

Patricia K. Tithof DVM, PhD
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Positions and Employment

1982-1983 Internship, Large Animal Medicine and Surgery, Univ. of Tennessee
 1983-1986 Residency, Large Animal Surgery, Cornell Univ.
 1986-1988 Private Veterinary Practice, Ithaca, NY
 1993-1996 Postdoctoral Fellow, Mich. State Univ. Dept of Pharm./Toxicol.
 1996-1998 Research Scientist, Hemoglobin Therapeutics, Baxter Healthcare
 1998-2002 Assistant Professor, Comparative Med, Univ. of Tennessee
 2002-2012 Associate Professor with Tenure, Pathobiology, Univ. of Tennessee
 2016-present Senior Lecturer Department of Animal Science, Berry College, Mount Berry, Georgia

Education

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Michigan	BS	1974-1978	Zoology
Michigan State University	DVM	1978-1982	Veterinary Medicine
University of Tennessee		1982-1983	Intern
Cornell University		1983-1986	Surgical Resident
Michigan State University	PhD	1988-1993	Cardiovascular Physiology
Michigan State University		1993-1996	Toxicology Post-doc

Licensure

2015 North American Veterinary Licensure-renewed

Teaching Appointments

2016-present Department of Animal Science, Berry College
 1998-2012 College of Veterinary Medicine, University of Tennessee,
 1993-1996 College of Veterinary Medicine, Michigan State University
 1988-1996 Department of Physiology, Michigan State University
 1995 Lansing Community College, Anatomy and Physiology
 1983-1985 College of Veterinary Medicine, Cornell University
 Resident instructor in Large Animal Surgery

Teaching Experience

- 2016-2017 ANS 328 Principles of Nutrition
ANS 302 Veterinary Microbiology
ANS 326 Anatomy and Physiology
ANS 105 Introduction to Agricultural Science
ANS 201 Orientation to Animal Science
- 2009 -2012 VM826; Blood and Cardiovascular Microanatomy for
Veterinary Students
- 1998-2012 VM823; Cardiovascular and Blood Physiology for Veterinary Students
- 1998-2012 AS520; Cardiovascular and Blood Physiology for Animal Science Graduate
Students
- 2011 VM800; Coordinator for Environmental Toxicology Elective
- 2008-2009 Environmental Justice Initiative; Youth Programs; Environmental
College
- 1998-2001 VM 824; Gastrointestinal Physiology for Veterinary Students
- 2004-2012 CEM 541; Cellular Mechanisms of Disease
- 1999-2012 VM 800; Cardiovascular Physiology Review for Medicine Residents
- 1999-2012 VM800; Cardiovascular Pathophysiology Review for Medicine Residents
- 2005-2012 Application Based Learning Exercises (ABLEs) facilitator (2/ semester)
- 2003 CEM 609; Mechanisms of Disease Seminar Series; co-coordinator
- 1998-2012 CEM 609; Mechanisms of Disease Seminar Series
- 1995-1996 PSL 475; Coordinator for Comparative Physiology Laboratory
- 1990 LCC 201; Introductory Anatomy and Physiology – Undergraduate
- 1995 Coordinator for Physiology Course-Vetward Bound
- 1996 Cardiovascular physiology-Vetward Bound
- 1990 PSL 401; Comparative Physiology
- 1990 PSL 432; Human Physiology

Other Experience and Professional Memberships

- 2007-2010 Faculty Senate
- 1998-2012 Veterinary Student Selection Committee
- 2007 Veterinary Student Interview Committee
- 2005 Creation of 2 ABLEs (Application Based Learning Exercises)
- 2000-2003 President, Phi Chapter of Phi Zeta National Honor Society
- 2000-2003 Graduate Council
- 2000-2012 Council Member, American Heart Association
- 1994-2010 Michigan Society of Toxicology
- 1992-2012 American Physiological Society
- 1984-2012 Phi Zeta-National Veterinary Honor Society

1998-2012	Ad Hoc Review American Heart Association American Journal of Physiology Journal of Immunology Arteriosclerosis, Thrombosis and Vascular Biology Environmental Health Perspectives Carcinogenesis Toxicological Sciences Environmental Science and Technology
2000-2008	CEM Graduate Student Selection Committee
1998-2012	Scholarships and Awards Committee
2010-present	Member HSUS
2008-present	Member ASPCA
2005	Search Committee-Center for Environmental Biotechnology; Research Assistant Professor
2003	Search Committee-Dept of Surgery; UT hospital; Research Assistant Professor of Research
2001-2002	Radiation Safety Committee
2002	Search Committee Chair; Development; Veterinary Teaching Hospital
2001	Search Committee Member-Pathobiology; Assistant Professor
2000	Search Committee Member-Lab Animal; Assistant Professor
2000	Search Committee Member-Comparative Medicine; Associate Professor
2000	Search Committee Member-Small Animal Medicine; Acree Chair, Oncology
1999	Search Committee Member-Microbiology; Associate Professor of Parasitology
1999-2010	Large Animal Research Advisory Committee
1999-2003	Major Adviser for Mona Elgayyar; PhD student; graduated 2003
2000-2004	Major Adviser for Meghan McNeilly; Masters student; graduated 2004
2001-2004	Major Adviser for Shangtao Liu; Masters student; did not graduate
2000-2012	Graduate student committee member for 10 students Mitchell Hocket-Animal Science; 1998-2003; PhD awarded Fernando Scenna-Animal Science; 1999-2004; PhD awarded Greg Ochs-Animal Science; 2002-2006; PhD awarded Tracy Livingston-Animal Science; 2002-2005; PhD awarded Stacy Patterson-Center for Environmental Biotechnology; 2003-2007; PhD awarded Diane Weddle-Comparative and Experimental Medicine; 1999-2003; PhD awarded Robert Gillis-Comparative and Experimental Medicine; 2001-2004; PhD awarded Amanda Peretich-Comparative and Experimental Medicine; 2006-2008; MS awarded

Nicolas Villarino-Comparative and Experimental Medicine;
2007-2011; PhD awarded

2001 Peer Review-Teaching-Sarel Van Amstel
2001 Peer Review-Teaching-Karen Tobias
2001 Peer Review-Teaching-Michael Sims

Volunteer Activities

2015-present For The Love of a Horse-a nonprofit organization dedicated to rescue and/or rehabilitation of horses and donkeys with medical conditions that render them unusable as performance animals.
2005-2011 Dog Bite Prevention Clinics- a clinic designed to teach children how to interact with dogs in a safe manner
2008-2011 Feral Fixins- a clinic dedicated to spaying, neutering and vaccination of stray cats from 4 counties in East Tennessee for future placement in safe homes
2008-2011 Horse Haven-a nonprofit organization for the care of horses rescued from abusive situations. This organization rehabilitates horses from East Tennessee for placement in safe homes
2010 Blount County Humane Society

Honors

2005 Teacher Appreciation Award for VM 823 Cardiovascular and Blood Physiology
1994 Award for Best Poster Presentation-Annual Food Toxicology Meeting
1994 Finalist, Colgate-Palmolive Postdoctoral Award, Society of Toxicology
1989 National Research Service Award, NIH
1992 Graduate Student Award for Excellence in Research, Teaching and Service
1984 Phi Zeta National Honor Society

Invited Oral Presentations

2001

Keystone Meeting, Snowbird Utah. Polycyclic aromatic hydrocarbons induce apoptosis of endothelial cells by a mechanism that involves phospholipase A₂.

2002

Texas A&M University, College Station, TX. The role of phospholipase A₂ enzymes in atherosclerotic vascular disease induced by components of cigarette smoke.

University of Pennsylvania, Philadelphia, PA. The role of phospholipase A₂ enzymes in atherosclerotic vascular disease induced by components of cigarette smoke.

2003

International Symposium on Oncology and Molecular Biology, Crete, Greece. Environmental toxicants induce apoptosis of cardiovascular cells by a mechanism that involves phospholipase A₂.

2004

Environmental Protection Agency. Cincinnati OH. Environmental Pollution and Associated Health Risks: The Chattanooga Initiative.

University of Tennessee Graduate School of Medicine. Environmental Pollution and Associated Health Risks: The Chattanooga Initiative.

2005

University of Tennessee Public Health Forum. Environmental Pollution and Associated Health Risks: The Chattanooga Initiative.

University of Michigan Department of Internal Medicine. Ann Arbor MI. The Role of Novel PLA₂ enzymes in atherosclerosis progression.

University of Michigan Department of Public Health, Ann Arbor MI. The Role of Novel PLA₂ enzymes in atherosclerosis progression.

Chattanooga Creek Environmental Research and Community Action Conference. Health Risks associated with Superfund Sites.

2006

Prostaglandin Registry Webinar; Role of Phospholipases and Prostaglandins in Toxicology.

2007

UT Science Forum. Environmental Pollution and Associated Health Risks. The Chattanooga Creek Initiative.

UT Graduate School of Medicine. Environmental Pollution and Associated Health Risks. The Chattanooga Initiative.

Chattanooga Environmental College. How where you live may impact your health and your children's health.

Chattanooga Environmental College. You have the right to know about what potential environmental hazards may exist in your neighborhood: points on advocacy.

EHJC Youth Summer Camp. The many faces of veterinary medicine.

EHJC Youth Summer Camp. All about horses.

2008

University of Michigan Department of Public Health. The roles of distinct Phospholipase A₂ isoforms in estrus cyclicity in ruminants.

EHJC Environmental College, Chattanooga. How where you live may impact your health and your well being.

EHJC Environmental College, Chattanooga. How to eat heart healthy.

2009

EHJC Summer Youth Camp. Coordinator. Minority students from South Chattanooga spent 3 days at UT to learn about opportunities in veterinary medicine as well as opportunities for higher education. The students involved in the camp reside in Alton Park and Piney Woods. These are residential areas that are located in the floodplain of the Chattanooga Creek that has been designated as a Superfund Site. Hundreds of toxic chemicals have been discovered in the creek and its floodplain.

Not only are these students predisposed to environmental hazards because of where they live, they are also predominantly from low-income African-American families. The youth camp was designed to bring these students to UT to educate them about opportunities in higher education and also career opportunities in veterinary medicine.

I was responsible for the organization of this camp including transportation from Chattanooga, and organization of tours of the veterinary school and other sites on campus. They were also given the opportunity to meet with faculty members and students from the veterinary school and other departments on campus.

Other activities included the oral histories program where students interviewed elders in their community about their thoughts on health effects and environmental pollution.

Public Health Seminar Series: Environmental Pollution and Associated Health Risks. The Chattanooga Creek Initiative.

Graduate School of Medicine. Environmental Pollution and Associated Health Risks. The Chattanooga Initiative.

Chattanooga Environmental College. How where you live may impact your health and your children's health.

Chattanooga Environmental College. You have the right to know about what is going on in your neighborhood that lies in the floodplain of the Chattanooga Creek, a designated Superfund site: points on advocacy.

2010

Southeastern Regional Lipid Conference. Cashiers North Carolina. Activation of Group IVC phospholipase A₂ induces apoptosis of human coronary artery endothelial cells. Platform presentation.

2011

UT Department of Public Health Seminar Series. Mortality Associated with Particulate Air Pollution; Cardiovascular and Respiratory Diseases.

Other Presentations (* designates presenting author)

1990

Tithof PK* Williams JF, Kaiser L. Adult heartworms (*Dirofilaria immitis*) release a small, stable, pharmacologically active product that depresses endothelium-dependent relaxation. FASEB J. 4: A311; poster presentation

Kaiser L*, Tithof PK, Mackenzie CD, Williams JF. Lymphatic filariasis alters endothelium-dependent relaxation in the *in vitro* rat aorta. FASEB J. 4: A311; platform presentation

1991

Kaiser L*, Lamb VL, Tithof PK, Watson JT, Gage DA, Chamberlin BA, Williams JF. Filarial cyclooxygenase products depress endothelium dependent relaxation. FASEB J. 5: A401; Oral presentation

1992

Tithof PK*, Schwartz N, Williams JF, Kaiser L. Seasonal effects of chronic heartworm infection on endothelium-dependent relaxation of the *in vitro* canine femoral artery. FASEB J. 6: A976; poster presentation.

Mupanomunda M*, Tithof PK, Williams JF, Kaiser L. Endothelium-dependent relaxation is depressed in the *in vitro* pulmonary artery from heartworm infected dogs. FASEB J. 6: A976; poster presentation.

1994

Tithof PK*, Contreras ML, Ganey PE. Aroclor 1242 stimulates hydrolysis of phosphoinositides in rat neutrophils. The Toxicologist 14(1): 249; poster/discussion presentation

1995

Tithof PK*, Peters-Golden M, Ruehle K, Schiamberg L, Ganey PE. Aroclor 1242 activates neutrophils by a mechanism which involves phospholipase A₂. The Toxicologist 15(1): 188; poster/discussion presentation

1996

Tithof PK*, Peters-Golden M, Ganey PE. A23187 and Aroclor 1242 activate distinct phospholipases A₂ which are differentially linked to eicosanoid production and superoxide anion generation. The Toxicologist 16(1): 243; poster/discussion presentation.

Tithof PK*, Ruehle K, Ganey PE. Dieldrin and Lindane activate neutrophils by a mechanism that involves calcium-independent phospholipase A₂. The Toxicologist 16(1): 243; poster presentation

2000

Elgayyar M, Peters-Golden M, Nerzak C, Tithof PK*. Polycyclic aromatic hydrocarbons (PAHS) present in cigarette smoke stimulate the release of arachidonic acid (AA) from vascular smooth muscle cells (VSMCS). FASEB J. 14(4): A150; poster presentation

Tithof PK*, Weddle D, Schuller HM, Barnhill M. The tobacco specific carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) induces apoptosis of endothelial cells. FASEB J. 14(4): A455; poster presentation

Weddle DL*, Tithof PK, Williams M, Schuller HM. Interaction of ethanol, NNK, beta-adrenergic receptors, and the arachidonic acid pathway in pancreatic adenocarcinoma. FASEB J. 14(4): A717; poster presentation

2001

Tithof PK*, Peters-Golden M. Activation of iPLA₂ by xenobiotics and its effects on cellular functions. Keystone Symposium/Eicosanoid Lipid Mediators: Biochemistry. Molecular Biology and Pharmacology. 019; oral presentation

Elgayyar M, Schultz T, Jarchow S, McGinn J, Sinks G, Tithof PK*. Polycyclic aromatic hydrocarbons with bay regions activate phospholipase A₂ and induce apoptosis. 7th International Eicosanoid Conference, October, 158. Poster presentation

2002

Tithof PK*, Elgayyar M, Lu KP, Ramos K. Distinct isoforms of calcium-independent phospholipase A₂ (iPLA₂) are responsible for apoptosis of endothelial cells induced by 1-methylanthracene (1-MA) and phenanthrene (PA). The Toxicologist 66(1-S): 281; oral presentation

2003

Tithof PK*, Elgayyar M, Guan W, Tucker D, Leslie CC, Lu KP, Ramos KS. Polycyclic aromatic hydrocarbons activate Group IVC Phospholipase A₂ and induce apoptosis of vascular cells in vivo and in vitro.. 8th International Eicosanoid conference, 143; oral presentation

2004

Godkin, JD*, Elgayyar M, Roberts M, Guan W, Tithof PK. 2004. Novel PLA₂ enzymes regulate uterine prostaglandin biosynthesis. Biol Reprod 71 (special issue): 1257; oral presentation

2006

Ochs G*, Roberts M Tithof PK, Godkin JD. 2006. PLA₂ regulation of uterine prostaglandin synthesis. Biol Reprod 75 (special issue): 333; poster/discussion presentation

Brant K*, Guan W, Tithof P, Loch-Carusio, R. Gestation age-related increase in rat uterine calcium-independent phospholipase A₂ expression influences uterine sensitivity to polychlorinated biphenyls. Biol Reprod 71 (special issue); poster presentation

2008

Godkin J, Roberts M, Tithof PK, Phospholipase A₂ regulation of bovine endometrial (BEND) cell prostaglandin production. Biol Reprod 78 (special issue); oral presentation

Peer Reviewed Manuscripts (* designates corresponding author)

1. Tithof PK, Rebhun WC*, Dietze AE. 1985. Ultrasonographic diagnosis of aorto-iliac thrombosis. Cornell Veterinarian, Vol. 75, No.4; 1-3.
2. Tithof PK, Rebhun WC*. 1986. Complications of blind stitch abomasopexy: 20 cases. Journal of the American Veterinary Medical Association 189: 1489-1492.
3. Fubini SL*, Smith DF, Tithof PK, Perdriquet JA, Rebhun WC. 1986. Volvulus of the distal part of the small intestine in four cows. Veterinary Surgery 15: 150-152.
4. Kaiser L*, Tithof PK, Williams JF. 1990. Depression of endothelium-dependent relaxation by filarial parasite products. American Journal of Physiology, Rapid Communication (Heart Circ. Physiol.), 259: H648-652.
5. Kaiser L*, Tithof PK, Lamb VL, Williams JF. 1991. Depression of endothelium-dependent relaxation in aorta from rats with *Brugia pahangi* lymphatic filariasis. Circulatory Research 68: 1703-1712.

6. Kaiser L*, Lamb VL, Tithof PK, Gage DA, Chamberlin BA, Watson JT, Williams JF. 1992. *Dirofilaria immitis*: Do filarial cyclooxygenase products depress endothelium-dependent relaxation in the *in vitro* rat aorta? *Experimental Parasitology* 75: 159-167.
7. Tithof PK, Schwartz AJ, Mupanomunda M, Schwartz NR, Lamb VL, Williams JF, Kaiser L*. 1994. *Dirofilaria immitis*: Depression of endothelium-dependent relaxation of canine femoral artery seen *in vivo* does not persist *in vitro*. *Experimental Parasitology* 79: 159-165.
8. Tithof PK, Contreras ML, Ganey PE*. 1995. Aroclor 1242 stimulates the production of inositol phosphates in polymorphonuclear neutrophils. *Toxicology and Applied Pharmacology* 131: 136-139.
9. Tithof PK, Peters-Golden M, Schiamburg E, Ganey PE*. 1996. Phospholipase A₂ is involved in the mechanism of activation of neutrophils by polychlorinated biphenyls. *Environmental Health Perspective* 104(1): 52-58.
10. Tithof PK, Ganey PE*. 1997. Protein tyrosine kinase involvement in the production of superoxide anion by neutrophils exposed to Aroclor 1242, a mixture of polychlorinated biphenyls. *Biochemistry and Pharmacology* 53: 1833-1842.
11. Tithof PK, Peters-Golden M, Ganey PE*. 1998. Distinct phospholipases A₂ regulate release of arachidonic acid for eicosanoid production and superoxide anion generation in neutrophils. *Journal of Immunology* 160: 953-960.
12. Schuller HM*, Tithof PK, Williams M, Plummer H. 1999. The tobacco-specific carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone is a β -adrenergic agonist and stimulates DNA synthesis in lung adenocarcinoma via β -adrenergic receptor-mediated release of arachidonic acid. *Cancer Research* 59: 4510-4515.
13. Olszewski MA, Robinson NE*, Zhu FX, Zhang Y, Tithof PK. 1999. Mediators of anaphylaxis but not activated neutrophils augment cholinergic responses of equine small airways. *American Journal of Physiology* **276**(3 Pt 1): L522-9.
14. Tithof PK, Olivero J, Ruehle K, Ganey PE*. 2000. Activation of neutrophil calcium-dependent and -independent phospholipases A₂ by organochlorine compounds. *Toxicological Science* 53:40-47.
15. Weddle DL, Tithof P, Williams M, Schuller HM*. 2001. Beta-adrenergic growth regulation of human cancer cell lines derived from pancreatic ductal carcinomas. *Carcinogenesis* 22(3): 473-479.
16. Tithof PK*, Elgayyar M, Barnhill M, Schuller HM, Andrews R. 2001. 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, a nicotine derivative, induces apoptosis of endothelial cells. *Am. J. Physiol.* 281:H1946-H1954.

17. Cakir Y, Plummer HK, Tithof PK, Schuller HM*. 2002. Beta-adrenergic and arachidonic acid-mediated growth regulation of human breast cancer cell lines. *Int. J. Oncol.* 21: 153-157.
18. Tithof PK*, Elgayyar M, Cho Y, Guan W, Fisher AB, and Peters-Golden M. 2002. Polycyclic Aromatic Hydrocarbons Present in Cigarette Smoke Cause Endothelial Cell Apoptosis by a Phospholipase A₂-Dependent Mechanism. *FASEB J.* published online 10.1096/fj.01-0909fje.
19. Shoieb AM, Dudrick PS, Bell JD, Tithof PK*. 2003. *In vitro* inhibition of growth and induction of apoptosis in cancer cell lines by thymoquinone. *Int. J. Oncol.* 22: 107-113.
20. Mancuso P*, Canetti, C, Gottschalk A, Tithof PK, Peters-Golden M. 2004. Leptin augments alveolar macrophage leukotriene synthesis by increasing phospholipase activity and enhancing Group IVC iPLA₂ (cPLA₂ γ) protein expression. *Am J. Physiol. Lung Cell. Mol. Physiol.* 287(3): L497-L503.
21. Martinez JM, Baek SJ, Mays DM, Tithof PK, Eling TE, Walker, NJ*. 2004. EGR1 is a novel target for AhR agonists in human lung epithelial cells. *Toxicol. Sci.* 82(2): 429-435.
22. Kim JH, Yamaguchi K, Lee SH, Tithof PK, Sayler GS, Yoon JH, Baek SJ*. 2005. Evaluation of polycyclic aromatic hydrocarbons of early growth response-1 and peroxisome proliferator activated receptors. *Toxicol. Sci.* Epub ahead of print.
23. Brant K, Guan W, Tithof P, Loch-Carusio, R. 2006*. Gestation age-related increase in 50 kD rat uterine calcium-independent phospholipase A₂ expression influences uterine sensitivity to polychlorinated biphenyl stimulation. *Biol Rep.* ePUB ahead of print.
24. Tithof PK*, Roberts M, Guan W, Elgayyar M, Godkin JD. 2007. Distinct phospholipase A₂ enzymes regulate prostaglandin E₂ and F₂ alpha production by bovine endometrial epithelial cells. *Reprod. Biol. Endocrinol.* 5(1):16-19.
25. Upham BL*, Blaha L, Babica P, Park JS, Sovadinova I, Pudrith C, Rummel AM, Weis, Sai K. Tithof PK, Guzvic M, Vondracek J, Machala M, Trosko JE. 2008. Tumor promoting properties of a cigarette smoke-predominant polycyclic aromatic hydrocarbon as indicated by the inhibition of gap junctional intercellular communication via phosphatidylcholine-specific phospholipase C. *Cancer Sci.* 99(4): 696-705.
26. Godkin JD, Roberts MP, Elgayyar M, Guan W, Tithof PK*. 2008. Phospholipase A₂ regulation of bovine endometrial (BEND) cell prostaglandin production. *Reprod Biol Endocrinol* 6: 44-48.
27. Tithof PK*, Richards SM, Elgayyar M, Minn Menn F, Vulava V, McKay L, Sanseverino Sayler G, Tucker D, Leslie CC, Lu KP, Ramos KS. 2011. Activation of Group IVC Phospholipase A₂ induces apoptosis of human coronary artery endothelial cells. *Arch Toxicol* PMID 21132278.

28. Elgayyar M, Wimalasena J, Fernando RI, Tithof PK*. Polycyclic aromatic hydrocarbons induce apoptosis of human coronary endothelial cells: evidence for the involvement of stress-activated protein kinases, caspases, and Group IVC PLA₂. Biochem Pharmacol (to submit).

Research Support

1. American Heart Association Beginning-Grant-In-Aid 01602645
The Role of Arachidonic Acid in Apoptosis and Dysregulation of Vascular Cell Growth Caused by Tobacco Components. Beginning Grant in Aid, American Heart Association, July 2001-2003.

Role: PI

This grant funded the investigation of structural requirements for polycyclic aromatic hydrocarbon-induced phospholipase A₂-induced apoptosis of human coronary artery endothelial cells.

2. Philip Morris Foundation Grant

The Role of Arachidonic Acid in Endothelial Cell Apoptosis Induced by Tobacco Components. Philip Morris Foundation Grant, June 2001-2004, \$522,000.

Role: PI

This grant funded the investigation of the mechanism by which the nitrosated derivative of nicotine, NNK, induces apoptosis of endothelial cells.

3. RO1 CA88809

NNK, Beta-adrenergic AA release and lung cancer.

Role: Co-PI

This grant funded the investigation of the mechanism by which NNK induces lung adenocarcinoma

PI: Schuller, HM

4. Alton Park/Piney Woods Environmental Health and Justice Collaborative. National Institute of Environmental Health Sciences. 1 R25 ES014317-01. 2005-2009. \$952,000. Role: Co-PI.

This grant funded outreach and education of African-Americans living in Alton Park/Piney Woods, Tennessee in the region of a Superfund site.

5. Mechanisms of Inflammation in gestational membranes. National Institute of Environmental Health Sciences. 1RO1 ES014860-01A2. 2008-2011. \$1,979,064.

Role: Co-PI.

This grant funded the investigation of the inflammatory mechanisms by which polychlorinated biphenyls affect gestation in rats. My role is to investigate regulation of inflammation by phospholipases A₂ and eicosanoids in gestational tissues.

6. Regulation of estrus cyclicity by phospholipase A₂-mediated release of prostaglandins. USDA. #09102978. 2009-2013. \$325,000.

Role: Co-PI

This grant involved investigation of how distinct isoforms of phospholipase A₂ regulate estrus cyclicity in the ewe.

PI: James Godkin