Stanford



Mary Beth Mudgett

Senior Associate Dean for the Natural Sciences and Susan B. Ford Professor Biology

CONTACT INFORMATION

- **Administrative Contact**

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Bio

BIO

Mary Beth Mudgett, the Stanford Friends University Fellow in Undergraduate Education, is the Senior Associate Dean for the Natural Sciences in the School of Humanities & Sciences. She received her doctorate in biochemistry at University of California, Los Angeles and has been a professor in Stanford's Department of Biology since 2002. Her research group studies plant-pathogen interactions, focusing on the biochemical mechanisms that pathogens use to manipulate the plant immune system resulting in disease outbreaks. As president of the International Society for Plant-Microbe Interactions, Mudgett launched a series of virtual symposia and platforms to enable networking on a global scale, while creating an inclusive environment to hear from the society's diverse stakeholders. Mudgett is also passionate about teaching and mentorship. She has launched new initiatives within biology to embrace different learning styles and enhance the student experience in the classroom. She also leads efforts to reshape introductory science and math courses to better support students with different levels of preparation for success in STEM majors. Mudgett partners on a school initiative to provide teaching mentorship support for junior faculty and their mentors to enhance best practices across the curricula. As co-chair of Stanford's Academic Continuity Group, Mudgett helped the university blaze a path through the thicket of teaching challenges posed by the pandemic. She helped to solve problems involving online learning and curriculum development and to create the infrastructure and support needed for faculty, staff, and students to safely return to in-person instruction. In addition, she directed the Dean's Fellows Program, which provided teaching and research opportunities for graduate students completing their degrees and facing a job market made challenging by the pandemic. In her current role, she is dedicated to champion the core missions in research, teaching, and mentoring within the natural science cluster and broader communities.

ACADEMIC APPOINTMENTS

- Associate Professor, Biology
- Professor, Biology
- Member, Bio-X

ADMINISTRATIVE APPOINTMENTS

- Senior Associate Dean of Natural Sciences, School of Humanities & Sciences, Stanford University, (2022- present)
- Senior Associate Dean, Educational Initiatives, School of Humanities & Sciences, Stanford University, (2019-2022)
- Adjunct Staff Scientist, Department of Plant Biology, Carnegie Institute of Science, (2016- present)

- Professor, Department of Biology, Stanford University, (2015- present)
- Associate Professor, Department of Biology, Stanford University, (2010-2015)
- Assistant Professor, Department of Biology, Stanford University, (2002-2009)

HONORS AND AWARDS

- Bass Fellow, Stanford Friends University Fellow in Undergraduate Education, Stanford University (2018-2022)
- Dean's Award for Distinguished Teaching, School of H&S, Stanford University (2017)
- Phi Beta Kappa Teaching Excellence Prize, PBK Northern Chapter (2017)
- Phi Beta Kappa Teaching Prize, Stanford University (2016)
- Excellence in Diversity, Bioscience Faculty Excellence Award, School of Medicine, Stanford University (2014)
- VPUE Faculty Scholar, Stanford University (2013-2014)
- Chambers Fellow, Stanford University (2011-2014)
- Teacher of the Year, Associated Students of Stanford University (2008)
- Hellman Faculty Scholar, Stanford University (2005-2006)
- Terman Fellow, Stanford University (2004-2010)
- National Research Service Award, National Institute of Health (1997-1999)
- Graduate Research Achievement Award, University of California, Los Angeles (1992)
- Graduate Teaching Assistant Award, University of California, Los Angeles (1990)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Advisor, University Accreditation Advisory Committee, Stanford University (2022 - present)
- Chair, Execute Advisory Committee for Hopkins Marine Station, Stanford University (2021 - present)
- Member, Faculty Senate, Stanford University (2021 - present)
- Chair, Center for Teaching & Learning Director Search, Stanford University (2021 - 2021)
- Co-Chair, Summer Program Committee, Stanford University (2020 - present)
- Member, IDEAL Education Committee, Stanford University (2020 - present)
- Co-lead, Academic Continuity, Pandemic Response, Stanford University (2020 - 2022)
- Member, Policy Group for Pandemic Response, Stanford University (2020 - 2022)
- Advisor, VPUE Undergraduate Advisory Council, Stanford University (2019 - present)
- President, International Society for Molecular Plant-Microbe Interactions (2019 - 2022)
- Member, Committee on Committees, Stanford Academic Council, Stanford University (2019 - 2020)
- Member, Search Committee for Vice Provost of Undergraduate Education, Stanford University (2019 - 2020)
- Member, Faculty Senate, Stanford University (2018 - 2020)
- Member, First Year Experience Design Team, Long-range Planning, Stanford University (2018 - 2019)
- Member, Steering Committee, Stanford Academic Council, Stanford University (2018 - 2019)
- Chair, Natural Sciences Long-Range Planning, School of Humanities & Sciences, Stanford University (2017 - 2017)
- Member, Committee on Review of Undergraduate Majors (C-RUM), Stanford University (2016 - 2019)
- Reviewer, Biophysics IDP Graduate Program, School of Medicine, Stanford University (2016 - 2016)
- Reviewer, Immunology IDP Graduate Program, School of Medicine, Stanford University (2016 - 2016)
- Advisor, Advisory Committee for NIH IRACDA Postdoctoral Program, Stanford University (2015 - 2020)

- Director of Graduate Studies, Department of Biology, Stanford University (2015 - 2019)
- Member, Committee on Graduate Admissions and Policy, Bioscience Program, Stanford University (2014 - 2019)
- Member, Executive Committee, Biology Department, Stanford University (2014 - 2019)
- Fellow, ChEM-H: Chemistry, Engineering & Medicine for Human Health, Stanford University (2013 - present)
- Chair, Bioscience Diversity Advisory Council (BDAC), School of Medicine, Stanford University (2013 - 2020)
- Member, Steering Committee, NIH Biotech Predoctoral Training Program, Bioengineering, Stanford University (2013 - 2020)
- Member, Postdoctoral Mentoring Initiative Task Force, Stanford Biosciences, Stanford University (2013 - 2014)
- Member, Sustainable Funding Model Working Group, Stanford Biosciences, Stanford University (2013 - 2014)
- Participant, Vision & Change in Undergraduate Biology Education, National Science Foundation & AAAS (2013 - 2013)
- Board Member, International Society for Molecular Plant-Microbe Interactions (2012 - present)
- Member, Biology Graduate Studies Committee, Stanford University (2011 - 2019)
- Chair of Biology Graduate Admissions & Recruiting, Stanford University (2011 - 2014)
- Member, Faculty Senate, Stanford University (2011 - 2014)
- Editor, Frontiers in Plant-Microbe Interactions, Frontiers Journal (2010 - 2014)
- Specialty Chief Editor, Frontiers in Plant-Microbe Interactions, Frontiers Journal (2010 - 2014)
- Member, Committee on Research (C-Res), Stanford University (2010 - 2013)
- Chair & Board Member, Pierce's Disease/Glassy Wing Sharp Shooter Research Advisory Board, California Department of Food & Agriculture (2009 - 2014)
- Senior Editor, Molecular Plant Pathology, British Society for Plant Pathology (2009 - 2011)
- Advisor, Pre-Major Undergraduate Advisor, Stanford University (2007 - 2018)
- Advisor, Graduate Program Review, Department of Molecular & Cell Biology, Oregon State University (2006 - 2006)
- Associate Editor, Molecular Plant-Microbe Interactions, International Society for Plant-Microbe Interactions (2004 - 2005)
- Advisor, Annual Review of Plant Biology, Annual Reviews (2004 - 2004)
- Member, Biology Undergraduate Studies Committee, Stanford University (2003 - 2009)
- Advisor, Biology First Year Graduate Advising, Stanford University (2002 - present)
- Advisor, NSF US-EC Task Force on Biotechnology, National Science Foundation (2001 - 2001)
- Member, International Society of Plant-Microbe Interactions (1996 - present)

PROFESSIONAL EDUCATION

- Postdoctoral Scholar, University of California, Berkeley , Plant-Microbe Interactions (2001)
- Postdoctoral Scholar, University of California, Los Angeles , Biochemistry (1995)
- PhD, University of California, Los Angeles , Biochemistry (1994)
- BA, Ithaca College , Biochemistry (1989)

LINKS

- Mudgett Lab Website: http://web.stanford.edu/group/mudgettlab/cgi-bin/wordpress/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My laboratory studies the biochemical mechanisms used by bacterial pathogens to alter plant physiology during infection. Extensive genetic and phenotypic data indicate that the bacterial type three secretion (T3S) system and its protein substrates (referred to as T3S effectors) are the major

virulence determinants that promote pathogen colonization in plants. The paradigm for T3S effector function has been that these proteins collectively suppress host defense responses to promote colonization and disease progression. The biological function(s) of most T3S effectors, however, is extremely limited and biochemical support for this paradigm is lacking. Thus, the goal of our research has been to elucidate T3S effector function, identify host targets, and provide fundamental knowledge of how perturbation of of distinct nodes in host signaling pathways leads to bacterial pathogenesis. To do so, we study the T3S effectors in Xanthomonas euvesicatoria (Xcv), a Gram-negative, facultative parasite that causes leaf spot disease in tomato and pepper. Understanding how plant innate immunity is regulated and how pathogens manipulate plant hosts is is fundamental knowledge that is required for the development of novel strategies to prevent and/or eliminate plant disease in the field.

Currently, my group is investigating: 1) how Xanthomonas employs a transcription repressor to rewire host transcription during infection to alter immune signaling and growth programs; 2) how Xanthomonas effectors target 14-3-3 phospho-binding proteins to alter immune complexes and signaling; 3) the impact of Xanthomonas-mediated acetylation of host proteins that are involved with lipid signaling and microtubule dynamics; 4) how Xanthomonas uses a "default to death and defense strategy" to promote plant pathogenesis; and 5) unique natural products made during pathogen infection in tomato by applying a untargeted metabolomics in conjunction with transcriptomics to accelerate the discovery of new antimicrobial compounds and their biosynthetic pathways.

Teaching

COURSES

2026-27

- Biology PhD Lab Rotation: BIO 299 (Aut, Win, Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Alice Gevorgyan

Doctoral Dissertation Advisor (AC)

Steven Massa, Omar Niagne

Doctoral Dissertation Co-Advisor (AC)

Yalikunjiang Aizezi

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (PhD Program)

Publications

PUBLICATIONS

- **Linking sugar sensing to immunity in plants via O-glycosylation.** *bioRxiv : the preprint server for biology*
  Aizezi, Y., Bi, Y., Zhang, H., Kim, J. G., Chaudhary, A., Trinh, C. S., Shen, Q. J., Xu, S. L., Mudgett, M. B., Wang, Z. Y.
  2026

- **Fast wide-field light sheet electro-optic FLIM** *OPTICS EXPRESS*
  Knight, V., Bode, N., Dowlatshahi, D. P., Kim, J., Mudgett, M., Wakatsuki, S., Bowman, A. J., Kasevich, M. A.
  2026; 34 (8): 15065-15073

- **Characterization of a XopJ2 variant in global population of Xanthomonas perforans**
  Sharma, A., Iruegas-Bocardo, F., Bibi, S., Chen, Y. C., Kim, J. G., Abrahamian, P., Minsavage, G. V., Hulbert, J. C., Vallad, G. E., Mudgett, M. B., Jones, J. B., Goss, E. M.

AMER PHYTOPATHOLOGICAL SOC.2024: 102-103

- **Transcriptome analysis reveals role of transcription factor WRKY70 in early N-hydroxy-pipecolic acid signaling.** *Plant physiology*
  Foret, J., Kim, J. G., Sattely, E. S., Mudgett, M. B.
  2024
- **Multiple acquisitions of XopJ2 effectors in populations of Xanthomonas perforans.** *Molecular plant-microbe interactions : MPMI*
  Sharma, A., Iruegas-Bocardo, F., Bibi, S., Chen, Y. C., Kim, J. G., Abrahamian, P., Minsavage, G. V., Hurlbert, J. C., Vallad, G. E., Mudgett, M. B., Jones, J. B., Goss, E. M.
  2024
- **Dynamic changes of the Prf/Pto tomato resistance complex following effector recognition.** *Nature communications*
  Sheikh, A. H., Zacharia, I., Pardal, A. J., Dominguez-Ferreras, A., Sueldo, D. J., Kim, J. G., Balmuth, A., Gutierrez, J. R., Conlan, B. F., Ullah, N., Nippe, O. M., Girija, A. M., Wu, et al
  2023; 14 (1): 2568
- **Deconvoluting signals downstream of growth and immune receptor kinases by phosphocodes of the BSU1 family phosphatases.** *Nature plants*
  Park, C. H., Bi, Y., Youn, J., Kim, S., Kim, J., Xu, N. Y., Shrestha, R., Burlingame, A. L., Xu, S., Mudgett, M. B., Kim, S., Kim, T., Wang, et al
  2022
- **A bacterial effector counteracts host autophagy by promoting degradation of an autophagy component.** *The EMBO journal*
  Leong, J. X., Raffeiner, M., Spinti, D., Langin, G., Franz-Wachtel, M., Guzman, A. R., Kim, J. G., Pandey, P., Minina, A. E., Macek, B., Hafrén, A., Bozkurt, T. O., Mudgett, et al
  2022: e110352
- **Arabidopsis UGT76B1 glycosylates N-hydroxy-pipecolic acid and inactivates systemic acquired resistance in tomato.** *The Plant cell*
  Holmes, E. C., Chen, Y., Mudgett, M. B., Sattely, E. S.
  2021
- **Arabidopsis bZIP11 is a susceptibility factor during Pseudomonas syringae infection.** *Molecular plant-microbe interactions : MPMI*
  Prior, M. J., Selvanayagam, J., Kim, J., Tomar, M., Jonikas, M., Mudgett, M. B., Smeekens, S., Hanson, J., Frommer, W. B.
  2021
- **Arabidopsis UGT76B1 glycosylates N-hydroxy-pipecolic acid and inactivates systemic acquired resistance in tomato.** *The Plant cell*
  Holmes, E. C., Chen, Y. C., Mudgett, M. B., Sattely, E. S.
  2021; 33 (3): 750–65
- **Tomato Atypical Receptor Kinase1 is involved in the regulation of pre-invasion defense.** *Plant physiology*
  Guzman, A. R., Kim, J., Taylor, K. W., Lanver, D., Mudgett, M. B.
  2020
- **A Pathogen-Responsive Gene Cluster for Highly Modified Fatty Acids in Tomato.** *Cell*
  Jeon, J. E., Kim, J. G., Fischer, C. R., Mehta, N. n., Dufour-Schroif, C. n., Wemmer, K. n., Mudgett, M. B., Sattely, E. n.
  2020; 180 (1): 176–87.e19
- **An engineered pathway for N-hydroxy-pipecolic acid synthesis enhances systemic acquired resistance in tomato.** *Science signaling*
  Holmes, E. C., Chen, Y., Sattely, E. S., Mudgett, M. B.
  2019; 12 (604)
- **Aphid effector Me10 interacts with tomato TFT7, a 14-3-3 isoform involved in aphid resistance** *NEW PHYTOLOGIST*
  Chaudhary, R., Peng, H., He, J., MacWilliams, J., Teixeira, M., Tsuchiya, T., Chesnais, Q., Mudgett, M., Kaloshian, I.
  2019; 221 (3): 1518–28
- **Tomato bHLH132 transcription factor controls growth and defense and is activated by Xanthomonas euvesicatoria effector XopD during pathogenesis.** *Molecular plant-microbe interactions : MPMI*
  Kim, J. G., Mudgett, M. B.
  2019
- **Tomato 14-3-3 Proteins Are Required for Xv3 Disease Resistance and Interact with a Subset of Xanthomonas euvesicatoria Effectors** *MOLECULAR PLANT-MICROBE INTERACTIONS*

Dubrow, Z., Sunitha, S., Kim, J., Aakre, C. D., Girija, A., Sobol, G., Teper, D., Chen, Y., Ozbaki-Yagan, N., Vance, H., Sessa, G., Mudgett, M.
2018; 31 (12): 1301–11

- **Aphid effector Me10 interacts with tomato TFT7, a 14-3-3 isoform involved in aphid resistance.** *The New phytologist*
  Chaudhary, R., Peng, H., He, J., MacWilliams, J., Teixeira, M., Tsuchiya, T., Chesnais, Q., Mudgett, M. B., Kaloshian, I.
  2018
- **Tomato 14-3-3 proteins are required for Xv3 disease resistance and interact with a subset of Xanthomonas euvesicatoria effectors.** *Molecular plant-microbe interactions : MPMI*
  Dubrow, Z., Sunitha, S., Kim, J., Aakre, C., Girija, A. M., Sobol, G., Teper, D., Chen, Y., Ozbaki-Yagan, N., Vance, H., Sessa, G., Mudgett, M. B.
  2018
- **N-hydroxy-pipecolic acid is a mobile metabolite that induces systemic disease resistance in Arabidopsis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Chen, Y., Holmes, E. C., Rajniak, J., Kim, J., Tang, S., Fischer, C. R., Mudgett, M., Sattely, E. S.
  2018; 115 (21): E4920–E4929
- **Quantification of Ethylene Production in Tomato Leaves Infected by Xanthomonas euvesicatoria.** *Bio-protocol*
  Kim, J., Stork, W., Mudgett, M. B.
  2016; 6 (3)
- **Functional Analysis of Plant Defense Suppression and Activation by the Xanthomonas Core Type III Effector XopX** *MOLECULAR PLANT-MICROBE INTERACTIONS*
  Stork, W., Kim, J., Mudgett, M. B.
  2015; 28 (2): 180-194
- **A Comprehensive Analysis of MicroProteins Reveals Their Potentially Widespread Mechanism of Transcriptional Regulation.** *Plant physiology*
  Magnani, E., de Klein, N., Nam, H., Kim, J., Pham, K., Fiume, E., Mudgett, M. B., Rhee, S. Y.
  2014; 165 (1): 149-159
- **The bHLH Transcription Factor HBI1 Mediates the Trade-Off between Growth and Pathogen-Associated Molecular Pattern-Triggered Immunity in Arabidopsis.** *Plant cell*
  Fan, M., Bai, M., Kim, J., Wang, T., Oh, E., Chen, L., Park, C. H., Son, S., Kim, S., Mudgett, M. B., Wang, Z.
  2014; 26 (2): 828-841
- **AvrBsT acetylates Arabidopsis ACIP1, a protein that associates with microtubules and is required for immunity.** *PLoS pathogens*
  Cheong, M. S., Kirik, A., Kim, J., Frame, K., Kirik, V., Mudgett, M. B.
  2014; 10 (2)
- **A robust methodology to subclassify pseudokinases based on their nucleotide-binding properties.** *Biochemical journal*
  Murphy, J. M., Zhang, Q., Young, S. N., Reese, M. L., Bailey, F. P., Eyers, P. A., Ungureanu, D., Hammaren, H., Silvennoinen, O., Varghese, L. N., Chen, K., Tripaydonis, A., Jura, et al
  2014; 457 (2): 323-334
- **Xanthomonas euvesicatoria typeIII effector XopQ interacts with tomato and pepper 14-3-3 isoforms to suppress effector-triggered immunity** *PLANT JOURNAL*
  Teper, D., Salomon, D., Sunitha, S., Kim, J., Mudgett, M. B., Sessa, G.
  2014; 77 (2): 297-309
- **Xanthomonas euvesicatoria type III effector XopQ interacts with tomato and pepper 14-3-3 isoforms to suppress effector-triggered immunity.** *The Plant journal : for cell and molecular biology*
  Teper, D., Salomon, D., Sunitha, S., Kim, J. G., Mudgett, M. B., Sessa, G.
  2013
- **Xanthomonas type III effector XopD desumoylates tomato transcription factor SlERF4 to suppress ethylene responses and promote pathogen growth.** *Cell host & microbe*
  Kim, J., Stork, W., Mudgett, M. B.
  2013; 13 (2): 143-154
- **XopD Peptidase** *HANDBOOK OF PROTEOLYTIC ENZYMES, VOLS 1 AND 2, 3RD EDITION*

Kim, J., Mudgett, M.
edited by Rawlings, N. D., Salvesen, G. S.
2013: 2382–85

- **Regulation of Cell Wall-Bound Invertase in Pepper Leaves by Xanthomonas campestris pv. vesicatoria Type Three Effectors** *PLOS ONE*
  Sonnewald, S., Priller, J. P., Schuster, J., Glickmann, E., Hajirezaei, M., Siebig, S., Mudgett, M. B., Sonnewald, U.
  2012; 7 (12)

- **Tomato TFT1 Is Required for PAMP-Triggered Immunity and Mutations that Prevent T3S Effector XopN from Binding to TFT1 Attenuate Xanthomonas Virulence** *PLOS PATHOGENS*
  Taylor, K. W., Kim, J., Su, X. B., Aakre, C. D., Roden, J. A., Adams, C. M., Mudgett, M. B.
  2012; 8 (6)

- **Comparative analysis of the XopD type III secretion (T3S) effector family in plant pathogenic bacteria** *MOLECULAR PLANT PATHOLOGY*
  Kim, J., Taylor, K. W., Mudgett, M. B.
  2011; 12 (8): 715-730

- **A New Leaf Blight of Rice Caused by Pantoea ananatis in India.** *Plant disease*
  Mondal, K. K., Mani, C. n., Singh, J. n., Kim, J. G., Mudgett, M. B.
  2011; 95 (12): 1582

- **Sugar transporters for intercellular exchange and nutrition of pathogens** *NATURE*
  Chen, L., Hou, B., Lalonde, S., Takanaga, H., Hartung, M. L., Qu, X., Guo, W., Kim, J., Underwood, W., Chaudhuri, B., Chermak, D., Antony, G., White, et al
  2010; 468 (7323): 527-U199

- **SOBER1 phospholipase activity suppresses phosphatidic acid accumulation and plant immunity in response to bacterial effector AvrBsT** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Kirik, A., Mudgett, M. B.
  2009; 106 (48): 20532-20537

- **Xanthomonas T3S Effector XopN Suppresses PAMP-Triggered Immunity and Interacts with a Tomato Atypical Receptor-Like Kinase and TFT1** *PLANT CELL*
  Kim, J., Li, X., Roden, J. A., Taylor, K. W., Aakre, C. D., Su, B., Lalonde, S., Kirik, A., Chen, Y., Baranage, G., McLane, H., Martin, G. B., Mudgett, et al
  2009; 21 (4): 1305-1323

- **XopD SUMO protease affects host transcription, promotes pathogen growth, and delays symptom development in Xanthomonas-infected tomato leaves** *PLANT CELL*
  Kim, J., Taylor, K. W., Hotson, A., Keegan, M., Schmelz, E. A., Mudgett, M. B.
  2008; 20 (7): 1915-1929

- **Impact of Xanthomonas AvrBsT effector action on signaling and immunity in Arabidopsis**
  Mudgett, M. B.
  AMER PHYTOPATHOLOGICAL SOC.2008: S193

- **Blue-light-activated histidine kinases: Two-component sensors in bacteria** *SCIENCE*
  Swartz, T. E., Tseng, T., Frederickson, M. A., Paris, G., Comerci, D. J., Rajashekara, G., Kim, J., Mudgett, M. B., Splitter, G. A., Ugalde, R. A., Goldbaum, F. A., Briggs, W. R., Bogomolni, et al
  2007; 317 (5841): 1090-1093

- **Xanthomonas XopD TTSS effector is a repressor of hormone-induced transcriptional responses.**
  Mudgett, M. B.
  AMER PHYTOPATHOLOGICAL SOC.2007: S145

- **An alpha-amylase (At4g25000) in Arabidopsis leaves is secreted and induced by biotic and abiotic stress** *PLANT CELL AND ENVIRONMENT*
  Doyle, E. A., Lane, A. M., Sides, J. M., Mudgett, M. B., Monroe, J. D.
  2007; 30 (4): 388-398

- **A conserved carboxylesterase is a SUPPRESSOR OF AVRBST-ELICITED RESISTANCE in Arabidopsis** *PLANT CELL*

Cunnac, S., Wilson, A., Nuwer, J., Kirik, A., Baranage, G., Mudgett, M. B.
2007; 19 (2): 688-705

- **Xanthomonas XopN is a HEAT-repeat protein that physically interacts with a RLK and two pathogen-inducible 14-3-3 proteins from tomato**
  Mudgett, M. B.
  AMER PHYTOPATHOLOGICAL SOC.2006: S151
- **New insights to the function of phytopathogenic bacterial type III effectors in plants** *ANNUAL REVIEW OF PLANT BIOLOGY*
  Mudgett, M. B.
  2005; 56: 509-531
- **A genetic screen to isolate type III effectors translocated into pepper cells during Xanthomonas infection** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Roden, J. A., Belt, B., Ross, J. B., Tachibana, T., Vargas, J., Mudgett, M. B.
  2004; 101 (47): 16624-16629
- **Cysteine proteases in phytopathogenic bacteria: identification of plant targets and activation of innate immunity** *CURRENT OPINION IN PLANT BIOLOGY*
  Hotson, A., Mudgett, M. B.
  2004; 7 (4): 384-390
- **Characterization of the Xanthomonas AvrXv4 effector, a SUMO protease translocated into plant cells** *MOLECULAR PLANT-MICROBE INTERACTIONS*
  Roden, J., Eardley, L., Hotson, A., Cao, Y. Y., Mudgett, M. B.
  2004; 17 (6): 633-643
- **Importance of opgH(Xcv) of Xanthomonas campestris pv. vesicatoria in host-parasite interactions** *MOLECULAR PLANT-MICROBE INTERACTIONS*
  Minsavage, G. V., Mudgett, M. B., Stall, R. E., Jones, J. B.
  2004; 17 (2): 152-161
- **Xanthomonas type III effector XopD targets SUMO-conjugated proteins in planta** *MOLECULAR MICROBIOLOGY*
  Hotson, A., Chosed, R., Shu, H. J., Orth, K., Mudgett, M. B.
  2003; 50 (2): 377-389
- **Common and contrasting themes of plant and animal diseases** *SCIENCE*
  Staskawicz, B. J., Mudgett, M. B., Dangl, J. L., Galan, J. E.
  2001; 292 (5525): 2285-2289
- **Mutational analysis of the Arabidopsis RPS2 disease resistance gene and the corresponding Pseudomonas syringae avrRpt2 avirulence gene** *MOLECULAR PLANT-MICROBE INTERACTIONS*
  Axtell, M. J., McNellis, T. W., Mudgett, M. B., Hsu, C. S., Staskawicz, B. J.
  2001; 14 (2): 181-188
- **Disruption of signaling by Yersinia effector YopJ, a ubiquitin-like protein protease** *SCIENCE*
  Orth, K., Xu, Z. H., Mudgett, M. B., Bao, Z. Q., Palmer, L. E., Bliska, J. B., Mangel, W. F., Staskawicz, B., Dixon, J. E.
  2000; 290 (5496): 1594-1597
- **Molecular signals required for type III secretion and translocation of the Xanthomonas campestris AvrBs2 protein to pepper plants** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Mudgett, M. B., Chesnokova, O., Dahlbeck, D., Clark, E. T., Rossier, O., Bonas, U., Staskawicz, B. J.
  2000; 97 (24): 13324-13329
- **Molecular Characterization of the avrBs2 gene of Xanthomonas campestris pv. vesicatoria and the Bs2 gene of pepper** *9th International Congress on Molecular Plant-Microbe Interactions*
  Tai, T., Dahlbeck, D., Gassmann, W., Chesnokova, O., Whalen, M., Clark, E., Mudgett, M. B., Staskawicz, B.
  INTERNATIONAL SOC MOLECULAR PLANT-MICROBE INTERACTIONS.2000: 223–226
- **Characterization of the Pseudomonas syringae pv. tomato AvrRpt2 protein: demonstration of secretion and processing during bacterial pathogenesis** *MOLECULAR MICROBIOLOGY*
  Mudgett, M. B., Staskawicz, B. J.

1999; 32 (5): 927-941

- **Glucocorticoid-inducible expression of a bacterial avirulence gene in transgenic Arabidopsis induces hypersensitive cell death** *PLANT JOURNAL*
  McNellis, T. W., Mudgett, M. B., Li, K., Aoyama, T., Horvath, D., Chua, N. H., Staskawicz, B. J.
  1998; 14 (2): 247-257

- **Protein signaling via type III secretion pathways in phytopathogenic bacteria** *CURRENT OPINION IN MICROBIOLOGY*
  Mudgett, M. B., Staskawicz, B. J.
  1998; 1 (1): 109-115

- **Protein repair L-isoaspartyl methyltransferase in plants - Phylogenetic distribution and the accumulation of substrate proteins in aged barley seeds** *PLANT PHYSIOLOGY*
  Mudgett, M. B., Lowenson, J. D., Clarke, S.
  1997; 115 (4): 1481-1489

- **A distinctly regulated protein repair L-isoaspartylmethyltransferase from Arabidopsis thaliana** *PLANT MOLECULAR BIOLOGY*
  Mudgett, M. B., Clarke, S.
  1996; 30 (4): 723-737

- **EXCEPTIONAL SEED LONGEVITY AND ROBUST GROWTH - ANCIENT SACRED LOTUS FROM CHINA** *AMERICAN JOURNAL OF BOTANY*
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