubaker, S. W., Honeycutt, J., Massis, L. M., Pham, T. H., Narberhaus, F., Monack, D. M.
2021; 17 (3): e1009345
- **A Rapid Caspase-11 Response Induced by IFN γ Priming Is Independent of Guanylate Binding Proteins.** *iScience*
Brubaker, S. W., Brewer, S. M., Massis, L. M., Napier, B. A., Monack, D. M.
2020; 23 (10): 101612
- **Upregulation of CD47 Is a Host Checkpoint Response to Pathogen Recognition.** *mBio*
Tal, M. C., Torrez Dulgeroff, L. B., Myers, L. n., Cham, L. B., Mayer-Barber, K. D., Bohrer, A. C., Castro, E. n., Yiu, Y. Y., Lopez Angel, C. n., Pham, E. n., Carmody, A. B., Messer, R. J., Gars, et al
2020; 11 (3)
- **Retinoic Acid and Lymphotoxin Signaling Promote Differentiation of Human Intestinal M Cells.** *Gastroenterology*
Ding, S. n., Song, Y. n., Brulois, K. F., Pan, J. n., Co, J. Y., Ren, L. n., Feng, N. n., Yasukawa, L. L., Sánchez-Tacuba, L. n., Wosen, J. E., Mellins, E. D., Monack, D. M., Amieva, et al
2020

- **Drp1/Fis1 interaction mediates mitochondrial dysfunction in septic cardiomyopathy** *JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY*
Haileselassie, B., Mukherjee, R., Joshi, A. U., Napier, B. A., Massis, L. M., Ostberg, N., Queliconi, B. B., Monack, D., Bernstein, D., Mochly-Rosen, D.
2019; 130: 160–69
- **Escalating Threat Levels of Bacterial Infection Can Be Discriminated by Distinct MAPK and NF-kappa B Signaling Dynamics in Single Host Cells** *CELL SYSTEMS*
Lane, K., Andres-Terre, M., Kudo, T., Monack, D. M., Covert, M. W.
2019; 8 (3): 183–+
- **Escalating Threat Levels of Bacterial Infection Can Be Discriminated by Distinct MAPK and NF-kappaB Signaling Dynamics in Single Host Cells.** *Cell systems*
Lane, K., Andres-Terre, M., Kudo, T., Monack, D. M., Covert, M. W.
2019
- **Western diet regulates immune status and the response to LPS-driven sepsis independent of diet-associated microbiome.** *Proceedings of the National Academy of Sciences of the United States of America*
Napier, B. A., Andres-Terre, M., Massis, L. M., Hryckowian, A. J., Higginbottom, S. K., Cumnock, K., Casey, K. M., Haileselassie, B., Lugo, K. A., Schneider, D. S., Sonnenburg, J. L., Monack, D. M.
2019; 116 (9): 3688–94
- **Controlling Epithelial Polarity: A Human Enteroid Model for Host-Pathogen Interactions.** *Cell reports*
Co, J. Y., Margalef-Catala, M., Li, X., Mah, A. T., Kuo, C. J., Monack, D. M., Amieva, M. R.
2019; 26 (9): 2509
- **Host inflammasome defense mechanisms and bacterial pathogen evasion strategies.** *Current opinion in immunology*
Brewer, S. M., Brubaker, S. W., Monack, D. M.
2019; 60: 63–70
- **Editorial: Protein Export and Secretion Among Bacterial Pathogens.** *Frontiers in cellular and infection microbiology*
Sana, T. G., Voulhoux, R., Monack, D. M., Ize, B., Bleves, S.
2019; 9: 473
- **ROLE OF DRP1/FIS1-MEDIATED MITOCHONDRIAL FRAGMENTATION IN SEPSIS-INDUCED MYOCARDIAL DYSFUNCTION**
Haileselassie, B., Joshi, A., Mukherjee, R., Napier, B., Massis, L., Ostberg, N., Monack, D., Bernstein, D., Mochly-Rosen, D.
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Drp1/Fis1 interaction mediates mitochondrial dysfunction in septic cardiomyopathy.** *Journal of molecular and cellular cardiology*
Haileselassie, B. n., Mukherjee, R. n., Joshi, A. U., Napier, B. A., Massis, L. M., Ostberg, N. P., Queliconi, B. B., Monack, D. n., Bernstein, D. n., Mochly-Rosen, D. n.
2019
- **Adding function to the genome of African Salmonella Typhimurium ST313 strain D23580.** *PLoS biology*
Canals, R., Hammarlof, D. L., Kroger, C., Owen, S. V., Fong, W. Y., Lacharme-Lora, L., Zhu, X., Wenner, N., Carden, S. E., Honeycutt, J., Monack, D. M., Kingsley, R. A., Brownridge, et al
2019; 17 (1): e3000059
- **Stanley Falkow (1934-2018) Obituary** *CELL HOST & MICROBE*
Monack, D.
2018; 23 (6): 687–88
- **Stanley Falkow (1934-2018)** *SCIENCE*
Monack, D., Strauss, E.
2018; 360 (6393): 1077
- **The oxidized phospholipid oxPAPC ameliorates septic shock by targeting the non-canonical inflammasome in macrophages**
Chu, L. H., Indramohan, M., Ratsimandresy, R. A., Gangopadhyay, A., Morris, E. P., Monack, D. M., Dorfleutner, A., Stehlik, C.
AMER ASSOC IMMUNOLOGISTS.2018
- **LysMD3 is a type II membrane protein without an in vivo role in the response to a range of pathogens** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Yokoyama, C. C., Baldrige, M. T., Leung, D. W., Zhao, G., Desai, C., Liu, T., Diaz-Ochoa, V. E., Huynh, J. P., Kimmey, J. M., Sennott, E. L., Hole, C. R., Idol, R. A., Park, et al

2018; 293 (16): 6022–38

- **The oxidized phospholipid oxPAPC protects from septic shock by targeting the non-canonical inflammasome in macrophages** *NATURE COMMUNICATIONS*
Chu, L. H., Indramohan, M., Ratsimandresy, R. A., Gangopadhyay, A., Morris, E. P., Monack, D. M., Dorfleutner, A., Stehlik, C.
2018; 9: 996
- **Cell-Intrinsic Defense at the Epithelial Border Wall: Salmonella Pays the Price** *IMMUNITY*
Brubaker, S. W., Monack, D. M.
2017; 46 (4): 522–24
- **Editorial: The sum of all defenses: tolerance plus resistance** *PATHOGENS AND DISEASE*
Napier, B. A., Monack, D. M.
2017; 75 (2)
- **Pseudogenization of the Secreted Effector Gene *sseI* Confers Rapid Systemic Dissemination of *S. Typhimurium* ST313 within Migratory Dendritic Cells.** *Cell host & microbe*
Carden, S. E., Walker, G. T., Honeycutt, J., Lugo, K., Pham, T., Jacobson, A., Bouley, D., Idoyaga, J., Tsolis, R. M., Monack, D.
2017; 21 (2): 182-194
- **T6SS: The bacterial "fight club" in the host gut.** *PLoS pathogens*
Sana, T. G., Lugo, K. A., Monack, D. M.
2017; 13 (6): e1006325
- **T6SS: The bacterial "fight club" in the host gut.** *Plos Pathogens*
Sana, T. G., Lugo, K. A., Monack, D. M.
2017: e1006325
- **Creating a RAW264.7 CRISPR-Cas9 Genome Wide Library.** *Bio-protocol*
Napier, B. A., Monack, D. M.
2017; 7 (10)
- **Complement pathway amplifies caspase-11-dependent cell death and endotoxin-induced sepsis severity.** *journal of experimental medicine*
Napier, B. A., Brubaker, S. W., Sweeney, T. E., Monette, P., Rothmeier, G. H., Gertsvolf, N. A., Puschnik, A., Carette, J. E., Khatri, P., Monack, D. M.
2016; 213 (11): 2365-2382
- **Bacterial Exotoxins: How Bacteria Fight the Immune System** *FRONTIERS IN IMMUNOLOGY*
Sastalla, I., Monack, D. M., Kubatzky, K. F.
2016; 7: 300
- **MICROBIOLOGY The dark side of antibiotics** *NATURE*
Sana, T. G., Monack, D. M.
2016; 534 (7609): 624–25
- **IMMUNOLOGY. A lipid arsenal to control inflammation.** *Science*
Napier, B. A., Monack, D. M.
2016; 352 (6290): 1173-1174
- **Disruption of glycolytic flux is a signal for inflammasome signaling and pyroptotic cell death** *ELIFE*
Sanman, L. E., Qian, Y., Eisle, N. A., Ng, T. M., van der Linden, W. A., Monack, D. M., Weerapana, E., Bogyo, M.
2016; 5
- **Coordinate actions of innate immune responses oppose those of the adaptive immune system during Salmonella infection of mice** *SCIENCE SIGNALING*
Hotson, A. N., Gopinath, S., Nicolau, M., Khasanova, A., Finck, R., Monack, D., Nolan, G. P.
2016; 9 (410)
- **Disruption of glycolytic flux is a signal for inflammasome signaling and pyroptotic cell death.** *eLife*
Sanman, L. E., Qian, Y., Eisele, N. A., Ng, T. M., van der Linden, W. A., Monack, D. M., Weerapana, E., Bogyo, M.
2016; 5
- **A quantitative analysis of single-cell TLR signaling dynamics in response to Salmonella infection.**

- Lane, K., Terre, M., Kudo, T., Monack, D., Covert, M. W.
AMER SOC CELL BIOLOGY.2016
- **Coordinate actions of innate immune responses oppose those of the adaptive immune system during Salmonella infection of mice.** *Science signaling*
Hotson, A. N., Gopinath, S. n., Nicolau, M. n., Khasanova, A. n., Finck, R. n., Monack, D. n., Nolan, G. P.
2016; 9 (410): ra4
 - **Cutting Edge: Inflammasome Activation in Primary Human Macrophages Is Dependent on Flagellin** *JOURNAL OF IMMUNOLOGY*
Kortmann, J., Brubaker, S. W., Monack, D. M.
2015; 195 (3): 815-819
 - **IMMUNOLOGY. Microbial metabolite triggers antimicrobial defense.** *Science*
Brubaker, S. W., Monack, D. M.
2015; 348 (6240): 1207-1208
 - **Non-typhoidal Salmonella Typhimurium ST313 isolates that cause bacteremia in humans stimulate less inflammasome activation than ST19 isolates associated with gastroenteritis.** *Pathogens and disease*
Carden, S., Okoro, C., Dougan, G., Monack, D.
2015; 73 (4)
 - **Non-typhoidal Salmonella Typhimurium ST313 isolates that cause bacteremia in humans stimulate less inflammasome activation than ST19 isolates associated with gastroenteritis.** *Pathogens and disease*
Carden, S., Okoro, C., Dougan, G., Monack, D.
2015; 73 (4)
 - **Bacterial recognition pathways that lead to inflammasome activation** *IMMUNOLOGICAL REVIEWS*
Storek, K. M., Monack, D. M.
2015; 265 (1): 112-129
 - **cGAS and Ifi204 Cooperate To Produce Type I IFNs in Response to Francisella Infection** *JOURNAL OF IMMUNOLOGY*
Storek, K. M., Gertsvoelf, N. A., Ohlson, M. B., Monack, D. M.
2015; 194 (7): 3236-3245
 - **Cutting Edge: Inflammasome Activation in Primary Human Macrophages Is Dependent on Flagellin.** *Journal of immunology (Baltimore, Md. : 1950)*
Kortmann, J. n., Brubaker, S. W., Monack, D. M.
2015; 195 (3): 815-19
 - **Intraspecies Competition for Niches in the Distal Gut Dictate Transmission during Persistent Salmonella Infection.** *PLoS pathogens*
Lam, L. H., Monack, D. M.
2014; 10 (12)
 - **Role of disease-associated tolerance in infectious superspreaders.** *Proceedings of the National Academy of Sciences of the United States of America*
Gopinath, S., Lichtman, J. S., Bouley, D. M., Elias, J. E., Monack, D. M.
2014; 111 (44): 15780-15785
 - **Host recognition of intracellular bacterial pathogens**
Monack, D.
ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD.2014: 24
 - **Structure and Function of REP34 Implicates Carboxypeptidase Activity in Francisella tularensis Host Cell Invasion** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Feld, G. K., El-Etr, S., Corzett, M. H., Hunter, M. S., Belhocine, K., Monack, D. M., Frank, M., Segelke, B. W., Rasley, A.
2014; 289 (44): 30668-30679
 - **Toll-like Receptor and Inflammasome Signals Converge to Amplify the Innate Bactericidal Capacity of T Helper 1 Cells.** *Immunity*
O'Donnell, H., Pham, O. H., Li, L., Atif, S. M., Lee, S., Ravesloot, M. M., Stolfi, J. L., Nuccio, S., Broz, P., Monack, D. M., Baumler, A. J., McSorley, S. J.
2014; 40 (2): 213-224
 - **The Battle in the Gut** *IMMUNITY*
Monack, D. M.
2014; 40 (2): 173-75

- **A microfluidic-based genetic screen to identify microbial virulence factors that inhibit dendritic cell migration** *INTEGRATIVE BIOLOGY*
McLaughlin, L. M., Xu, H., Carden, S. E., Fisher, S., Reyes, M., Heilshorn, S. C., Monack, D. M.
2014; 6 (4): 438-449
- **Helicobacter and Salmonella Persistent Infection Strategies** *COLD SPRING HARBOR PERSPECTIVES IN MEDICINE*
Monack, D. M.
2013; 3 (12)
- **Microbiota-liberated host sugars facilitate post-antibiotic expansion of enteric pathogens** *NATURE*
Ng, K. M., Ferreyra, J. A., Higginbottom, S. K., Lynch, J. B., Kashyap, P. C., Gopinath, S., Naidu, N., Choudhury, B., Weimer, B. C., Monack, D. M., Sonnenburg, J. L.
2013; 502 (7469): 96-?
- **Microbiota-liberated host sugars facilitate post-antibiotic expansion of enteric pathogens.** *Nature*
Ng, K. M., Ferreyra, J. A., Higginbottom, S. K., Lynch, J. B., Kashyap, P. C., Gopinath, S., Naidu, N., Choudhury, B., Weimer, B. C., Monack, D. M., Sonnenburg, J. L.
2013; 502 (7469): 96-99
- **Salmonella Require the Fatty Acid Regulator PPAR δ for the Establishment of a Metabolic Environment Essential for Long-Term Persistence.** *Cell host & microbe*
Eisele, N. A., Ruby, T., Jacobson, A., Manzanillo, P. S., Cox, J. S., Lam, L., Mukundan, L., Chawla, A., Monack, D. M.
2013; 14 (2): 171-182
- **PPAR γ -mediated increase in glucose availability sustains chronic Brucella abortus infection in alternatively activated macrophages.** *Cell host & microbe*
Xavier, M. N., Winter, M. G., Spees, A. M., den Hartigh, A. B., Nguyen, K., Roux, C. M., Silva, T. M., Atluri, V. L., Kerrinnes, T., Keestra, A. M., Monack, D. M., Luciw, P. A., Eigenheer, et al
2013; 14 (2): 159-170
- **PPAR gamma-Mediated Increase in Glucose Availability Sustains Chronic Brucella abortus Infection in Alternatively Activated Macrophages** *CELL HOST & MICROBE*
Xavier, M. N., Winter, M. G., Spees, A. M., den Hartigh, A. B., Nguyen, K., Roux, C. M., Silva, T. M., Atluri, V. L., Kerrinnes, T., Keestra, A. M., Monack, D. M., Luciw, P. A., Eigenheer, et al
2013; 14 (2): 159-170
- **Newly described pattern recognition receptors team up against intracellular pathogens** *NATURE REVIEWS IMMUNOLOGY*
Broz, P., Monack, D. M.
2013; 13 (8): 551-565
- **Revisiting caspase-11 function in host defense.** *Cell host & microbe*
Ng, T. M., Monack, D. M.
2013; 14 (1): 9-14
- **A coupled protein and probe engineering approach for selective inhibition and activity-based probe labeling of the caspases.** *Journal of the American Chemical Society*
Xiao, J., Broz, P., Puri, A. W., Deu, E., Morell, M., Monack, D. M., Bogoy, M.
2013; 135 (24): 9130-9138
- **The Systemic Immune State of Super-shedder Mice Is Characterized by a Unique Neutrophil-dependent Blunting of TH1 Responses.** *PLoS pathogens*
Gopinath, S., Hotson, A., Johns, J., Nolan, G., Monack, D.
2013; 9 (6)
- **Innate amplification of CD4 T cell responses during infection: NLRs and TLRs converge**
O'Donnell, H., Monack, D., McSorley, S.
AMER ASSOC IMMUNOLOGISTS.2013
- **The NeST Long ncRNA Controls Microbial Susceptibility and Epigenetic Activation of the Interferon-gamma Locus** *CELL*
Gomez, J. A., Wapinski, O. L., Yang, Y. W., Bureau, J., Gopinath, S., Monack, D. M., Chang, H. Y., Brahic, M., Kirkegaard, K.
2013; 152 (4): 743-754
- **Policing the cytosol-bacterial-sensing inflammasome receptors and pathways** *CURRENT OPINION IN IMMUNOLOGY*
Ng, T. M., Kortmann, J., Monack, D. M.

2013; 25 (1): 34-39

- **Noncanonical Inflammasomes: Caspase-11 Activation and Effector Mechanisms** *PLOS PATHOGENS*
Broz, P., Monack, D. M.
2013; 9 (2)
- **The complex interactions of bacterial pathogens and host defenses.** *Current opinion in microbiology*
Monack, D. M., Hultgren, S. J.
2013; 16 (1): 1-3
- **Measuring inflammasome activation in response to bacterial infection.** *Methods in molecular biology (Clifton, N.J.)*
Broz, P., Monack, D. M.
2013; 1040: 65-84
- **Phosphorylation of NLRC4 is critical for inflammasome activation** *NATURE*
Qu, Y., Misaghi, S., Izrael-Tomasevic, A., Newton, K., Gilmour, L. L., Lamkanfi, M., Louie, S., Kayagaki, N., Liu, J., Koemueves, L., Cupp, J. E., Arnott, D., Monack, et al
2012; 490 (7421): 539-?
- **Caspase-11 increases susceptibility to Salmonella infection in the absence of caspase-1** *NATURE*
Broz, P., Ruby, T., Belhocine, K., Bouley, D. M., Kayagaki, N., Dixit, V. M., Monack, D. M.
2012; 490 (7419): 288-?
- **Caspase-1 activity is required to bypass macrophage apoptosis upon Salmonella infection** *NATURE CHEMICAL BIOLOGY*
Puri, A. W., Broz, P., Shen, A., Monack, D. M., Bogyo, M.
2012; 8 (9): 745-747
- **Shedding light on Salmonella carriers** *TRENDS IN MICROBIOLOGY*
Gopinath, S., Carden, S., Monack, D.
2012; 20 (7): 320-327
- **Salmonella's long-term relationship with its host** *FEMS MICROBIOLOGY REVIEWS*
Ruby, T., McLaughlin, L., Gopinath, S., Monack, D.
2012; 36 (3): 600-615
- **Delayed activation of host innate immune pathways in streptozotocin-induced diabetic hosts leads to more severe disease during infection with Burkholderia pseudomallei** *IMMUNOLOGY*
Chin, C., Monack, D. M., Nathan, S.
2012; 135 (4): 312-332
- **Innate immune response to Salmonella typhimurium, a model enteric pathogen.** *Gut microbes*
Broz, P., Ohlson, M. B., Monack, D. M.
2012; 3 (2): 62-70
- **Salmonella persistence and transmission strategies** *CURRENT OPINION IN MICROBIOLOGY*
Monack, D. M.
2012; 15 (1): 100-107
- **Francisella infection triggers activation of the AIM2 inflammasome in murine dendritic cells** *CELLULAR MICROBIOLOGY*
Belhocine, K., Monack, D. M.
2012; 14 (1): 71-80
- **Dermacentor andersoni Transmission of Francisella tularensis subsp novicida Reflects Bacterial Colonization, Dissemination, and Replication Coordinated with Tick Feeding** *INFECTION AND IMMUNITY*
Reif, K. E., Palmer, G. H., Ueti, M. W., Scoles, G. A., Margolis, J. J., Monack, D. M., Noh, S. M.
2011; 79 (12): 4941-4946
- **Elevated AIM2-mediated pyroptosis triggered by hypercytotoxic Francisella mutant strains is attributed to increased intracellular bacteriolysis** *CELLULAR MICROBIOLOGY*
Peng, K., Broz, P., Jones, J., Joubert, L., Monack, D.
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