Stanford



Denise M. Monack

Martha Meier Weiland Professor in the School of Medicine

Microbiology and Immunology

CONTACT INFORMATION

- **Alternate Contact**

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Bio

BIO

Dr. Denise Monack, Ph.D., is the Martha Meier Weiland Professor of School of Medicine in the Department of Microbiology and Immunology at the School of Medicine at Stanford University. The primary focus of her research is to understand the tug-of-war between the immune system and bacterial pathogens during infections. She is particularly intrigued by host-adapted enteric pathogens that have evolved to persist within hosts for long periods of time and spread to new hosts. She has discovered specific immune responses that help the host tolerate high levels of pathogen, referred to as “superspreaders”. She studies pathogen-microbiota interactions in the gut and has discovered that specific commensal bacteria-derived metabolites help defend against bacteria that cause food poisoning. In addition, her laboratory studies how immune cells recognize pathogenic bacteria that are residing within them. Her lab discovered that two innate immune pathways are sequentially linked and that this 2-tiered response is a host gauge of the “danger” level before commitment to host cell death. She has received numerous prestigious awards in microbiology and immunology, including The Burroughs Wellcome Fund Recipient in Infectious Disease, Society of Leukocyte Biology G. J. Thorbecke Award, Stanford University Postdoc Association Mentor Award, Max Planck Sabbatical Award, Elected Chair of Division B, American Society of Microbiologist, and is an elected Fellow and Governor to the American Academy of Microbiology. She is Section Editor at PLoS Pathogens, Editor at Infection and Immunity. She is currently the Principle Investigator of the NIH Training Grant in Microbiology and Immunology at Stanford and Chair of the Department of Microbiology and Immunology at Stanford University School of Medicine.

ACADEMIC APPOINTMENTS

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

ADMINISTRATIVE APPOINTMENTS

- Department Chair, Microbiology and Immunology, (2022- present)

HONORS AND AWARDS

- Martha Meier Weiland Professor in The School of Medicine, Stanford University (2022)
- 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

- B.Sc., University of California, Davis CA , Genetics (1984)
- 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

2023-24

- Advanced Seminar in Microbial Molecular Biology: BIO 346, CSB 346, GENE 346 (Aut, Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Jasmine Arunachalam, Alyssa Cutter, Miles Tuncel, George Walters-Marrah

Postdoctoral Faculty Sponsor

Wesley Burford, Addison Duda, Jeff Hsiao, Joy McKenna, Christine Qabar, Victor Vazquez Marrero, Xiaohui Yu

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (PhD Program)
- Microbiology and Immunology (PhD Program)

Publications

PUBLICATIONS

- **Native pathogen-phage networks reveal multilayered defense and gut-active anti-phage immunity.** *Cell host & microbe*
  Wang, B. X., Narasimhan, R., Brady, A., Wenner, N., Perez Sepulveda, B., Hughes, K., Hooda, Y., Saha, S., Hinton, J. C., Monack, D. M.
  2026
- **Eosinophils enhance granuloma-mediated control of persistent Salmonella infection in mice.** *Nature microbiology*
  Butler, D. S., Di Luccia, B., Vilches-Moure, J. G., Monack, D. M.
  2025
- **Salmonella-superspreader hosts require gut regulatory T cells to maintain a disease-tolerant state.** *The Journal of experimental medicine*
  Di Luccia, B., Massis, L. M., Butler, D. S., Narasimhan, R., Ruddle, S. J., Pham, T. H., Vilches-Moure, J. G., Monack, D. M.
  2025; 222 (11)
- **Profiling Salmonella transcriptional dynamics during macrophage infection using a comprehensive reporter library.** *Nature microbiology*
  Nguyen, T. H., Wang, B. X., Diaz, O. R., Rajendram, M., McKenna, J. A., Butler, D. S., Hokamp, K., Hinton, J. C., Monack, D. M., Huang, K. C.
  2025; 10 (4): 1006-1023
- **High-throughput fitness experiments reveal specific vulnerabilities of human-adapted Salmonella during stress and infection.** *Nature genetics*
  Wang, B. X., Leshchiner, D., Luo, L., Tuncel, M., Hokamp, K., Hinton, J. C., Monack, D. M.
  2024
- **Salmonella enterica serovar Typhi uses two type 3 secretion systems to replicate in human macrophages and colonize humanized mice.** *mBio*
  Hamblin, M., Schade, R., Narasimhan, R., Monack, D. M.
  2023: e0113723
- **Salmonella-liberated dietary L-arabinose promotes expansion in superspreaders.** *Cell host & microbe*
  Ruddle, S. J., Massis, L. M., Cutter, A. C., Monack, D. M.
  2023
- **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
- **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
- **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
- **Follicle-associated epithelial tuft cells amplify type 2 mucosal immunity and IgA production.** *Science immunology*
  Barrón, G. M., Jayewickreme, R. D., Tran, H. H., Thompson, T. W., Narasimhan, R., Zhu, Y., DeSchepper, L. B., Habashi, D., Nico, K. F., Tyner, M. D., Tierney, F. M., Billipp, T. E., Rosen, et al
  2026; 11 (124): eaee1358
- **Salmonella- infected superspreader hosts require gut regulatory T cells to maintain an asymptomatic state during chronic infection**

Di Luccia, B., Butler, D. S. C., Pham, T., Vilches-Moure, J. G., Monack, D. M.
OXFORD UNIV PRESS.2025: 619

- **A tale of two caspases.** *eLife*
  Monack, D. M.
  2025; 14

- **Eosinophils Enhance Granuloma-Mediated Control of Persistent Salmonella Infection.** *Research square*
  Monack, D., Butler, D., Di Luccia, B., Vilches-Moure, J.
  2025

- **High-throughput fitness screens link genes to unique phenotypes in human-restricted Salmonella** *NATURE GENETICS*
  Wang, B. X., Monack, D. M.
  2024; 56 (7): 1053-1054

- **Transcriptional profiling links unique human macrophage phenotypes to the growth of intracellular Salmonella enterica serovar Typhi.** *Scientific reports*
  Schade, R., Butler, D. S., McKenna, J. A., Di Luccia, B., Shokoohi, V., Hamblin, M., Pham, T. H., Monack, D. M.
  2024; 14 (1): 12811

- **Temperature-dependent differences in mouse gut motility are mediated by stress.** *Lab animal*
  Han, A., Hudson-Paz, C., Robinson, B. G., Becker, L., Jacobson, A., Kaltschmidt, J. A., Garrison, J. L., Bhatt, A. S., Monack, D. M.
  2024

- **Corrigendum to "Drp1/Fis1 interaction mediates mitochondrial dysfunction in septic cardiomyopathy" [Journal: Molecular of and Cellular Cardiology (2019) May 130;160-169].** *Journal of molecular and cellular cardiology*
  Haileselassie, B., Mukherjee, R., Joshi, A. U., Napier, B. A., Massis, L. M., Ostberg, N. P., Queliconi, B. B., Monack, D., Bernstein, D., Mochly-Rosen, D.
  2023

- **Turning foes into permissive hosts: manipulation of macrophage polarization by intracellular bacteria.** *Current opinion in immunology*
  Pham, T. H., Monack, D. M.
  2023; 84: 102367

- **One species, different diseases: the unique molecular mechanisms that underlie the pathogenesis of typhoidal Salmonella infections.** *Current opinion in microbiology*
  Wang, B. X., Butler, D. S., Hamblin, M., Monack, D. M.
  2023; 72: 102262

- **Single-cell profiling identifies ACE+ granuloma macrophages as a nonpermissive niche for intracellular bacteria during persistent Salmonella infection.** *Science advances*
  Pham, T. H., Xue, Y., Brewer, S. M., Bernstein, K. E., Quake, S. R., Monack, D. M.
  2023; 9 (1): eadd4333

- **Drp1/Fis1-Dependent Pathologic Fission and Associated Damaged Extracellular Mitochondria Contribute to Macrophage Dysfunction in Endotoxin Tolerance.** *Critical care medicine*
  Mukherjee, R., Tompkins, C. A., Ostberg, N. P., Joshi, A. U., Massis, L. M., Vijayan, V., Gera, K., Monack, D., Cornell, T. T., Hall, M. W., Mochly-Rosen, D., Haileselassie, B.
  1800

- **Controlling the polarity of human gastrointestinal organoids to investigate epithelial biology and infectious diseases.** *Nature protocols*
  Co, J. Y., Margalef-Catala, M., Monack, D. M., Amieva, M. R.
  2021

- **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 IFNgamma 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

- **Spraying Small Water Droplets Acts as a Bacteriocide.** *QRB discovery*
  Dulay, M. T., Lee, J. K., Mody, A. C., Narasimhan, R., Monack, D. M., Zare, R. N.
  2020; 1: e3
- **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
- **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
- **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)
- **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., Merrikh, H., Monack, D., Veening, J.
  2019; 27 (6): 471–72
- **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-+
- **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
- **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
- **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
- **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., Lacharme-Lora, L., Zhu, X., Wenner, N., Carden, S. E., Honeycutt, J., Monack, D. M., Kingsley, R. A., Brownridge, et al
  2019; 17 (1)
- **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
- **A Gut Commensal-Produced Metabolite Mediates Colonization Resistance to Salmonella Infection** *CELL HOST & MICROBE*
  Jacobson, A., Lam, L., Rajendram, M., Tamburini, F., Honeycutt, J., Trung Pham, Van Treuren, W., Pruss, K., Stabler, S., Lugo, K., Bouley, D. M., Vilches-Moure, J. G., Smith, M., et al
  2018; 24 (2): 296-+
- **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., Baldridge, 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., Ratsimandresey, R. A., Gangopadhyay, A., Morris, E. P., Monack, D. M., Dorfleutner, A., Stehlik, C.
  2018; 9: 996
- **T6SS: The bacterial "fight club" in the host gut.** *PLoS pathogens*
  Sana, T. G., Lugo, K. A., Monack, D. M.
  2017; 13 (6): e1006325
- **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
- **Creating a RAW264.7 CRISPR-Cas9 Genome Wide Library.** *Bio-protocol*
  Napier, B. A., Monack, D. M.
  2017; 7 (10)
- **T6SS: The bacterial "fight club" in the host gut.** *Plos Pathogens*
  Sana, T. G., Lugo, K. A., Monack, D. M.
  2017: e1006325
- **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
- **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., Flaugnatti, 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
- **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)

- **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): ra4
- **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
- **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
- **Cutting Edge: Inflammasome Activation in Primary Human Macrophages Is Dependent on Flagellin.** *Journal of immunology (Baltimore, Md. : 1950)*
  Kortmann, J., Brubaker, S. W., Monack, D. M.
  2015; 195 (3): 815-9
- **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., Gertsvolf, N. A., Ohlson, M. B., Monack, D. M.
  2015; 194 (7): 3236-3245
- **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.
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