Sara Thomas-Sharma

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Education

Ph.D., Plant Pathology, University of Georgia (UGA), Athens, GA, USA, 2006-2012
B.Sc., Agriculture, University of Agricultural Sciences (UAS), Bengaluru, KA, India, 2002-2006

Professional appointments

Assistant Professor, Field Crop Pathology, Louisiana State University (LSU), Baton Rouge, LA, 2018-present
Postdoctoral Research Associate, University of Wisconsin (UW)-Madison, Madison, WI, USA 2015-2017
Postdoctoral Research Associate, Kansas State University (KSU), Manhattan, KS, USA, 2013-2015
Graduate Research Assistant, UGA

Teaching experience

- Primary instructor, General Plant Pathology (PLHL 4000, Fall 2019 LSU)
- Guest lecturer, Practicum in Plant Pathology (PLHL 8800, Spring 2019, LSU)
- Team lecturer, General Plant Pathology (PLHL 4000, Fall 2018, LSU)
- Facilitator, Impact network analysis workshop, APS-North Central meeting (2013, KSU)
- Instructor, An introduction to R programing for biologists (2013, 2014, KSU)

Professional Service

- 2020 USDA-NIFA – Federal Grant Peer-Review Panelist – Food, Agricultural, Natural Resources, and Human Sciences Grant Programs
- Judge at regional Junior Science and Humanities Symposia (2019)
- Reviewer for LSU Discover - undergraduate research funding (2019)
- Faculty advisor for Plant Pathology & Crop Physiology Graduate Student Association (2018-2020)
- Member of Courses and Curricula Committee, Plant Pathology & Crop Physiology (2018-present)
- Member of Graduate Student Recruiting Committee, Plant Pathology & Crop Physiology (2018-present)
- Board Member, APS – Office of International Program (OIP) (2018-present)
- Administrator, Books for the World Award Program, APS (2017-present)
- OIP liaison to Office of Education, APS (2019-present)
- Member, Epidemiology committee, APS (2013-present)
- Member, Teaching committee, APS (2019-present)
- Reviewer for *Phytopathology*, *Plant Disease*, *Plant Pathology*, *PLOS One, Scientific reports* and others
- Dean's representative, Graduate Advisory Committee (3 students)
- Member of Graduate Advisory Committee (5 students, major advisor: 3 students)

Competitive Funding & Awards

- Louisiana Soybean & Grain Research & Promotion Board, (2018- present, $159,845)
- United soybean board (2018, 2019-present $54, 877)
- National Science Foundation and Bill & Mellinda Gates foundation, NSF-BREAD Idea challenge award, (2013, $10000)
- Grant-in-Aid of Research, Sigma-Xi (2009, $400)

Membership in professional societies

- The American Phytopathological Society (APS) (2007-present)
- Southern Soybean Disease Workers (SSDW) (2019- present)
- The Sigma Xi Scientific Research Society (2009-2010, 2016-present)
- The Georgia Association of Plant Pathologists (GAPP) (2007-2012)
- The Blue Key Honor Society (2009)

Honors and awards

- Invited to participate in the NIMBios workshop on Vectored Plant Viruses (2014)
- Dissertation Completion Award, UGA graduate school (2012, stipend and tuition waiver)
- Malcolm C. Shurtleff Student Travel Award, American Phytopathological Society (2011, $500)
- Outstanding graduate student presentation, GAPP (2011)
- Judge's Choice award for educational video 'Gene for gene hypothesis-demystified', Office of Public Relations and Outreach Video Contest, APS (2011)
- Kenneth E. Papa Award for Outstanding PhD student, GAPP (2010)
- Who's Who Among Students in American Universities and Colleges (2010)
- Three awards in the APS 'Art in Phytopathology' contest (2010)
- Outstanding Teaching Assistant Award, UGA (2009)
- Cedric Kuhn Award for Outstanding Masters student, GAPP (2008)

Publications

Book chapters

J. F. Hernandez Nopsa, **S. Thomas-Sharma**, and K. A. Garrett. 2014. Climate change and plant disease. In: Encyclopedia of Agriculture and Food Systems. N. van Alfen, ed. Elsevier Ltd. 231-243

K. A. Garrett, S. Thomas-Sharma, G.A. Forbes, and J. H. Hernandez Nopsa. 2014. Climate change and plant pathogen invasions. In Invasive Species and Global Climate Change. L. H. Ziska and J. S. Dukes, eds. CABI Publishing. 22-44

Peer-reviewed journal articles

S. Thomas-Sharma and H. Scherm. 2017. Pre- and post-anthesis activity of fenbuconazole and triforine against blueberry flower infection by *Monilinia vaccinii-corymbosi*. *Crop Protection* 96: 180-187 (doi: 10.1016/j.cropro.2017.02.016)

S. Thomas-Sharma, J. H. Leebens-Mack, and H. Scherm. 2017. Marker gene overexpression in flowers treated with resistance inducers does not correlate with protection against flower-infecting fungi in tomato and blueberry. *J Phytopathol* 165: 53–63 (doi:10.1111/jph.12536)

S. Thomas-Sharma, A. Abdurahman, S. Ali, J.L. Andrade-Piedra, S. Bao, A. O. Charkowski, D. Crook, M. Kadian, P. Kromann, P. C. Struik, L. Torrance, K. A. Garrett, and G. A. Forbes. 2016. Seed degeneration in potato: the need for an integrated seed health strategy to mitigate the problem in developing countries. *Plant Pathology* 65: 3-16 (doi: 10.1111/ppa.12439)

J. F. Hernandez Nopsa, G. J. Daglish, D. W. Hagstrum, J. F. Leslie, T. W. Phillips, C. Scoglio, **S. Thomas-Sharma**, G. H. Walter, and K. A. Garrett. 2015. Ecological networks in stored grain: Identifying key nodes for emerging pests and mycotoxins in postharvest networks. *BioScience* 65:985-1002 (doi:10.1093/biosci/biv122)

S. Thomas-Sharma, J. Andrade-Piedra, M. Carvajal Yepes, J. Hernandez Nopsa, M. Jeger, R. Jones, P. Kromann, J. Legg, J. Yuen, G. A. Forbes, and K. A. Garrett. 2017. A risk assessment framework for seed degeneration: Informing an integrated seed health strategy for vegetatively-propagated crops. *Phytopathology* 107: 1123-1135 (doi: 10.1094/PHYTO-09-16-0340-R)

C. E. Buddenhagen, J. F. Hernandez Nopsa, K. F. Andersen, J. Andrade-Piedra, G. A. Forbes, P. Kromann, **S. Thomas-Sharma**, P. Useche, and K. A. Garrett. 2017. Epidemic network analysis for mitigation of invasive pathogens in seed systems: Potato in Ecuador. *Phytopathology* 107: 1209-1218 (doi: 10.1094/PHYTO-03-17-0108-FI)

S. Thomas-Sharma, L. Wells-Hansen, R. Page, V. Kartanos, E. Saalau-Rojas, B.E.L. Lockhart, P. McManus. 2018. Characterization of *Blueberry shock virus*, an emerging *Ilarvirus* in cranberry. *Plant Disease*: 102:91-97 (doi:10.1094/PDIS-04-17-0551-RE)

K. O. Ogero, J. F. Kreuze, M. A. McEwan, N. D. Luambano, H. Bachwenkizi, K. A. Garrett, K. F. Andersen, **S. Thomas-Sharma**, R. A. A. van der Vlugt. 2019. Efficiency of insect-proof net tunnels in reducing virus-related seed degeneration in sweet potato. *Plant Pathology* 68, 1472–1480 (doi: 10.1111/ppa.13069)

K. A. Garrett, R. I. Alcalá-Briseño, K. F. Andersen, J. Brawner, R. A. Choudhury, E. Delaquis, J. Fayette, R. Poudel, D. Purves, J. Rothschild, I. M. Small, **S. Thomas-Sharma**, Y. Xing. 2019. Effective altruism as an ethical lens on research priorities. *Phytopathology*, published online (doi.org/10.1094/PHYTO-05-19-0168-RVW)

Extension publications

S. Thomas-Sharma and P. S. McManus. 2017. Blueberry shock virus in cranberry. UW Extension publication A4147

S. Thomas-Sharma and P. S. McManus. 2017. Soil-borne diseases of fruit crops: Introduction. Wisconsin Fruit News, Volume 2, Issue 4

S. Thomas-Sharma and P. S. McManus. 2017. Phytophthora diseases of berry crops. Wisconsin Fruit News, Volume 2, Issue 5

S. Thomas-Sharma and P. S. McManus. 2017. Verticillium on stone fruits. Wisconsin Fruit News, Volume 2, Issue 5

S. Thomas-Sharma and P. S. McManus. 2017. Nematode diseases of berry crops. Wisconsin Fruit News, Volume 2, Issue 9

S. Thomas-Sharma and P. S. McManus. 2017. Armillaria root rot on tree fruits. Wisconsin Fruit News, Volume 2, Issue 11

S. Thomas-Sharma and P. S. McManus. 2017. Peach leaf curl and plum pockets. Wisconsin Fruit News, Volume 2, Issue 12

Selected presentations

Extension

- Moderated 'Apple track' at the Wisconsin Fresh Fruit and Vegetable conference
- 'Apple disease management' at the 2015 Apple School, Madison, WI
- 'Soil-borne diseases of fruit trees' at the 2015 UW peninsular research station fruit school, Sturgeon bay, WI
- 'Strawberry – back to basics: disease management' at the Wisconsin berry grower association field day, Helenville, WI
- Worked with growers in India as a part of Rural Agricultural Work Experience Program, interviewing local farmers, assessing agricultural practices and suggesting improvements
- Conducted regional survey of biodiversity and indigenous technical knowledge in Karnataka India, to compile ancestral solutions to problems in agriculture, animal, and human health

Research

- New approaches to managing Cercospora leaf blight on soybean, Invited talk, School of Plant, Environmental, and Soil Sciences, Spring Seminar series (2020)
- Reducing the element of surprise: Linking molecular biology and epidemiology to inform farmers of virus disease outbreaks, Poster Presentation, Young Investigator Meeting, Chicago, IL (2016)
- Epidemiological insights into an emerging virus disease: *Blueberry shock virus* on cranberry, Oral Presentation, APS Annual meeting, Tampa, FL (2016)
- Virus recovery in cranberry. Seminar, UW-Madison, Madison, WI (2016)
- 'Shiny' interfaces for interactive data collection and reporting in Plant Pathology, Poster presentation, APS Annual meeting, Pasadena, CA (2015)
- Seed degeneration risk assessment: Optimizing the success of management strategies, Oral presentation, Conceptual Framework and Seed Degeneration Workshop, Wageningen, Netherlands (2014)
- Expert elicitation: A complement to traditional experimental data, Poster presentation, APS-CPS meeting, Minneapolis, MN (2014)
- Estimating the effectiveness of management strategies to reduce seed degeneration in vegetatively-propagated crops, Oral presentation, Asia-Pacific Congress on Virology, Noida, UP, India (2013)
- Viruses in social-ecological systems: Strategies for farmer selection in smallholder seed systems, Poster presentation, International Plant Virus Epidemiology symposium, Arusha, Tanzania (2013)
- Pre- and post-bloom activity of fenbuconazole and triforine against blueberry flower infection by *Monilinia vaccinii-corymbosi*, Oral Presentation, Southeast Professional Fruit Workers Conference, Mills River, NC (2010)
- Induced resistance in flowers and its effectiveness in suppressing flower-infecting fungi, Oral presentation, Annual Meeting of APS, Portland, OR (2009)