

Curriculum Vitae

John M. Thomas III, PhD

Associate Professor of Medicine
Department of Human Genetics
Director – South Texas Human Genomics
University of Texas Rio Grande Valley
School of Medicine

Contact Information

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Education & Training

Ph.D in Microbiology & Immunology, University of Texas Medical Branch, USA
MS Biology, University of Texas San Antonio, USA
BS Biology, University of Texas San Antonio, USA

Work Experience

- Laboratory Director, UT Health Rio Grande Valley Clinical Laboratory, UTRGV School of Medicine, Edinburg, Texas April 2020 – June 2023
- Research Scientist, Boehringer-Ingelheim Vetmedica Inc. Ames, Iowa November 2011-October 2013
- Postdoctoral Researcher II, University of Texas Southwestern Medical Center, Dr. Philip E. Thorpe, September 2009 – October 2011
- Guest Researcher, Centers for Disease Control. Division for Vector-Borne Infectious Disease, Alphavirus Research Branch. Dr. Ann K. Powers. December 2008 - August 2009.
- Doctoral Fellow, The University of Texas - Medical Branch, Dept. of Microbiology and Immunology. Dr. Johnny W Peterson. May 2004 - November 2008
- Recon Marine, 1st SRIG, 1st Recon Bn., Deep Recon Platoon, U. S. M. C., Camp Pendleton, California, July 1988 - July 1992

Professional Memberships

- American Society of Virology, 2000-present
- American Society of Microbiology, 2000-present

Honors & Awards

- 2021 Team Excellence Award UTRGV
- 2009 David and Janet Niesel Scholarship Honoree
- SE Sulkin Award -Excellence in Microbiology Research 2007 - ASM

Research Focus

John M. Thomas III, PhD is an associate professor of medicine at the University of Texas Rio Grande Valley (UTRGV) School of Medicine, in the Department of Human Genetics. Dr. Thomas began working with RNA viruses in 1999, and earned his doctorate degree from the University of Texas Medical Branch in Galveston, Texas, where he constructed and characterized replication-competent viral vectors as vaccine platforms against anthrax and plague, and studied the immunopathogenesis of viral and bacterial select agents in animal models of infection. Following completion of his postdoctoral training at the CDC and The University of Texas Southwestern Medical Center in Dallas where he studied the pathology of hemorrhagic fever viruses, he served as a lead scientist for vaccine development in the private sector for three years. Dr. Thomas joined the faculty of the UTRGV SOM in 2014, and his research has focused on understanding Zika virus pathogenesis using the laboratory opossum, and molecular surveillance of arboviral and rickettsial disease transmission in south Texas. He has served as PI or co-PI with grants funded from the CDC and the NIH since 2016, and currently serves as the laboratory director for a newly-formed CLIA-certified diagnostic laboratory [South Texas Human Genomics] in Brownsville, Texas, with a focus on whole genome sequencing (WGS) as a tool for understanding microbial pathogenesis.

Publications

Dr. Thomas has made significant contributions to virology, bacteriology, biology and molecular research, as evident by his peer-reviewed published manuscripts. Selected representative publications are listed below.

1. Kumar, S., Granados, J., Aceves, M., Peralta, J., Leandro, A.C., **Thomas, J.**, Williams-Blangero, S., Curran, J.E. and Blangero, J., 2024. Pre-Infection Innate Immunity Attenuates SARS-CoV-2 Infection and Viral Load in iPSC-Derived Alveolar Epithelial Type 2 Cells. *Cells*, 13(5), p.369.
2. **Thomas, J.**, Garcia, J., Terry, M., Mahaney, S., Quintanilla, O., Silva, D.C., Morales, M. and VandeBerg, J.L., 2023. *Monodelphis domestica* as a fetal intra-cerebral inoculation model for Zika virus pathogenesis. *Pathogens*, 12(5), p.733.
3. Aguillón-Durán, G.P., Prieto-Martinez, E., Ayala, D., Garcia Jr, J., **Thomas, J.M.**, Garcia, J.I., Torrelles, J.B., Ledezma-Campos, E. and Restrepo, B.I.,

2023. COVID-19 and chronic diabetes: The perfect storm for reactivation TB?.

4. Guerrero, C.D., Hinojosa, S., Vanegas, D., Tapangan, N., Guajardo, M., Alaniz, S., Cano, N., Vitek, C.J., **Thomas, J.**, Hernandez, V. and Garcia, J., 2021. Increasing Public Health Mosquito Surveillance in Hidalgo County, Texas to Monitor Vector and Arboviral Presence. *Pathogens*, 10(8), p.1022.
5. De Leon E, Garcia J, Faulkes Z, and **JM Thomas III**. Culturing embryonic cells from the parthenogenetic clonal crayfish Marmorkrebs (*Procambarus virginalis*). 2019. *Journal Crustacean Biology* 39 (6):758–763.
6. Tidwell J, Vitek CJ, Thomas DB, and **JM Thomas**. Status Update on the Threat of Babesiosis Returning to the United States. 2019. *JVDM*. 7(5): 1-4.
7. **Thomas JM** and PE Thorpe. Fully Human Anti-Phosphatidylserine Monoclonal Antibody Capable of Direct Antiviral Activity Protects Guinea Pigs from Advanced Hemorrhagic Arenavirus Infection. 2017. *Open Micro Journ*, 11: 303-315.
8. Peterson JW, Healy D, Hardcastle J, Pawlik J, Taormina J, Moen S, **Thomas JM**, Chatuev BM, Sower L, and AK Chopra. Protection Afforded by Fluoroquinolones in Animal Models of Respiratory Acquired Infections with *Bacillus anthracis*, *Yersinia pestis*, and *Francisella tularensis*. 2010. *Open Micro Journ*, 4: 34-46.
9. **Thomas JM**, Moen ST, Gnade BT, Vargas-Inchaustegui, DA, Foltz SM, Suarez G, Heidner HW, Konig RA, Chopra AK, and JW Peterson. Recombinant Sindbis Virus Vectors Designed to Express Protective Antigen of *Bacillus anthracis* Protect Animals from Anthrax and Display Synergy with Ciprofloxacin. *Clin Vaccine Immunol*. 2009 Nov, 16: (11):1696-9.
10. Peterson JW, Comer JE, Baze WB, Noffsinger DM, Wenglikowski A, Walberg KG, Hardcastle J, Pawlik J, Bush K, Taormina J, Moen S, **Thomas JM**, Chatuev BM, Sower L, Chopra AK, Stanberry LR, Sawada R, Scholz WW, Sircar J. Human Monoclonal Antibody AVP-21D9 to Protective Antigen Reduces Dissemination of the *Bacillus anthracis* Ames Strain from the Lungs in a Rabbit Model. *Infect Immun*. 2007 Jul;75 (7):3414-24.
11. **Thomas JM**, Klimstra WA, Ryman KD, and HW Heidner. Sindbis Virus Vectors Designed to Express a Foreign Protein as a Cleavable Component of the Viral Structural Polyprotein. *Journal of Virology*, 77: (10), May 2003.