

Erika Abel, Ph. D.

Curriculum Vitae

Accomplished higher education professional with solid history of success in program development and administration of a large undergraduate program; Proven track record of cross-disciplinary collaborative leadership, with the ability to establish and foster effective relationships with internal and external stakeholders. Demonstrated ability to think strategically and systemically, bringing an innovative approach and fresh perspective to both policy making and problem solving at a private Christian University.

Recognized excellence in classroom teaching and a robust record of scholarly attainment and research contributions. Strong record of fostering and promoting pedagogical innovation among colleagues, enhancing classroom instruction. Experienced leader in recruitment activities tailored for high ability students. Involved Christian educator committed to guiding students through their academic experience and in their spiritual journeys.

Education and Credentials

Postdoctoral Fellowship – University of Texas MD Anderson Cancer Center, Smithville, Texas
Department of Molecular Carcinogenesis

Doctor of Philosophy – University of Washington, Seattle, Washington
School of Public Health and Community Medicine, Department of Environmental and Occupational Health Sciences, Program in Toxicology
Society of Toxicology Graduate Student Travel Award

Bachelor of Science in Biomedical Science – Texas A&M University, College Station, Texas
Summa cum Laude
McFadden Endowed Scholarship-Texas A&M University

Professional Experience

BAYLOR UNIVERSITY, Waco, Texas

Undergraduate Program Director, Department of Biology, 2013 to Present

Provide administrative leadership for the Department of Biology undergraduate program. Coordinate departmental functions such as academic advising, training and coordination of undergraduate learning assistants, managing enrollment, resolving student complaints, and coordinating and designing curriculum to reflect advances in the field of Biology. Participate in recruitment and retention activities, approve transfer credits and degree petitions in biology for an undergraduate population of ~15,000. Supervise five professional laboratory coordinators and numerous student workers, directing workflow and providing performance feedback.

- Managed biology programs that serve approximately 3,700 undergraduate biology majors and pre-majors, pre-healthcare students, and pre-nursing students.
- Conducted extensive recruiting efforts for both the Department of Biology and the High Ability Student program in the College of Arts and Sciences.

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BAYLOR UNIVERSITY, Waco, Texas

Lecturer and Academic Advisor, Department of Biology, 2011 to Present

Taught between 250-500 first year and advanced students cell biology and biochemistry annually. Advised students in course scheduling, academic requirements, and career guidance.

- Established interactive, inclusive classroom learning environments to foster student engagement with course materials.
- Maintained up to date knowledge of academic policies and procedures, departmental requirements, and information such as medical school admissions requirements to provide effective support to ~100 advisees each semester.
- Authored letters of recommendation for students applying to graduate or professional school, averaging nearly 50 letters annually.
- Managed productive undergraduate research lab utilizing zebrafish research animals

THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER, Smithville, Texas

Research Assistant Professor, Department of Molecular Carcinogenesis, 2009 to 2011

Developed therapies against the cutaneous effects of mustard gas exposure; project funded by the CounterACT (Countermeasures Against Chemical Threats) as a response to homeland security threats, collaboration with Dr. Michael MacLeod. Investigated molecular mechanisms underlying obesity promoted pancreatic cancer development, collaboration with Dr. Susan Fischer.

THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER, Smithville, Texas

Instructor and Postdoctoral Fellow, Department of Carcinogenesis, 2003 to 2009

Engineered and utilized transgenic, knockout and congenic mouse lines and cultured cell lines to investigate genetic susceptibility to skin cancer, collaboration with Dr. John DiGiovanni.

UNIVERSITY OF WASHINGTON, Seattle, Washington

Graduate Research Assistant, Department of Environmental and Occupational Health Services, School of Public Health and Community Medicine, 1998 to 2003

Investigated the effect of polymorphisms in Glutathione S-transferases on metabolism of pesticides and on endometrial cancer risk, under Dr. David Eaton.

University Leadership and Service

Baylor University:

Faculty Leader, Medical Mission Trip to the Dominican Republic, Multicultural Association of Prehealth Students. 2016, 2017, 2018

College of Arts and Sciences Revised Core Curriculum Implementation Team, College of Arts and Sciences.

College of Arts and Sciences Dean's Special Subcommittee on Assessment of Need for Additional Associate Dean for Research, College of Arts and Sciences.

Symposium Organizer, Common Grounds in Tropical Disease Biology, Department of Biology and Baylor College of Medicine-National School of Tropical Medicine.

Enrollment Council, College of Arts and Sciences.

Provost's Task Force, Transfer Credit Policy Evaluation.

Curriculum Committee, College of Arts and Sciences.

Prehealth Programs Committee, College of Arts and Sciences.

Registrar's Task Force on Undergraduate Course Repeat Policy.

Paul L. Foster Success Center Public Relations Committee.

Women in Science and Engineering, Steering Committee.

University Academic Advising Council Subcommittee on Faculty Mentoring.

Chairperson, Undergraduate Committee, Department of Biology.

Recruitment and Program Development Experience

Program Development, Inaugural STEM Career Panel Event, cooperative with Career and Professional Development (2017).

Program Development, Bachelor of Science in Science Research Fellows, College of Arts and Sciences (2016-present).

Program Development, Departmental Ambassadors for Recruitment and Retention, College of Arts and Sciences (2015-present).

Program Development, Bachelor of Science in Biology concentration in Tropical Disease Biology, Cooperative with Baylor College of Medicine--National School of Tropical Medicine (2015-present).

Program Development, Department of Biology Welcome Week Event, (2015-present)

Faculty Representative, Fall and Spring Premiere, Student Recruitment Event, (2014-present).

Faculty Representative, Know Where You Are Going Day, Student Recruitment Event, (2014-present).

Program Development, Biology Distinguished Scholars Day, Department of Biology, College of Arts and Sciences, (2014).

Faculty Representative, Fall and Spring Invitation to Excellence, High Ability Student Recruitment Event, (2012-present).

Professional Affiliations

Invited Attendee, Seminar on Academic Leadership in Baptist Universities.

Texas Genetics Society (2005-present)

- President-Elect, Texas Genetics Society (2015-2016)
- Local Arrangements Coordinator, Annual Meeting (2014)
- Board Member (2006 and 2011-present)

Women in Science and Engineering, Baylor University (2014-present)

American Gastroenterological Association (2009-2011)

American Association for Cancer Research (2005-2011)

Society of Toxicology (2000-2011)

Pacific Northwest Association of Toxicology (1999-2003)

Awards

Baylor University Undergraduate Research and Scholarly Achievement **Mentor of the Year** (2016)

Named **Baylor Fellow for excellence in teaching** by the Academy for Teaching and Learning (2015- 2016)

Named as a National Academies Education Fellow in the Life Sciences, by the National Academy of Sciences (2013-2014)

Selected to participate in the Summer Faculty Institute offered by the Academy for Teaching and Learning at Baylor University (2016)

Nominated for the Baylor chapter Phi Kappa Chi fraternity's Richard Couey Award for Excellence; invited to attend the Light Your World banquet honoring Baylor faculty who significantly impact the lives of Baylor students (2012)

Selected as the National Institute for Environmental Health and Safety, Center for Research on Environmental Disease's Career Development Program Representative (2010)

Outstanding Postdoctoral Platform Presentation, Texas Genetics Society 32nd Annual Meeting (2005)

The University of Texas MD Anderson Cancer Center (UT MDACC)/National Institutes of Health Research Training in Carcinogenesis and Mutagenesis Postdoctoral Training Grant Fellow (2003-2005)

Society of Toxicology Graduate Student Travel Award (2003)

Departmental Nominee for the Outstanding Teaching Assistant Award at the University of Washington (2001)

National Institute of Aging-Genetic Approaches to Aging Training Grant Fellow (1999-2003)

Achievement Rewards for College Scientists-Sam and Althea Stroum Fellow (1998)

Teaching Experience

Lecturer, Baylor University, Research Techniques I

Lecturer, Baylor University, Honors: Modern Concepts of Bioscience I honors section

Lecturer, Baylor University, Biochemistry and Physiology of the Cell

Lab Instructor, Baylor University, Biochemistry and Physiology of the Cell Laboratory

Guest Lecturer, Department of Environmental Science, Baylor University, "Environmental Carcinogenesis"

Seminar Series Lecturer, UT MDACC, Summer Undergraduate Research Program

Guest Lecturer, Department of Animal Science, Texas A&M University, "Developmental signaling pathways in skin: Relevance to wound healing and cancer",

Graduate Teaching Assistant, University of Washington-Toxic Chemicals in the Environment

Graduate Teaching Assistant, University of Washington-Environmental and Occupational Toxicology I

Research Mentorship Experience

Student Research, Department of Biology, Baylor University

Christina Hagan, Min-Suk Kwak and Ashely Nguyen, *Effects on thiol-containing copper chelators on zebrafish development and viability*. Fall 2014-2016.

Aparna Sarode and Raveena Patel, *Effects of organophosphate flame retardants on spontaneous movement in zebrafish larvae*, Fall 2014-2016.

Gerardo Martinez and Sammy Huseman, *Measuring inflammatory markers in zebrafish larvae after fin resection*. Fall 2014-Fall 2015.

Aleah Nichols and Atiq Haque, *Pigmentation in developing zebrafish embryos after exposure to disulfuram*. Fall 2014-Spring 2015.

Aaron Hopkins and Aparna Sarode, *Assessment of toxicity of disulfuram in developing zebrafish embryos*. Fall 2014-2016.

Michael Cotton, *Effect of dietary energy balance on hepatic Glutathione S-transferase expression in mice*. Spring 2014.

Victor Manon and Chase Van Gorp, *Protein expression of Glutathione S-transferase alpha 4 in the liver of obese and normal weight mice*. Spring 2014.

Aaron Hopkins and Lana Joudeh, *Effect of Brominated Flame Retardant Exposure on viability and morphology in developing zebrafish*. Spring 2014.

Gerardo Martinez and Nick Norris, *Effect of Brominated Flame Retardant Exposure on Glutathione S-transferase expression and activity in zebrafish embryos*. Spring 2014.

Annie Janise and Molli Kudela, *Effect of PBDE exposure on GST expression and Acetylcholinesterase activity in zebrafish embryos*. Spring 2014.

Rachel Shifflet, *Active Learning Models for Teaching Co-Regulation of Glycolysis and Gluconeogenesis*. Spring 2014.

Jeremy Walder and Linh Nguyen, *Effect of chemopreventive agent treatment on hepatic Glutathione S-transferase expression in mice with fatty liver disease*. Fall 2012-2013.

Annie Janise and Taylor Jackson, *Effect of dietary energy balance on hepatic Glutathione S-transferase expression in mice*. Spring 2013.

HoSe Kim and Jason Lambert, *Effect of fatty liver disease on hepatic Glutathione S-transferase enzyme activity in mice*. Spring 2013.

Nick Norris and Molli Kudela, *Comparative analysis of Glutathione S-transferase activity in muscle tissue from artic walruses and bearded seals*. Spring 2013.

Matthew Mackay and Jessica Bucio, *Analysis of Glutathione S-Transferase enzyme activity in C. elegans*. Fall 2012.

Carlo Manzana, Fall 2012, *Analysis of Glutathione S-transferase isoform expression in C. elegans*. Fall 2012.

Anthony Nguyen, *Assessment of chemical safety needs for BIO 4107 optimization*. Fall 2012.

Honors Student Research, Department of Biology, Baylor University

Austin MacDonald, 2014-2016

Aparna Sarode, 2014-2016

Christina Hagan, 2015-2016

Honors Student Committee Member, Baylor University

Victor Manon, *Quantifying the Genetic Basis of Yellow Pigmentation in Lake Malawi Cyclid Fish*, Dr. Patrick Danley Laboratory (2014).

Anju Kanapan, *Markers of an Unhealthy Pregnancy: An Assessment of The Ingestion of Soft Rocks During Pregnancy and Blood Lead Levels in Luo Women of Rural Western Kenya*, Dr. Lisa Baker Laboratory (2014).

Jessica Korona, *The Effect of Mother's Health on Children's Hemoglobin and Lead Levels in Rural Western Kenya*, Dr. Lisa Baker Laboratory (2014).

Sara Kim, *Meta-analysis of Psychotherapy and Alternative Treatments for Combat-related PTSD*, Dr. Beth Lanning Group (2013).

Megan Hermann, *Potential Inhibitors of *Bacillus anthracis*' Metallo- β -Lactamase by Hydroxamate Functional Groups and G-Quadruplex Aptamers*, Dr. Sung Kim Laboratory.

Robin Van Der Pol, *Characteristics of urban constructions occupied by bats*. Department of Biology, Dr. Kenneth Wilkins Laboratory (2012).

Victoria Seoung, *Biochemical Studies of Cathepsin B and Cruzain Inhibitors Sharing a Thiosemicarbazone Moiety*, Department of Chemistry and Biochemistry, Dr. Mary Lynn Trawick Laboratory (2012).

Zachary Sartor, *Synergistic Effects of Hydroxychloroquine on the Activity of Thiomaltol against Melanoma Cancer Cells*, Department of Chemistry and Biochemistry, Dr. Patrick Farmer Laboratory (2012).

Supervisory Graduate Student Mentor, UT MDACC/ Graduate School of Biomedical Science

Ronald Bozeman, 2006 to 2009

Dharanija Rao, 2007 to 2009

Summer Intern Research Mentor, UT MDACC Summer Undergraduate Research Program

Tyler Smith, 2010

Stephen Meyer, 2008

Natalie Korth and Jessica Campos. 2006

Ben Warshawsky, Tommy Coyen and Tekoah Lewis, 2005

Publications

Book Chapters

Abel EL, DiGiovanni J. Environmental carcinogenesis. In: *The Molecular Basis of Cancer, Fourth Edition*. Ed(s) JM Mendelsohn, P Howley, MA Israel, J Gray, CB Thompson. Elsevier Saunders: Philadelphia, 2015.

Abel EL, DiGiovanni J. Multistage Carcinogenesis. In: *Current Cancer Research: Chemical Carcinogenesis*. Ed TM Penning, Springer: New York, NY. 27-50, 2011.

Angel J, **Abel E**, DiGiovanni J. Genetic Determinants of Cancer Susceptibility. In: *Comprehensive Toxicology*. 14, 2nd. Ed(s) C McQueen. Elsevier, 371-400, 2010.

Abel EL, DiGiovanni J. Environmental carcinogenesis. In: *The Molecular Basis of Cancer, Third Edition*. Ed(s) JM Mendelsohn, P Howley, MA Israel, J Gray, CB Thompson. WB Saunders: Philadelphia, 2008.

Invited Articles

Abel EL, Angel JM, Kiguchi K, DiGiovanni J. Multi-stage chemical carcinogenesis in mouse skin: fundamentals and applications. *Nat Protoc* 4(9):1350-62, 2009. e-Pub 8/2009.

Articles in Peer-Reviewed Journals

Gueldner, J, Sayes, C, **Abel, E***, Bruce E. Emerging Association of the ALDH2*2 Polymorphism with Disease Susceptibility, *Journal of Drug Metabolism and Toxicology*, 7:2, 2016. ***corresponding author**

Usenko, CY, **Abel, EL**, Hopkins, A, Martinez, G, Tijerina, J, Kudela M, Norris, N, Joudeh, L, Bruce, EA. Evaluation of Common Use Brominated Flame Retardant (BFR) Toxicity Using a Zebrafish Embryo Model. *Toxics*, 43(3), 21, 2016.

Rosenberg M, **Abel, E**, Garver, W, Osgood, M. Taking the Hassle out of Hasselbalch, *Course Source*, 3:1-10, 2016.

Usenko, CY, **Abel, EL**, Kudela, M, Janise, A, Bruce, EA. Comparison of PBDE congeners as inducers of oxidative stress in zebrafish. *Environmental Toxicology and Chemistry*. 34(5):1154-60, 2015.

Angel JM, **Abel EL**, Riggs PK, McClellan SA, DiGiovanni J. Fine mapping reveals that promotion susceptibility locus 1 (Ps1) is a compound locus with multiple genes that modify susceptibility to skin tumor development. *G3 (Bethesda)*, Apr 3;4(6):1071-9, 2014.

Bozeman R, **Abel EL**, Macias E, Cheng T, Beltran L, Digiovanni J. A novel mechanism of skin tumor promotion involving interferon-gamma (IFN γ)/signal transducer and activator of transcription-1 (Stat1) signaling. *Mol Carcinog*. ePub, ahead of print, 2014.

Abel EL, Boulware S, Fields T, Mclvor E, Powell KL, Digiovanni J, Vasquez KM, Macleod MC. Sulforaphane induces phase II detoxication enzymes in mouse skin and prevents mutagenesis induced by a mustard gas analog. *Toxicol Appl Pharmacol*. 266(3):439-442. 2012

Boulware S, Fields T, Mclvor E, Powell KL, **Abel EL**, Vasquez KM, Macleod MC. 2,6 Dithiopurine, a nucleophilic scavenger, protects against mutagenesis in mouse skin treated in vivo with 2-(chloroethyl) ethyl sulfide, a mustard gas analog. *Toxicol Appl Pharmacol*. 263:203-209. 2012

Shen J, **Abel EL**, Riggs PK, Repass J, Hensley SC, Schroeder LJ, Temple A, Chau A, McClellan SA, Rho O, Kiguchi K, Ward MD, Semmes OJ, Person MD, Angel JM, Digiovanni J. Proteomic and pathway analyses reveal a network of inflammatory genes associated with differences in skin tumor promotion susceptibility in DBA/2 and C57BL/6 mice. *Carcinogenesis*. 33(11):2208-19. 2012.

Surh I, Rundhaug J, Pavone A, Mikulec C, **Abel EL**, Simper M, Fischer S. The EP1 receptor for prostaglandin E2 promotes the development and progression of malignant murine skin tumors. *Molecular Carcinogenesis*. 51(7):553-64, 2012.

Abel EL, Bubel JD, Simper MS, Powell L, McClellan SA, Andreeff M, MacLeod MC, DiGiovanni J. Protection against 2-chloroethyl ethyl sulfide (CEES)-induced cytotoxicity in human keratinocytes by an inducer of the glutathione detoxification pathway. *Toxicol Appl Pharmacol.* 255(2):176-83. 2011

Surh I, Rundhaug J, Pavone A, Mikulec C, **Abel EL**, Fischer S. Upregulation of the EP1 receptor for prostaglandin E2 promotes tumor progression. *Molecular Carcinogenesis.* 50(6): 458-60, 2011.

Blando J, Carbajal S, **Abel EL**, Beltran L, Conti C, Fischer SM, DiGiovanni J. Cooperation between Stat3 and Akt signaling leads to prostate tumor development in transgenic mice. *Neoplasia.* 13(3):254-65, 2011.

Abel EL, Angel JM, Riggs PK, Langfield L, Lo HH, Person MD, Awasthi YC, Wang LE, Strom SS, Wei Q, DiGiovanni J. Evidence That Gsta4 Modifies Susceptibility to Skin Tumor Development in Mice and Humans. *J Natl Cancer Inst* 102(21):1663-1675. e-Pub 10/2010.

Yasgar A, Shultz J, Z 6 pthou W, Wang H, Huang F, Murphy N, **Abel EL**, DiGiovanni J, Inglese J, Simeonov A. A High-Throughput 1,536-Well Luminescence Assay for Glutathione S Transferase Activity. *Assay Drug Dev Technol* 8(2):200-11, 4/2010. PMID: PMC2864799.

Chan KS, Sano S, Kataoka K, **Abel E**, Carbajal S, Beltran L, Clifford J, Peavey M, Shen J, DiGiovanni J. Forced expression of a constitutively active form of Stat3 in mouse epidermis enhances malignant progression of skin tumors induced by two-stage carcinogenesis. *Oncogene* 27(8):1087-94, 2/2008. e-Pub 8/2007.

Riggs PK, Angel JM, **Abel EL**, DiGiovanni J. Differential gene expression in epidermis of mice sensitive and resistant to phorbol ester skin tumor promotion. *Mol Carcinog* 44(2):122-36, 10/2005.

Abel EL, Lyon RP, Bammler TK, Verlinde CL, Lau SS, Monks TJ, Eaton DL. Estradiol metabolites as isoform-specific inhibitors of human glutathione S-transferases. *Chem Biol Interact* 151(1):21-32, 12/2004.

Abel EL, Opp SM, Verlinde CL, Bammler TK, Eaton DL. Characterization of atrazine biotransformation by human and murine glutathione S-transferases. *Toxicol Sci* 80(2):230-8, 8/2004.

Abel EL, Bammler TK, Eaton DL. Biotransformation of methyl parathion by glutathione S-transferases. *Toxicol Sci* 79(2):224-32, 6/2004.

Abstracts (past 10 years)

Patel R, Sarode A, Smith G, **Abel E**, Usenko C. Comparative Toxicity of Organophosphate Flame Retardants in Zebrafish, SETAC regional conference, 2015.

Janise A, Kudela M, Norris N, **Abel E**, Usenko C, Bruce E. Polybrominated diphenyl ethers are unlikely to elicit toxicity via oxidative stress in zebrafish. Texas Genetics Society Annual Meeting, 4/2014.

Abel EL, Simper MS, Bubel JD, Powell L, McClellan A, Carbajal S, Andreeff M, DiGiovanni J, MacLeod MC. Protection from 2-chloroethyl ethyl sulfide (CEES) toxicity by inducers of the glutathione detoxification pathway in vitro and in vivo. 4th Annual CounterAct Network Research Symposium, 6/2010.

Abel EL, Angel JM, Riggs PK, Langfield S, Jiang A, Carbajal S, Lo H, Person M, Awasthi YC, Wang L, Strom s, Wei Q and DiGiovanni J. Gsta4 modifies susceptibility to skin tumor development in mice and humans. American Association for Cancer Research Annual Meeting, 4/2010.

Abel EL, Angel JM, Bubel JD, Beltran LM, DiGiovanni J. Constitutive activation of PI3Kinase/Akt signaling in the basal layer of the epidermis sensitizes C57BL/6 mice to skin tumor promotion by TPA. American Association for Cancer Research Annual Meeting, 4/2009.

Abel E, Angel J, Meyer S, Coyne T, Riggs P, Elizondo L, DiGiovanni J. Gsta4 is a mouse skin tumor promotion susceptibility gene that maps to promotion susceptibility locus 1.2 (Psl1.2) on chromosome 9. 8th International Skin Carcinogenesis Conference, 10/2008.

Abel EL, Angel JM, Riggs PK, Elizondo L, DiGiovanni J. Characterization of glutathione S-transferase alpha 4 (Gsta4) as a modifier of tumor promotion susceptibility in the mouse two-stage skin carcinogenesis model. Society of Toxicology Annual Meeting, 3/2008.

Abel E, Angel J, Riggs P, Simper M, Elizondo L, Warshawsky B, Coyne T, DiGiovanni J. Strain-specific induction of glutathione S-transferase alpha 4 (Gsta4) in mouse epidermis following treatment with diverse tumor promoting agents. Texas Genetics Society 34th Annual Meeting, 2007.

Research Accomplishments

Funded/Completed

Supervisor, Folmar Grant Recipient: Clayton Smith, Department of Biology, Baylor University, 6/1/16-9/15/16, \$1000.

Co-Principal Investigator with Crystal Usenko, Investigation of flame retardant exposures on protein homeostasis, C. Gus Glasscock, Jr Endowed Fund for Excellence in Environmental Sciences, 2016, \$4915.

Supervisor, Folmar Grant Recipients: Austin MacDonald and Christina Hagan, Department of Biology, Baylor University, 6/1/15-12/31/15, \$2000.

Co-Principal Investigator with Rebecca Sheesley, Optimization of a zebrafish model for toxicological assessment of atmospheric particulate matter, Undergraduate Research and Scholarly Achievement Program Small Grant, 6/1/2014- 5/31/2015, \$1,859.18.

Principal Investigator, Obesity-induced IGF-1 modulates PGDH and COX-2 expression to promote pancreatic cancer growth, Center for Research on Environmental Disease Pilot Project Award, 12/1/2010–2011, \$30,000 (\$30,000/year).

Co-Investigator, Obesity and Pancreatic Cancer: The Role of IGF-1, R01-CA135386-01, NIH/NCI, PI - Susan Fischer, 5/7/2009–2011, \$830,000 (\$207,500/year).

Co-Investigator, Obesity-induced IGF-1 coordinately upregulates COX-2 and downregulates tumor suppressive PGDH resulting in enhanced pancreatic cancer growth, American Institute for Cancer Research (AICR), PI - Susan Fischer (*transfer to E. Abel in progress*), 1/1/2011–2011, \$150,000 (\$75,000/year).

Co-Investigator, Cyclooxygenase-2 Induced Pancreatic Cancer, R01-CA124615-03, NIH/NCI, PI - Susan Fischer, 4/1/2008–2011, \$1,037,500 (\$207,500/year).

Co-Investigator, Detoxification of electrophilic chemical threat agents by nucleophilic scavengers, U01-NS058191, NIH/NINDS, PI - Michael MacLeod, 9/30/2006–2011, \$1,875,015 (\$375,003/year).

Co-Investigator, Identification of common pathways in tumor promotion, 5-R01-ES015718- 02, NIH/NIEHS, PI - John DiGiovanni, 4/1/2008–8/31/2013, \$1,125,664 (\$281,416/year).

Co-Investigator, Identification of tumor promotion susceptibility genes, 1-R01-ES016623, NIH/NIEHS, PI - John DiGiovanni, 4/1/2008–8/31/2013, \$1,250,000 (\$250,000/year).

Co-Investigator, Stat3 in epithelial carcinogenesis, 01-R01-CA76520, NIH/NCI, PI - John DiGiovanni, 7/1/2008–6/30/2013, \$1,250,000 (\$250,000/year).

*I was highly involved in writing and managing these grants; however, my work related to these projects was completed by 2011 when I transferred to a teaching position at Baylor.

Not Funded

Co-Principal Investigator, Undergraduate Research and Scholarly Achievement Small Grant Program, Comparison of Organophosphate Flame Retardant Toxicity, Baylor University, Spring 2015.

Research Associate, Targeting melanoma with combination therapy based on generation of oxidative stress and inhibition of autophagy, Department of Defense, PI-Patrick Farmer, Baylor University, 8/31/12-7/31/14.

Principal Investigator, The role of prostaglandin receptor EP1 in epithelial carcinogenesis, R01, 2/2011, NIH/NCI, 7/1/2011–6/30/2016, \$1,225,000 (\$250,000/year).

Principal Investigator, Obesity-induced serum IGF-1 modulates the development of pancreatic tumors via repression of PGDH, National Pancreas Foundation, 4/1/2010–3/31/2011, \$50,000 (\$50,000/year).

Principal Investigator, Identification of genetic loci that modify susceptibility to UV-induced skin cancer, 1 K01 ES018855-01, NIH/NIEHS, 4/1/2010–3/31/2015, \$375,000 (\$75,000/year).

Principal Investigator, Obesity-induced IGF-1 coordinately upregulates COX-2 and downregulates tumor suppressive PGDH resulting in enhanced pancreatic cancer growth, American Gastroenterological Association, 7/1/2010–6/30/2013, \$180,000.

Invited Presentations

Speaker, Graduate Student Teaching Skills Workshop, Academy for Teaching and Learning, Baylor University, Waco, TX, “Teaching in STEM Fields”, 2016

Panelist, Women in the Academy, Annual Conference, Waco, TX, “Evidence-Based Scientific Teaching” 2015

Panelist, Women in the Academy, Annual Conference, Waco, TX, “Breaking the Glass Ceiling” 2014

Poster Presentation, NIEHS Center Director’s Annual Meeting, Louisville, KY, “Protection from 2-chloroethyl ethyl sulfide (CEES) toxicity by inducers of the glutathione detoxification pathway *in vitro* and *in vivo*”, 2010

Platform Presentation, NIH CounterACT Network Research Symposium, San Francisco, CA, “Detoxification of Electrophilic Chemical Threat Agents by Nucleophilic Scavengers”, 2010

Scholastic Activities

Textbook Reviewer for Academic Press/Elsevier 2011-present

Journal Reviewer for *Molecular Carcinogenesis* 2006-present

Journal Reviewer for *Toxicology Letters* 2010-present

Community Involvement

Active member of Covenant Lutheran Church—Pastor Heath Abel (husband) Temple, TX
Temple High School Band Boosters, Temple, TX (2017-present)
Family Promise of Temple, Volunteer, Temple, TX (2016-present)
Feed My Sheep, Volunteer, Temple, TX (2011-present)
Temple ISD—Parent Teacher Organization Fundraising Committee (2013-2015)
Baylor University American Cancer Society Relay for Life, Volunteer (2011-2015)
Colorado County American Cancer Society Relay for Life Team Member (2009-2011)
UT MDACC Center for Research on Environmental Disease Community Outreach Speaker (2007-2011)
Waco Area American Cancer Society Relay for Life Speaker (2006)
UT MDACC Postdoctoral Association Board Member (2004-2005)