Curriculum Vitae

Jeffrey H. Thomas

Associate Professor
Department of Cell Biology and Biochemistry
School of Medicine
Texas Tech University Health Sciences Center

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Education and Training:

University of Virginia	B.A.	1989	Biology
Massachusetts Institute of Technology	Ph.D.	1997	Biology
Princeton University	Post-doc	1997-2004	
Northwestern University	Post-doc	2004	

Academic Appointments:

School of Medicine, TTUHSC:
- Assistant Professor, 2005-2019
- Associate Professor, 2019-present

Graduate School of Biomedical Sciences, TTUHSC:
- Cell and Molecular Biology, Primary Appointment, 2005-2014
- Biochemistry and Molecular Genetics, Associate Appointment, 2005-2014
- Biochemistry, Cell and Molecular Biology, Primary Appointment, 2015-present
- Biotechnology, Joint Appointment, 2005-present

Fellowships:

Howard Hughes Medical Institute Predoctoral Fellowship, 1989-1994
National Institutes of Health Postdoctoral Fellowship, 1997-2002
Howard Hughes Medical Institute Postdoctoral Fellowship, 2002-2004

Honors:

Echols Scholar, 1985-1989
Intermediate Honors, 1987
Biological Honor Society of the University of Virginia, 1987
Golden Key Honor Society, 1988
Miller Scholarship, 1989

Phi Beta Kappa, 1989
Graduated with Highest Distinction (summa cum laude), 1989
Sigma Xi Research Association, MIT Chapter, 1997

Awards:

Outstanding Faculty Mentor, TTU Center for Undergraduate Research, 2009
Nominated for Outstanding Faculty Mentor, TTU Center for Undergraduate Research, 2011
Unsung Hero Award, TTUHSC Dept. of Cell Biology and Biochemistry, 2014
Considered for 17th International Royan Award in Embryology, 2016
Unsung Hero Award, TTUHSC Dept. of Cell Biology and Biochemistry, 2020

Professional Society Memberships:

Sigma Xi Research Association, MIT Chapter (elected), 1997 - present
American Association for the Advancement of Science, 2000 - present
New York Academy of Sciences, 2000 - present
Genetics Society of America, 2006 - present
Society for Developmental Biology, 2009 - present

Professional Service, Journal Reviewer (*ad hoc*):

Biomechanics and Modeling in Mechanobiology
Fly
Journal of Biological Chemistry
Journal of Cell Science
Journal of the Royal Society: Interface
Journal of Visualized Experimentation
PLoS ONE

Professional Service, Book Reviewer:

Cambridge University Press, 2009, L.I. Held, *Quirks of Human Anatomy, An Evo-Devo Look at the Human Body*.
Cambridge University Press, 2013, L.I. Held, *How the Snake lost its Legs: Curious Tales from the Frontier of Evo-Devo*.
Cambridge University Press, 2020, L.I. Held, *Animal Anomalies: What Abnormal Anatomies Reveal About Normal Development*.

Professional Service, Grant Reviewer (*ad hoc*):

Wellcome Trust, London, United Kingdom, 2004.
TTUHSC Seed Grants, 2010

Professional Service, Advisory:

Board Member, Scientific Advisory Board, Tosk, Inc., 2012-present
Flybase Community Advisory Group, 2014-present
MIT Insight Forum, 2019-present

Professional Development:

Time Management Seminar, PI Leader: Making Every Minute Count, 2018
CME – Time Management Seminar, 2019

Community Service:

Consultant to elementary school student on science project (Shaunak Sathe, Wellington Elementary, Flower Mound, TX), Fall 2012-Spring 2013
Osher Lifelong Learning Institute at TTU, Class/Talk, "How Cells Generate the Shape of the Human Body, " Fall 2013
Introduction to Genetics and Laboratory Tour, for Sharp Academy (Lubbock, TX) Science Students (Special College Prep High School for Students with Dyslexia, ADHD or Related Learning Challenges), Fall 2015
Laboratory Tour, for Lubbock-Cooper High School students in the University Scholastic League program, Spring 2016
Laboratory Tour and Demonstrations, Summer Accelerated Biomedical Research (SABR), for Undergraduate Students, 2016-2019
Advised Kurt Caswell, author, TTU Honors college, on fruit flies for book on space exploration, 2016-2017
TTUHSC Science Camp, for STEM high school students in Lubbock, Texas, Laboratory Demonstration and/or Talk: Using Fruit Flies to Learn about Embryonic Development, Summer 2017-2019
Library Book Reader, All Saints Episcopal School, Preschool - Kindergarten, 2019-present

Administrative Service:

Website Committee, Departmental, 2005-2006
Space Committee, Departmental, 2005-2011, 2012-present
Chair, 2010-2011
M.D./Ph.D. Admissions Committee, School of Medicine (SOM) and Graduate School of Biomedical Science (GSBS), *ad hoc* interviewer for M.D./Ph.D. applicants, 2005-2008
M.D./Ph.D. Admissions Committee, School of Medicine (SOM) and Graduate School of Biomedical Science (GSBS), 2010-2015
Brochure and Recruiting Committee, Departmental, 2006
Computer Committee, Departmental, 2007-2010
Institutional Biohazards Committee (IBC), *ad hoc* Advisor, Institutional, 2007-2008
Institutional Biosafety Committee (IBC), Institutional, 2008-present
Genetics Advisor, for the IBC, NIH-required position, Institutional, 2008-present
Summer Accelerated Biomedical Research (SABR) Program Steering Committee, School (GSBS), 2008-2009
Program Review Committee for the Evaluation of the Pharmacology and Neuroscience Graduate Program, School (GSBS), 2008-2009
Imaging Center Design Committee, Institutional, 2009-2011
Stem Cell Oversight Committee, Institutional, 2011-2015
Dean's Representative for Student Defense, School (GSBS), 2011

Genetics Curriculum Committee, 2011-present, School (SOM), 2011-2015
Selection Committee for the 2012 GSBS Outstanding Student Award and 2012 Dean's Recognition Award, 2012
Program Review Committee for the Evaluation of the Graduate Program, School (GSBS), 2012-2013
Graduate School Admissions Committee, School (GSBS), 2013-2014
Graduate School Ph.D. Selection Committee, School (GSBS), 2015-present
Cell and Molecular Biology Program Committee, School (GSBS), 2013-2015
Chair, 2013-2015
Curriculum and Course Evaluation ad Awards Committee, School (GSBS), 2013-present
Graduate Council, School (GSBS), 2013-present
Graduate Student Stipend Committee, School (GSBS), 2013-present
Advisory Committee for the Image Analysis Core (Institutional), 2013-2014
Hematology and Hematopoiesis Education Committee (SOM), 2013-2015
Biochemistry, Cell and Molecular Biology Faculty Evaluation Committee. (Departmental), 2015
TTUHSC Pharmaceutical Sciences Internal Review Committee (GSBS), 2016-2017
Evaluation Committee of Core Curriculum (Departmental), 2017
Master of Public Health Program Internal Review Committee, 2017-2018
Master of Public Health Program Internal Review Committee, 2017-2018
Chair, 2017-2018
General Biomedical Sciences Ph.D. Program Evaluation Committee, 2017-present
GSBS Catalogue Revision Review Committee, 2017
Departmental Core Curriculum Evaluation Review Committee, 2016-2017
Outstanding BCMB Graduating Student Selection Committee, 2019
President of the Graduate Faculty (GSBS, elected), 2020-2021

Academic Administration:

Graduate Advisor, Cell and Molecular Biology Concentration, School (GSBS), 2013-2015
Graduate Advisor, Biochemistry, Cellular and Molecular Biology Concentration, School (GSBS), 2015-present
Course Director, GCMB 6620 Advanced Cell Biology I, School (GSBS), 2009-present
Course Director (as Graduate Advisor): GBCM 5130 Research Presentation Skills, Spring, 2015 - Present
Course Director (as Graduate Advisor): GBCM 7000 Research, Texas Tech University Health Sciences Center, Spring, Summer and Fall, 2015 - Present
Course Director (as Graduate Advisor): GBCM 7103 Seminar. Texas Tech University Health Sciences Center, Fall, 2015 - Present.
Course Director (as Graduate Advisor): GBCM 7101 Seminar. Texas Tech University Health Sciences Center, Spring, 2015 - Present

Course Director (as Graduate Advisor): GBCM 8000 Ph.D. Dissertation, Texas Tech University Health Sciences Center, Spring, Summer and Fall, 2015 – Present
Head Teaching Assistant: 7.011 Experimental Biology Lab, MIT, 1993

Teaching Experience:

Teaching Assistant, MIT Biology Classes:
7.03 Genetics, Fall 1990.
7.011 Experimental Biology Lab, Head Teaching Assistant, Spring 1993.

Course Director, TTUHSC Graduate School of Biomedical Sciences Classes:
GANM 6620 Advanced Cell Biology I, Co-Director, Fall 2009
GCMB 6620 Advanced Cell Biology I, Director, Fall 2010, Spring 2012-present

Lecturer/Small Group Instructor, TTUHSC Graduate School of Biomedical Sciences Classes:
GBTC 6301 Introduction to Biotechnology (3 hrs.), Fall 2005
GBTC 6301 Introduction to Biotechnology (4.5 hrs.), Fall 2006-2007
GBTC 6301 Introduction to Biotechnology (3 hrs.), Fall 2008-2010
GSBS 5373 Core III: Genes (3 hrs.), Fall 2011-present
GANM 6620 Advanced Cell Biology I (Small Group) (6 hrs.), Fall 2006
GANM 6620 Advanced Cell Biology I (Small Group) (12 hrs.), Fall 2008
GANM 6620 Advanced Cell Biology I (Small Group) (14 hrs.), Fall 2009
GCMB 6620 Advanced Cell Biology I (Small Group) (20 hrs.), Fall 2010
GCMB 5313 Special Topics: Cell and Developmental Biology: Advanced Cell Biology (Small Group) (12 hrs.), Spring 2012
GCMB 6320 Advanced Cell Biology I (Small Group) (12 hrs.), Spring 2013-2016
GCMB 6320 Advanced Cell Biology I (Small Group) (9 hrs.), Spring 2017
GCMB 6320 Advanced Cell Biology I (Small Group) (7.5 hrs.), Spring 2018
GCMB 6320 Advanced Cell Biology I (Small Group) (12 hrs.), Spring 2019 present
GANM 6340 Cell Structure and Function (3 hrs.), Spring 2007-2009
GANM 6340 Cell Structure and Function (6 hrs.), Spring 2010-2011
GSBS 5372 Core II: Cells (1.5 hrs.), Fall 2018-present
GANM 5313 Special Topics: Genetics I (45 hrs.), Spring 2008
GANM 5313 Special Topics: Genetics II (45 hrs.), Summer 2008
GBCH 6335 Topics in Biochemistry: Genetics I (45 hrs.), Spring 2010
GCMB 5130 Research Presentation Skills (5 hrs.), Spring 2013-present
GGMS 5001 Clinically-Oriented Anatomy (5 hrs.), Fall 2013-present
GCMB 5510 Biology of Cells and Tissues (33 hrs.), Fall 2012
GGMS 5002 Biology of Cells and Tissues (26.5 hrs.), Fall 2013-present
GGMS 5005 Advanced Histology (Small Group) (11-16 hrs.), Fall 2013-present
GCMB 7102 001 Seminar (Grader) (6 hrs.), Spring 2011-2018
GCMB 5130 Research Presentation Skills (6 hrs.), Spring 2014-2018

Small Group Instruction, TTUHSC Graduate School of Biomedical Sciences

GGMS 5005 Advanced Histology (11 hrs.), Fall 2013-present
GSBS Core V BCMB Faculty Research Interests, 2013-present

Lecturer/Small Group Instructor, TTUHSC School of Medicine Classes:
BLOCK I Clinically-Oriented Anatomy (Lecture: 5 hr.), Fall 2014-2017
BLOCK I Clinically-Oriented Anatomy (Lecture: 4 hr.), Fall 2013
BLOCK I Clinically-Oriented Anatomy (Small Group: 1.5 hr.), Fall 2013
BLOCK I Clinically-Oriented Anatomy (Lecture: 1 hr.), Fall 2012
BLOCK I Clinically-Oriented Anatomy (Small Group: 4.5 hr.), Fall 2012
BLOCK II Biology of Cells and Tissues (Lecture: 2 hrs.), Fall 2007-2010
BLOCK II Biology of Cells and Tissues (Lecture: 6 hrs.), Fall 2011-present
BLOCK II Biology of Cells and Tissues (Laboratory: 22 hrs.), Fall 2008-2011
BLOCK II Biology of Cells and Tissues (Laboratory: 33 hrs.), Fall 2012-2014
BLOCK II Biology of Cells and Tissues (Laboratory: 32 hrs.), Fall 2015
BLOCK II Biology of Cells and Tissues (Laboratory: 18.5 hrs.), Fall 2016
BLOCK II Biology of Cells and Tissues (Laboratory: 20.5 hrs.), Fall 2017-present
BLOCK III Structure and Function of Organ Systems (Laboratory: 13 hrs.), Spring 2009-2012
BLOCK VIII: Systems Disorders II and Lifespan Issues (Lecture: 2hr.), Spring 2012-2013

Course Content Organizer, TTUHSC School of Medicine Classes:
BLOCK I Clinically-Oriented Anatomy, Embryology Section, Fall 2013

Special Educational Content and Groups, TTUHSC School of Medicine
Early Clinical Experiences I Honors Project: Group Advisor, 2009-2010
P3 Stem Cells Study Cases and Knowledge Assessments, 2013-present
BLOCK I Clinically-Oriented Anatomy: Embryology time comparison study aid
BLOCK I Clinically-Oriented Anatomy: On-line Molecular Embryology lecture

Adjunct/Assistant Instructor, TTU Department of Biology Classes:
BIOL 4300 Undergraduate Research in Biology (Laboratory: 42 hrs.), Fall 2006, Spring 2007, Summer 2008, Fall 2010, Spring 2011, Spring 2013, Fall 2013, Spring 2014
BIOL 4100 Undergraduate Research in Biology (Lecture: 14 hr.), Fall 2009

Other Teaching Activities:
Advised on designing a Genetic Laboratory Class for TTU Undergraduates

Advisor, Post-doctoral Fellows:
Ashish Chougule, Ph.D. (Fall 2014-Summer 2016)
Namanh Buiphu, Ph.D., 2017-present
Subhash Kairamkonda, Ph.D., 2018-present

Advisor, Graduate Students:
Taylor Strong, M.S. Cell and Molecular Biology, 2007, (Fall 2005-Summer 2007)

Swetha Gadwala , M.S. Biotechnology, 2008, (Summer 2007-Summer 2008)
Tammy Carter, Ph.D. Cell and Molecular Biology, 2013, (Fall 2007-Fall 2013)
Ashish Chougule, Ph.D. Biochemistry and Molecular Genetics, 2014, (Fall 2009-Fall 2014)
Mahsa Servati, M.S. Physics (visiting Graduate Student), 2018, (Fall 2017-Summer 2018)

Advisor, Rotation Students:
Taylor Strong: Summer 2005
Aya Ito: Fall 2005
Tammy Carter: Summer 2007
Michael Holliday: Summer 2007
Jaehyung Lee: Fall 2007
Gurvinder Kaur: Spring 2008
Ramya Vutukuru: Summer 2008
Ashish Chougule: Summer 2009
Jill Wright: Fall 2010
Kellsie Beasley, Spring 2015
Dylan Delaney, Spring 2017
Christina Matl, Spring 2020

Advisor, Medical Students - Research:
Riley Junell: Summer 2017-2018

Advisor, Undergraduate Students - Research:
Karen Ng, Senior Thesis Supervisor 2001-2002 [Princeton University]
Chris Upton, Summer 2005 [TTU]
Sashanda Russell, SABR 2005 [Voorhees College]
Spencer Thomas, Summer 2006 - Summer 2008 [TTU]
Brian Friesen, SABR 2006, 2007 [Oklahoma Baptist University]
Bilal Siddiqui, SABR 2008, 2009 [Harvard University]
Allison Spencer, HHMI and McNair Scholar, Summer 2008-Spring 2010 [TTU]
Sishir Subedi, HHMI Scholar, Summer 2009-Spring 2011 [TTU]
Stephanie Pleasant, HHMI Scholar, Summer 2012-Spring 2012 [TTU]
Ryan Dean, Honors College, HHMI Scholar, Spring 2013-Summer 2014 [TTU]
Victoria Young, SABR 2013 [TTU]
Joe Bargo, 2014 [TTU]
Alex Sanders, SABR 2014 [University of Central Arkansas]
Jun Park, SABR 2019 [Cornell University]

Advisor, High School Students - Research:
Carissa DeRanek, Clark Scholar, Summer 2014 [North Broward Prep. School]

Advisor, Volunteers - Research:
William Murray, 2018-present

Dissertation, Thesis and Examination Committees:

Jin Yong Kim, Ph.D. 2005, Dissertation Defense, Advisor: Simon Williams, 2005
Andrew Hockert, Qualifying Examination Committee, 2006
Andrew Hockert, Ph.D. 2007, Advisor: Clinton MacDonald, 2005-2007
Andrew Hockert, Dissertation Defense, Advisor: Clinton MacDonald, 2007
Neha Kumari, M.S. 2009, Master's Committee, Advisor: Simon Williams, 2008-2009
Jaehyung Lee, Ph.D. 2013, [TTU Biology], Advisor: Lauren Gollahon, 2009-2013
Jaehyung Lee, Qualifying Examination Committee, 2009
Jaehyung Lee, Dissertation Defense, [TTU Biology], Advisor: Lauren Gollahon, 2013
Huzefa Dungrawala, Ph.D. 2013, Advisor: Brandt Schneider, 2009-2012
Huzefa Dungrawala, Dissertation Defense, Advisor: Brandt Schneider, 2012
Leah Quisenberry, M.S. 2014, Ph.D. Candidate, Advisor: Joaquin Lado, 2009-2014
Poonam Sonawane, Ph.D. 2013, Advisor: Min Kang, 2010-2013
Poonam Sonawane, Dissertation Defense, Advisor: Min Kang, 2013
Jill Wright, Ph.D. 2017, Advisor: Brandt Schneider, 2011-2017
Armanjot Riar, Ph.D. 2014, Advisor: Lenin Mahimainathan and George Henderson, 2011-2014
Souvik Karmarkar, Ph.D. 2014, Advisor: Afzal Siddiqui, 2012-2014
Souvik Karmarkar, Qualifying Examination Committee, Advisor: Afzal Siddiqui, 2013
Brad Youngblood, Ph.D. 2014, Advisor: Clinton MacDonald, 2012-2014
Brad Youngblood, Qualifying Examination Committee, Advisor: Clinton MacDonald, 2013
Jessica Smith, Ph.D. Candidate, Advisor: Brandt Schneider, 2014-2018
Kellsie Beasley, Ph.D. Candidate, Immunolgy and Molecular Microbiology, Advisor: Gail Cornwall, Abdul Hamood, 2015-present
Michael C. Holcomb, Ph.D. Candidate [TTU Physics], Advisor: Jerzy Blawzdziewicz 2017-present
Hunter Edwards, Ph.D. Candidate [TTU Mechanical Engineering], 2017-2019
Mahsa Servati, M.S. 2018, [TTU Physics], Advisor: Jerzy Blawzdziewicz 2017-2018

Other Educational:

QEP Case Facilitator, Interprofessional Teamwork Symposium, October 25, 2013
TTUHSC Student Research Week Judge, 2012
TTU Undergraduate Research Conference, Judge, 2012

Technology Licenses:

MIT Case #6397H: Negative Regulators of Growth Factor Receptors, 1994-2004.

Publications:

Michael C. Holcomb, Guo-Jie Jason Gao, Mahsa Servati, Dylan Schneider,

Presley K. McNeely, **Jeffrey H. Thomas**, Jerzy Blawzdziewicz. (2019). Mechanical Feedback and Robustness of Apical Constrictions in Drosophila Embryo Ventral Furrow Formation. (submitted). [Deposited in BioXiv]

Kanika Sharma, Ming Yi, Giovanna Grandinetti, Ashish Chougule, Philip Liaw, Stephen Yanofsky, Solomon Ungashe, **Jeffrey H. Thomas,** William Garland and Mathew Holderfield. ETC Inhibitors Alter Oncogenic KRAS Signal Transduction. (submitted)

Tammy Y. Carter, Swetha Gadwala, Ashish B. Chougule, Nam P. N. Bui, Alex C. Sanders, Raghothama Chaerkady, Nathaly Cormier, Robert N. Cole and **Jeffrey H. Thomas**. (2019). Actomyosin Ring Contraction during Cellularization is Regulated in Part by Src64 Control of Actin 5C Protein Levels. *genesis* 57: e23297.

Guo-Jie Gao, Michael C. Holcomb, **Jeffrey H. Thomas** and Jerzy Blawzdziewicz. (2016). Embryo as an active granular fluid: stress-coordinated cellular constriction chains. *J. Phys.: Condens. Matter* 28: 414021.

Online at: **arXiv:1601.02692 [cond-mat.soft]**
http://arxiv.org/abs/1601.02692
*IOPselect article for novelty, significance, and potential future impact
**Selected for Journal Highlights 2016
(http://iopscience.iop.org/journal/0953-8984/page/Highlights-of-2016)

Ashish B. Chougule, Mary C. Hastert and **Jeffrey H. Thomas.** (2016). Drak is required for actomyosin organization during Drosophila cellularization. *G3: Genes, Genomes, Genetics* 6: 819-828.

Available online: doi:10.1534/g3.115.023515

Allison K. Spencer, Bilal Siddiqui and **Jeffrey H. Thomas**. (2015). Cell shape change and invagination of the cephalic furrow involves reorganization of F-actin. *Developmental Biology* 402: 192-207.

*Cover Image

Taylor C. Strong, Gurvinder Kaur and **Jeffrey H. Thomas**. (2011). Mutations in the catalytic loop HRD motif alter the activity and function of Drosophila Src64. *PLoS ONE* 6: e28100.

Taylor C. Strong and **Jeffrey H. Thomas**. (2011). Maternal and zygotic requirements for *src64* during Drosophila cellularization. *Genesis* 49: 912-918. First Published online 05 August 2011, DOI: 10.1002/dvg.20783

Jeffrey H. Thomas and Eric Wieschaus. (2004). *src64* and *tec29* are required for microfilament contraction during Drosophila cellularization. *Development* 131: 863-871.

Jeffrey H. Thomas*, Craig J. Ceol*, Hillel T. Schwartz and H. Robert Horvitz. (2003). New genes that interact with *lin-35 Rb* to negatively regulate the *let-60 ras* pathway in *Caenorhabditis elegans*. *Genetics* 164: 135-151.
*Co-first authors

Jeffrey H. Thomas and H. Robert Horvitz. (1999). The *C. elegans* gene *lin-36* acts cell autonomously in the *lin-35 Rb* pathway. *Development* 126: 3449-3459.

Other Publications:

Flybase gene description: *Src64* (Reference: Attrill, H., Falls, K., Goodman, J. L., Millburn, G. H., Antonazzo, G., Rey, A. J., & Marygold, S. J. (2016). FlyBase: establishing a Gene Group resource for Drosophila melanogaster. *Nucleic Acids Res, 44*(D1), D786-792. doi:10.1093/nar/gkv1046).

Abstracts:

Thomas, J.H. and H.R. Horvitz (1990). Synthetic Multivulva genes. East Coast *C. elegans* Meeting, Cambridge, MA.

Thomas, J.H. and H.R. Horvitz (1991). Synthetic Multivulva genes. International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and H.R. Horvitz (1992). Synthetic Multivulva genes. East Coast *C. elegans* Meeting, New York, NY.

Thomas, J.H. and H.R. Horvitz (1993). Synthetic Multivulva genes. International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and H.R. Horvitz (1994). *lin-36*, a class B synthetic Multivulva gene, encodes a novel protein. Worm Breeder's Gazette 13: 33.

Thomas, J.H. and H.R. Horvitz (1994). *lin-36*, a class B synthetic Multivulva gene, acts cell autonomously. Worm Breeder's Gazette 13: 34.

Thomas, J.H. and H.R. Horvitz (1994). Synthetic Multivulva genes. East Coast *C. elegans* Meeting, Baltimore, MD.

Thomas, J.H. and H.R. Horvitz (1994). A genetic and molecular analysis of the synthetic Multivulva genes: Genes involved in the specification of Cell fate in *Caenorhabditis elegans* vulval development. Predoctoral and Physician Postdoctoral Fellows Meeting, Chevy Chase, MD.

Thomas, J.H. and H.R. Horvitz (1995). The synthetic Multivulva genes may encode components of a cell signaling system, International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and H.R. Horvitz (1996). Lineage analysis of synthetic Multivulva genes. East Coast *C. elegans* Meeting, Piscataway, NJ.

Lu, W.X., **J.H. Thomas**, and H.R. Horvitz (1997). Molecular analyses of the class B synthetic Multivulva genes *lin-37*, *lin-35* and *lin-53*. International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and E. Wieschaus (1999). Loci controlling cephalic furrow formation. Annual Drosophila Research Conference 40, Seattle, WA.

Thomas, J.H. and E. Wieschaus (2000). Loci controlling cephalic furrow formation. Annual Drosophila Research Conference 41, Pittsburg, PA.

Thomas, J.H. and E.F. Wieschaus (2000). Genes controlling an epithelial invagination in Drosophila embryos. Molec. Biol. Cell 11 (Suppl.): 514a. 40th American Society for Cell Biology Annual Meeting, San Francisco, CA.

Hoang, R., T. Blankenship, J. Grosshans, P. Sung, **J. Thomas** and E. Wieschaus (2001). An ectopic expression approach to gastrulation. Annual Drosophila Research Conference 42, Washington, DC.

Thomas, J.H. and E. Wieschaus (2001). Genes controlling cephalic furrow formation in the Drosophila embryo, Annual Drosophila Research Conference 42, Washington, DC.

Thomas, J.H. and E. Wieschaus (2002). Analysis of a gene controlling cephalic furrow formation. Annual Drosophila Research Conference 43, San Diego, CA.

Thomas, J.H. and E. Wieschaus (2003). *src64* involvement in cellularization. Annual Drosophila Research Conference 44, Chicago, IL.

Thomas, J.H., K. Ng and E. Wieschaus (2005). Genes that control Drosophila cephalic furrow invagination. Morphogenesis and Regenerative Medicine Symposium, Charlottesville, VA.

Strong, T.C. and **J.H. Thomas** (2007). A Molecular Analysis of *src64* and its impact on cytoskeletal organization in the Drosophila embryo. Annual TTUHSC Student Research Week 19, Lubbock, TX.

Strong, T.C. and **J.H. Thomas** (2007). A molecular analysis of *Src64* during cellularization. Annual Drosophila Research Conference 48, Philadelphia, PA.

Thomas, J.H., T.C. Strong, R. Rosales and S. Thomas (2007). Drosophila Src64 and the cytoskeleton. Texas Tech Cancer Research Symposium, Lubbock, TX.

Carter, T.Y. and **J.H. Thomas** (2008). The role of *Csk* in regulating *src64* during Drosophila cellularization and microfilament ring contraction. Annual TTUHSC Student Research Week 20, Lubbock, TX.

Gadwala, S. and **J.H. Thomas** (2008). Role of tyrosine phosphorylated proteins in Drosophila embryo development. Annual TTUHSC Student Research Week 20, Lubbock, TX.

Carter, T.Y., N. Cormier and **J.H. Thomas** (2009). Src64 signaling pathway during Drosophila cellularization. Annual TTUHSC Student Research Week 21, Lubbock, TX.

Spencer, A.K. and **J.H. Thomas** (2009) Visualizing the cephalic furrow formation during Drosophila gastrulation. Annual TTUHSC Student Research Week 21, Lubbock, TX.

Spencer, A.K. and **J.H. Thomas** (2009) Visualizing the cephalic furrow formation during Drosophila gastrulation. Annual TTU Undergraduate Research Conference, Lubbock, TX.

Carter, T.Y., S. Gadwala, N. Cormier and **J.H. Thomas** (2009). *src64* signaling in Drosophila embryos during cellularization. TTU Research Days Conference, Lubbock, TX.

Carter, T.Y., S. Gadwala, N. Cormier and **J.H. Thomas** (2009). *src64* signaling pathway in Drosophila Embryos during cellularization. Center for Cardiovascular Disease and Stroke Conference, Lubbock, TX.

Spencer, A.K., and **J.H. Thomas** (2009). Visualizing cephalic furrow formation during Drosophila gastrulation. UNTHSC Undergraduate Research Symposium, Fort Worth, TX.

Carter, T.Y., N. Cormier and **J.H. Thomas** (2010). *src64* signaling in Drosophila embryos during cellularization. Annual TTUHSC Student Research Week 22, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2010). Regulation of actomyosin contraction by Src64 through MLCK and Rok during cellularization. Annual TTUHSC Student Research Week 22, Lubbock, TX.

Subedi, S. and J.H. Thomas (2010). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. TTU Undergraduate Research Conference, Lubbock, TX.

Carter, T.Y., S. Gadwala, N. Cormier and **J.H. Thomas** (2010). *src64* signaling in Drosophila embryos during cellularization. TTU Research Days Conference, Lubbock, TX.

Roh, J., H. Singh, A. Tarpara, M. Yim, Q. Zaidi, and **J.H. Thomas** (2010). Implementation of mobile clinic program in overcoming barriers to health care for treating Type II Diabetics in rural west Texas. School of Medicine Population Health Project EXPO, Lubbock, TX.

Thomas, J.H., Spencer, A.K., Siddiqui, B. and S. Subedi (2010). Multiple morphogenetic processes drive Drosophila cephalic furrow infolding. Society for Developmental Biology 2010 Southwest Regional Meeting, Austin, TX.

Subedi, S. and **J.H. Thomas** (2010). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. UNTHSC Undergraduate Research Symposium, Fort Worth, TX.

Thomas, J.H., T.C. Strong, G. Kaur and J. Lee (2010). Role of the catalytic loop HRD motif in Src activity and function. CPRIT Inaugural Innovations in Cancer Research and Prevention Conference, Austin, TX.

Carter, T.Y., N. Cormier, M. Zabet and **J.H. Thomas** (2011). *src64* signaling in Drosophila embryos during cellularization. Annual TTUHSC Student Research Week 23, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. Annual TTUHSC Student Research Week 23, Lubbock, TX.

Subedi, S. and **J.H. Thomas** (2011). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. Annual TTUHSC Student Research Week 23, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. Annual TTU Research Days Conference, Lubbock, TX.

Subedi, S. and **J.H. Thomas** (2011). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. Annual TTU Research Days Conference, Lubbock, TX.

Subedi, S. and **J.H. Thomas** (2011). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. National Conferences on Undergraduate Research, Ithaca, NY.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. TTUHSC Annual Cancer Symposium, Amarillo, TX.

Thomas, J.H., R. Rosales and A.B. Chougule (2011). Src64 regulates myosin regulatory light chain during basal closure of the Drosophila cellular blastoderm. Society for Developmental Biology 70th Annual Meeting, Chicago, IL. *Abstract published in *Developmental Biology* (2011) 356: 108-109. **Presented as selected platform presentation, July 23, 2011.

Carter, T.Y., S. Gadwala, R. Cole, N. Cormier, M. Zabet and **J.H. Thomas** (2012). *src64* signaling in Drosophila embryos during cellularization. Annual TTUHSC Student Research Week 24, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2012). Regulation of actomyosin contraction by Src64 through Rok and MLCK during Drosophila cellularization. Annual TTUHSC Student Research Week 24, Lubbock, TX.

Chougule, A.B., R. Rosales, **J.H. Thomas** (2012). Regulation of actomyosin contraction during Drosophila cellularization. Model Organisms to Human Biology - Cancer Genetics Meeting (Genetics Society of America), Washington, D.C.

Thomas, J.H., A.B. Chougule and R. Rosales (2012). Regulation of nonmuscle myosin II during Drosophila cellularization. Society of Developmental Biology 71st Annual Meeting, Montreal, Quebec, Canada. *Abstract title published in *Developmental Biology* (2012) 368: 150.

Thomas, J.H., T.Y. Carter, M. Zabet-Moghaddam, R.N. Cole (2012). Identification of targets of a Drosophila homologue of src, a gene involved in breast cancer. Gender Specific Women's Health Conference, Lubbock, TX. October 2012.

Chougule, A.B., R. Rosales, **J.H. Thomas** (2013). Regulation of actomyosin dynamics by Rho kinase and myosin light chain kinases during Drosophila cellularization. Annual TTUHSC Student Research Week 25, Lubbock, TX., March 2013.

Thomas, J.H., T.Y. Carter, M. Zabet-Moghaddam, R.N. Cole (2013). New cellular roles for a Drosophila homologue of *src*, a gene involved in breast cancer. Gender Specific Women's Health Conference, Lubbock, TX. November 2013.

Chougule, A.B., M.C. Hastert, **J.H. Thomas** (2014). Drak is required for actomyosin assembly or organization during Drosophila cellularization. Annual Drosophila Research Conference 55, San Diego, CA.

Chougule, A.B., M.C. Hastert, R. Rosales, **J.H. Thomas** (2014). Regulation of actomyosin dynamics by Rho kinase and myosin light chain kinases during Drosophila cellularization. Annual TTUHSC Student Research Week 26, Lubbock, TX., March 2014.

Thomas, J.H., A. Spencer, A. and B. Siddiqui (2014). Formation of the cephalic furrow during Drosophila gastrulation. Society of Developmental Biology 73rd Annual Meeting, University of Washington, Seattle, WA.

Holcomb, M., G-J. Gao, **J. Thomas** and J. Blawzdziewicz (2016). Embryo as an active granular fluid: stress-coordinated cellular constriction chains. 69th Annual Meeting of the APS Division of Fluid Dynamics. Portland, Oregon. November, 2016. *Abstract published in *Bulletin of the American Physical Society*, 61: 20, D30.00002.

Blawzdziewicz, J., G-J. Gao, M. Holcomb and **J. Thomas** (2017). Stochastic phase of ventral furrow formation in the Drosophila Embryo: cellular constriction chains, mechanical feedback and robustness. American Physical Society, March Meeting. New Orleans, Louisiana. March, 2017.

Holcomb, M., Blawzdziewicz, J., G-J. Gao and **Thomas, J.** (2018). Mechanical Feedback during Ventral Furrow Formation in *Drosophila*: Intercellular Coordination and Robustness. American Physical Society Physics Meeting. Los Angeles, California. March, 2018.

Servati, M., Blawzdziewicz, J. and **Thomas, J.** (2018). Exploring Cellular Constriction Chain Dynamics in the Drosophila Embryo. American Physical Society Physics Meeting. Los Angeles, California. March, 2018.

Sharma, K., Y. Ming, A.B. Chougule, P. Liaw, S. Yanofsky, S. Ungashe, **J.H. Thomas**, W. Garland, F. McCormick, M. Holderfield (2018). KRAS and Metabolism: An Interesting Interplay. Targeting RAS-Driven Cancers Meeting. American Association for Cancer Research December, 2018.

Bui, A.P.N., T.Y. Carter, **J.H. Thomas** (2019). Maternal RNAi screening of potential Src64 targets in actomyosin ring contraction during cellularization. Genetics Society of America 60th Annual Drosophila Research Conference, Dallas, Texas, March, 2019.

Kairamkonda, S., A.B. Chougule, A. Lenneck, P. Liaw, S. Yanofsky, W. Garland, **J.H. Thomas** (2019). Screening for inhibitors of human oncogenic KRAS using a *Drosophila melanogaster* model. Genetics Society of America 60th Annual Drosophila Research Conference, Dallas, Texas, March, 2019.

Park J, **Thomas JH** (2019). Analysis of a Gene Involved in Tissue Folding in the Embryo. SABR Symposium, TTUHSC, August 2019

Blawzdziewicz J_, Holcomb MC, Gao GJJ, Servati M, Schneider D, Presley Mcneely P, **Thomas JH** (2019). Mechanical Feedback during Ventral Furrow Formation in the Drosophila embryo: Intercellular Coordination and Robustness. VI International Conference on Particle-based Methods. Fundamental and Applications. Particles 2019, Barcelona, Spain, October 2019

Poster Presentations:

Thomas, J.H. and H.R. Horvitz (1990). Synthetic Multivulva genes. East Coast *C. elegans* Meeting, Cambridge, MA.

Thomas, J.H. and H.R. Horvitz (1991). Synthetic Multivulva genes. International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and H.R. Horvitz (1992). Synthetic Multivulva genes. East Coast *C. elegans* Meeting, New York, NY.

Thomas, J.H. and H.R. Horvitz (1993). Synthetic Multivulva genes. International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and H.R. Horvitz (1995). The synthetic Multivulva genes may encode components of a cell signaling system, International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and H.R. Horvitz (1996). Lineage analysis of synthetic Multivulva genes. East Coast *C. elegans* Meeting, Piscataway, NJ.

Lu, W.X., **J.H. Thomas**, and H.R. Horvitz (1997). Molecular analyses of the class B synthetic Multivulva genes *lin-37*, *lin-35* and *lin-53*. International *C. elegans* Meeting, Madison, WI.

Thomas, J.H. and E. Wieschaus (1999). Loci controlling cephalic furrow formation. Annual Drosophila Research Conference 40, Seattle, WA.

Thomas, J.H. and E. Wieschaus (2000). Loci controlling cephalic furrow formation. Annual Drosophila Research Conference 41, Pittsburg, PA.

Thomas, J.H. and E.F. Wieschaus (2000). Genes controlling an epithelial invagination in Drosophila embryos. Molec. Biol. Cell 11 (Suppl.) 514a. 40th American Society for Cell Biology Annual Meeting, San Francisco, CA.

Hoang, R., T. Blankenship, J. Grosshans, P. Sung, **J. Thomas** and E. Wieschaus (2001). An ectopic expression approach to gastrulation. Annual Drosophila Research Conference 42, Washington, DC.

Thomas, J.H. and E. Wieschaus (2001). Genes controlling cephalic furrow formation in the Drosophila embryo. Annual Drosophila Research Conference 42, Washington, DC.

Thomas, J.H. and E. Wieschaus (2002). Analysis of a gene controlling cephalic furrow formation. Annual Drosophila Research Conference 43, San Diego, CA.

Thomas, J.H. and E. Wieschaus (2002). Genes involved in cephalic furrow formation and actin-myosin contractility in the Drosophila embryo. Symposium in Honor of the Recipients of the 2002 Nobel Prize in Medicine or Physiology, Cambridge, MA. (No Abstract)

Thomas, J. and E. Wieschaus (2003). *src64* mediates actin-myosin contractility during Drosophila cellularization. Inaugural Morphogenesis and Regenerative Medicine Symposium, Charlottesville, VA. (No Abstract)

Thomas, J.H., K. Ng and E. Wieschaus (2005). Genes that control Drosophila cephalic furrow invagination. Morphogenesis and Regenerative Medicine Symposium, Charlottesville, VA.

Strong, T.C. and **J.H. Thomas** (2007). A Molecular Analysis of *src64* and its impact on cytoskeletal organization in the Drosophila embryo. Annual TTUHSC Student Research Week 19, Lubbock, TX.

Strong, T.C. and **J.H. Thomas** (2007). A molecular analysis of *Src64* during cellularization. Annual Drosophila Research Conference 48, Philadelphia, PA.

Carter, T.Y. and **J.H. Thomas** (2008). The role of *Csk* in regulating *src64* during Drosophila cellularization and microfilament ring contraction. Annual TTUHSC Student Research Week 20, Lubbock, TX. *Award: 3rd Place, Junior Ph.D. Division, Institutional.

Gadwala, S. and **J.H. Thomas** (2008). Role of tyrosine phosphorylated proteins in Drosophila embryo development. Annual TTUHSC Student Research Week 20, Lubbock, TX.

Carter, T.Y., N. Cormier and **J.H. Thomas** (2009). Src64 signaling pathway during Drosophila cellularization. Annual TTUHSC Student Research Week 21, Lubbock, TX. *Award: 2nd Place, Senior Ph.D. Student Division, Institutional.

Spencer, A.K. and **J.H. Thomas** (2009) Visualizing the cephalic furrow formation during Drosophila gastrulation. Annual TTUHSC Student Research Week 21, Lubbock, TX.

Spencer, A.K. and **J.H. Thomas** (2009) Visualizing the cephalic furrow formation during Drosophila gastrulation. Annual TTU Undergraduate Research Conference, Lubbock, TX.

Carter, T.Y., S. Gadwala, N. Cormier and **J.H. Thomas** (2009). *src64* signaling in Drosophila embryos during cellularization. TTU Research Days Conference, Lubbock, TX. *Award: 1st Place: Science I Division, TTU Institutional Poster Competition.

Carter, T.Y., S. Gadwala, N. Cormier and **J.H. Thomas** (2009). *src64* signaling pathway in Drosophila Embryos during cellularization. Center for Cardiovascular Disease and Stroke Conference, Lubbock, TX.

Spencer, A.K., and **J.H. Thomas** (2009). Visualizing cephalic furrow formation during Drosophila gastrulation. UNTHSC Undergraduate Research Symposium, Fort Worth, TX.

Carter, T.Y., N. Cormier and **J.H. Thomas** (2010). *src64* signaling in Drosophila embryos during cellularization. Annual TTUHSC Student Research Week 22, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2010). Regulation of actomyosin contraction by Src64 through MLCK and Rok during cellularization. Annual TTUHSC Student Research Week 22, Lubbock, TX.

Subedi, S. and J.H. Thomas (2010). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. TTU Undergraduate Research Conference, Lubbock, TX.

Carter, T.Y., S. Gadwala, N. Cormier and **J.H. Thomas** (2010). *src64* signaling in Drosophila embryos during cellularization. TTU Research Days Conference, Lubbock, TX.

Roh, J., H. Singh, A. Tarpara, M. Yim, Q. Zaidi, and **J.H. Thomas** (2010). Implementation of mobile clinic program in overcoming barriers to health care for treating Type II Diabetics in rural west Texas. School of Medicine Population Health Project EXPO, Lubbock, TX.

Thomas, J.H., Spencer, A.K., Siddiqui, B. and S. Subedi (2010). Multiple morphogenetic processes drive Drosophila cephalic furrow infolding. Society for Developmental Biology 2010 Southwest Regional Meeting, Austin, TX.

Subedi, S. and **J.H. Thomas** (2010). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. UNTHSC Undergraduate Research Symposium, Fort Worth, TX. *Award: 3rd Place, UNTHSC Undergraduate Research Symposium Award

Thomas, J.H., T.C. Strong, G. Kaur and J. Lee (2010). Role of the catalytic loop HRD motif in Src activity and function. CPRIT Inaugural Innovations in Cancer Research and Prevention Conference, Austin, TX. (Selected Poster)

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. Annual GSBS Retreat, Lubbock, TX. (No Abstract)

Carter, T.Y., N. Cormier, M. Zabet and **J.H. Thomas** (2011). *src64* signaling in Drosophila embryos during cellularization. Annual TTUHSC Student Research Week 23, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. Annual TTUHSC Student Research Week 23, Lubbock, TX.

Subedi, S. and **J.H. Thomas** (2011). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. Annual TTUHSC Student Research Week 23, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. Annual TTU Research Days Conference, Lubbock, TX.

Subedi, S. and **J.H. Thomas** (2011). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. Annual TTU Research Days Conference, Lubbock, TX.

Subedi, S. and **J.H. Thomas** (2011). A study of the *ImpE1* gene and its role in cephalic furrow formation in the Drosophila embryo. National Conferences on Undergraduate Research, Ithaca, NY.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2011). Regulation of actomyosin contraction by Src64 through Rok and MLCK during cellularization. TTUHSC Annual Cancer Symposium, Amarillo, TX.

Carter, T.Y., S. Gadwala, R. Cole, N. Cormier, M. Zabet and **J.H. Thomas** (2012). *src64* signaling in Drosophila embryos during cellularization. Annual TTUHSC Student Research Week 24, Lubbock, TX.

Chougule, A.B., R. Rosales and **J.H. Thomas** (2012). Regulation of actomyosin contraction by Src64 through Rok and MLCK during Drosophila cellularization. Annual TTUHSC Student Research Week 24, Lubbock, TX.

Chougule, A.B., R. Rosales, **J.H. Thomas** (2012). Regulation of actomyosin contraction during Drosophila cellularization. Model Organisms to Human Biology - Cancer Genetics Meeting (Genetics Society of America), Washington, D.C.

Thomas, J.H., A.B. Chougule and R. Rosales (2012). Regulation of nonmuscle myosin II during Drosophila cellularization. Society of Developmental Biology 71st Annual Meeting, Montreal, Quebec, Canada.

Thomas, J.H., T.Y. Carter, M. Zabet-Moghaddam, R.N. Cole (2013). New cellular roles for a Drosophila homologue of *src*, a gene involved in breast cancer. Gender Specific Women's Health Conference, Lubbock, TX. November 2013.

Thomas, J.H., A. Spencer, A. and B. Siddiqui (2014). Formation of the cephalic furrow during Drosophila gastrulation. Society of Developmental Biology 73rd Annual Meeting, University of Washington, Seattle, WA.

Holcomb, M., Blawzdziewicz, J., G-J. Gao and **Thomas, J.** (2017). Mechanical Feedback during Ventral Furrow Formation in *Drosophila*: Intercellular Coordination and Robustness. American Physical Society Physics Meeting. Los Angeles, California. March, 2017.

Holcomb, M., Blawzdziewicz, J., G-J. Gao and **Thomas, J.** (2017). Mechanical Feedback during Ventral Furrow Formation in *Drosophila*: Intercellular Coordination and Robustness. Meeting of the Texas Section of the American Physical Society. Dallas, Texas. October, 2017.

Blawzdziewicz, J., Gao, G-J., Holcomb, M., and **Thomas, J. H**. (2017). Stochastic Phase of Ventral Furrow Formation in Drosophila Embryo: Cellular Constriction Chains, Mechanical Feedback and Robustness. American Physical Society Physics Meeting. New Orleans, Louisiana. March, 2017.

Servati, M., Blawzdziewicz, J. and **Thomas, J.** (2018). Exploring Cellular Constriction Chain Dynamics in the Drosophila Embryo. American Physical Society Physics Meeting. Los Angeles, California. March, 2018.

Servati, M., Holcomb, M.C., Gao, G-J.J., Schneider, D., Blawzdziewicz, J. and **Thomas, J.H.** (2018). Exploring Cellular Constriction Chain Dynamics in the Drosophila Embryo. Annual Graduate Student Poster Competition. Los Angeles, California. March, 2018.

Sharma, K., Y. Ming, A.B. Chougule, P. Liaw, S. Yanofsky, S. Ungashe, **J.H. Thomas**, W. Garland, F. McCormick, M. Holderfield (2018). KRAS and Metabolism: An Interesting Interplay. Targeting RAS-Driven Cancers Meeting. American Association for Cancer Research December, 2018.

Bui, A.P.N., T.Y. Carter, **J.H. Thomas** (2019). Maternal RNAi screening of potential Src64 targets in actomyosin ring contraction during cellularization. Genetics Society of America 60th Annual Drosophila Research Conference, Dallas, Texas, March, 2019.

Kairamkonda, S., A.B. Chougule, A. Lenneck, P. Liaw, S. Yanofsky, W. Garland, **J.H. Thomas** (2019). Screening for inhibitors of human oncogenic KRAS using a *Drosophila melanogaster* model. Genetics Society of America 60th Annual Drosophila Research Conference, Dallas, Texas, March, 2019.

Holcomb, M., Gao, G-J., Servati, M., Schneider, D., McNeely, P., **Thomas, J.**, Blawzdziewicz. (2019). Cellular Constriction Chains in the Drosophila Embryo: Mechanical Feedback and Robustness of Morphogenetic Movements. Joint Meeting of the Texas Sections of APS, AAPT and Zone 13 of the SPS, Lubbock, Texas, October 2019.

Holcomb, M., Gao, G-J., Servati, M., **Thomas, J.**, Blawzdziewicz. (2019). Embryo as an Active Granular Fluid: Stress-Coordinated Cellular Constriction Chains. 69th Annual Meeting of the American Physical Society Division of Fluid Dynamics, Portland, Oregon, November 2019.

Talks:

Synthetic Multivulva Genes, East Coast *C. elegans* Meeting, Johns Hopkins University, Baltimore, MD, June, 1994.

A Genetic and Molecular Analysis of the Synthetic Multivulva Genes: Genes Involved in the Specification of Cell Fate in *Caenorhabditis elegans* Vulval Development, Predoctoral and Physician Postdoctoral Fellows Meeting, Howard Hughes Medical Institute Headquarters, Chevy Chase, MD, June, 1994.

Synthetic Multivulva Genes, Boston Area Worm Meeting, Massachusetts Institute of Technology, Cambridge, MA, December, 1994.

Loci Affecting Cephalic Furrow Formation in Drosophila, Princeton University Department of Molecular Biology Retreat, Vernon NJ, October, 1999.

src64 Involvement in Cellularization, 44th Annual Drosophila Research Conference, Chicago, IL, March, 2003.

The Role of Src in Drosophila Cellular and Tissue Morphogenesis, Invited Speaker: Institute of Biosciences and Technology, Texas A&M University, Houston, TX, January, 2004

The Role of Src in Drosophila Cellular and Tissue Morphogenesis, Invited Speaker: Columbus Children's Hospital, Columbus, OH, May, 2004

The Role of Src in Drosophila Cellular and Tissue Morphogenesis, Invited Speaker: Texas Tech University Health Sciences Center, Lubbock, TX, July, 2004

Genes that Control Cell Shape Changes and Movements in the Drosophila Embryo, Invited Speaker: Baylor University, Waco, TX, March, 2005.

Regulation of Microfilament Dynamics during Drosophila Cellularization, Invited Speaker: Department of Physiology, Texas Tech University Health Sciences Center, Lubbock, TX, October, 2006.

Drosophila Src64 and the Cytoskeleton. Texas Tech Cancer Research Symposium, Lubbock, TX, March, 2007.

Regulation of the Microfilament Cytoskeleton by the Drosophila *src* Homologue, *src64*, Invited Speaker: Department of Pharmacology and Neuroscience, Texas Tech University Health Sciences Center, Lubbock, TX, November, 2007.

Drosophila Src Signaling and the Regulation of Actomyosin Contraction, Invited Speaker: The Commonwealth Medical College, Scranton, PA, December 2, 2010.

Src64 regulates myosin regulatory light chain during basal closure of the Drosophila cellular blastoderm. Selected Short Talk: Society for Developmental Biology 70th Annual Meeting, Chicago, IL, July 23, 2011.

Cellular Morphogenesis in the Drosophila Embryo. Invited Speaker: Texas Institute for Environmental and Human Health, Lubbock, TX, April 16, 2012.

Identification of targets of a Drosophila homologue of *src*, a gene involved in breast cancer. Laura W. Bush Institute for Women's Health: Gender Specific Women's Health Conference, Lubbock, TX. October 3, 2012.

Developmental Biology and Genetics, GSBS Retreat, Lubbock, TX, September, 2013.

Regulation of Actin Organization and Myosin Activity in the Drosophila Embryo. Invited Speaker, Department of Immunology and Molecular Microbiology, Texas Tech University Health Sciences Center, Lubbock, TX, April 9, 2014

Overview of Recent Developments and Findings in Drosophila Research. Invited Speaker, Tosk, Inc., Sunnyvale, CA, July 29, 2014.

Update on Fly Research in the Thomas Laboratory at Texas Tech. Invited Speaker, Tosk, Inc., Sunnyvale, CA, July 29, 2014.

Cell Shape Change and the Generation of Embryonic Structure. Invited Speaker, Department of Immunology and Molecular Microbiology, Texas Tech University Health Sciences Center, Lubbock, TX, October, 2016

Developing Screens for Other Oncogenic KRAS Mutants. Invited Speaker, Tosk, Inc., Sunnyvale, CA, August 7, 2018.

Flies and Oncogenes. Invited Speaker, Department of Cell Biology and Biochemistry, Texas Tech University Health Sciences Center, Lubbock, TX, September, 2018.

Research Support, Current:

South Plains Foundation Seed 09/01/2019-08/31/2020
C-GAP, a Key to the Role of the Cytoskeleton during Epithelial Folding
Principal Investigator: Jeffrey H. Thomas
$15,000 direct costs

Research Support, to be Resubmitted:

R43AG058475 (NIH-NIA) 01/01/2018-12/31/2018
Optimized flavonoids for anti-aging.
Principal Investigators: William A. Garland, Jeffrey H. Thomas
Role: Multiple-PI
$227,880 direct costs, $299,990 total costs

R43CA221590-02 (NIH-NCI) 01/01/2018-12/31/2018
Screening with *D. melanogaster* to discover inhibitors of G12D mutated *KRAS*.
Principal Investigators: William A. Garland, Jeffrey H. Thomas
Role: Multiple-PI
$196,217 direct costs,

Research Support, Previous:

2R44-CA189549-02A1 (NIH-NCI) 09/01/2017-08/31/2019
Suppressors of kRAS Activity Discovered Using a Fruit Fly-based *in-vivo* Screen
Principal Investigators: William A. Garland, Jeffrey H. Thomas
Role: Multiple-PI
$1,538,363 direct costs ($1,999,872 total costs)

South Plains Foundation Seed 09/01/2017-08/31/2018
Functional identification of signaling and cytoskeletal proteins regulated by Src64
Principal Investigator: Jeffrey H. Thomas
$15,000 direct costs

1R43CA189549-01 (NIH-NCI) 07/01/2014-06/30/2015

Screening with *D. melanogaster* to discover inhibitors of G12Vmutated *KRAS*.
Principal Investigator: William A. Garland
Role: Co-Investigator
(5% effort, $204,033/$49,142)
Goal: To develop screening methods in Drosophila to discover small chemical inhibitors to specifically target human KRAS.

LWBIWH and UMC Women's Health Seed Grant 09/01/2013-08/31/2014
Regulation of oxidative stress response by src
Principal Investigator: Jeffrey H. Thomas
(5% effort, $20,000)
Goal: To determine how Src64 regulates oxidative stress response in the early Drosophila embryo.

South Plains Foundation Seed Grant 09/01/2012-08/31/2013
Analysis of the role of *arroyo* in epithelial folding
Principal Investigator: Jeffrey H. Thomas
(5% effort, $15,000)
Goal: To determine the epithelial folding defects and cellular defects of the *arroyo* mutation, and to molecularly identify the *arroyo* gene.

TTUHSC Preliminary Data Grant 01/01/2012-12/31/2012
Regulation of Actomyosin Contraction by a Src-Rok-MLCK Pathway
Principal Investigator: Jeffrey H. Thomas
(5% effort, $20,000)
Goal: To determine how drak regulates actomyosin assembly and contraction in the early Drosophila embryo.

09BGIA2260616 07/01/2009-06/30/2012*
American Heart Assoc., South-Central Affiliate-Beginning Grant-in-Aid
Regulation of the Microfilament Cytoskeleton by Src64
Principal Investigator: Jeffrey H. Thomas
(10% effort, $127,274)
Goal: To determine how Src64 controls microfilament contraction in the early Drosophila embryo and to identify its effector proteins.
*No-cost extension from 07/01/2011-06/30/2012

TTU Center for Undergraduate Research Grant 08/08/2011-08/31/2011
Studies on Morphogenesis of the Drosophila Embryo
Principal Investigator: Jeffrey H. Thomas
(1% effort, $1,500)
Goal: To investigate the mechanisms and signaling pathways involved in morphogenesis in the early Drosophila embryo.

LWBIWH and UMC Women's Health Seed Grant 02/01/2010-01/31/2011
Identification of Proteins in a src Signaling Pathway

Principal Investigator: Jeffrey H. Thomas
(5% effort, $20,000)
Goal: To use proteomics and biochemical approaches to identify signaling and effector molecules that act downstream of Src64 to control microfilament contraction in the Drosophila embryo.

TTUHSC Preliminary Data Grant Program: 01/01/2009-12/31/2009
Src64 and the Control of Microfilament Dynamics
Principal Investigator: Jeffrey H. Thomas
(5% effort, $20,000)
Goal: To use proteomics and biochemical approaches to identify signaling and effector molecules that act downstream of Src64 to control microfilament contraction in the Drosophila embryo.

South Plains Foundation Grant: 09/01/2007-08/31/2008
The Role of *csk* in Regulating *src64* Activity in the Early Drosophila Embryo.
Principal Investigator: Jeffrey H. Thomas
(5% effort, $10,000).
Goal: To determine whether *Csk* is a negative regulator of *src64* in microfilament contraction during Drosophila cellularization.

Southwest Cancer Treatment and Research Center 03/01/2007 - 02/29/2008
Mechanisms of *Src64* Control of Microfilament Contraction
Principal Investigator: Jeffrey H. Thomas
(5% Effort, $10,000)
Goal: To determine whether *src64* controls microfilament ring contraction during Drosophila cellularization by regulating myosin activity or by organizing actin.

South Plains Foundation Grant: 09/01/2005-08/31/2006
Determination of the Mechanism of *src64*-mediated Control of Cytoskeletal Contraction.
Principal Investigator: Jeffrey H. Thomas
(20% effort, $10,000).
Goal: To determine whether *src64* controls microfilament ring contraction during Drosophila cellularization by regulating myosin activity or by organizing actin.

School of Medicine Seed Grant: 09/01/2005-08/31/2006
Analysis of a Drosophila Gene that Delays Epithelial Invagination.
Principal Investigator: Jeffrey H. Thomas
(15% effort, $20,000).
Goal: To molecularly identify the newly discovered gene *paused furrow* and characterize its role in Drosophila cephalic furrow formation.