

Curriculum Vitae of Thu “Annelise” Nguyen

Professor, Toxicology

School of Veterinary Medicine

Texas Tech University

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Education:

- Doctor of Philosophy (Ph.D.) – Toxicology
Department of Veterinary Physiology and Pharmacology, College of Veterinary Medicine, Texas A&M University
Faculty Advisor – Dr. Stephen Safe
- Master of Business Administration (M.B.A.) – Management
College of Business, Kansas State University
Faculty Advisors – Drs. Brian Niehoff and Kevin Gwinner
- Bachelor of Science (B.S.) – Molecular and Cell Biology
Department of Biology, Texas A&M University
Faculty Advisor – Dr. Tom Adams

Specialty Certification:

- Diplomate, American Board of Toxicology (D.A.B.T.), active 2018-2023

Professional Experience/Appointments:

- Professor, Toxicology, School of Veterinary Medicine, Texas Tech University, 8/20-present
- Associate Director, Johnson Cancer Research Center, Kansas State University, 1/20-8/2020
- Associate Professor, Toxicology, Department of Diagnostic Medicine/Pathobiology, Kansas State University, 3/12-3/20
- Chair, Faculty Affairs of Faculty Senate, Kansas State University, 5/18-8/20
- Chair, Institutional Biosafety Committee of Kansas State University, 5/18-8/19

- Appointed Scientific Reviewer, National Library of Medicine, Pub-Med Central, 6/18-present
- Director, Veterinary Research Scholars Program, College of Veterinary Medicine, Kansas State University, 11/13-12/18
- Visiting Research Scientist, National Institute of Health, Frederick National Laboratory for Cancer Research, Clinical Pharmacodynamics Biomarkers Program, 10/17-4/18
- Interim Director, Master of Public Health Program, Kansas State University, 2/16-6/16
- Assistant Professor, Toxicology, Department of Diagnostic Medicine/Pathobiology, Kansas State University, 11/05- 2/12
- Research Assistant Professor, Department of Diagnostic Medicine/Pathobiology, Kansas State University, 8/04- 10/05
- Research Assistant Professor, Department of Biochemistry, Kansas State University, 1/03 – 8/04
- Research Associate, Department of Biochemistry, Kansas State University, 8/01-1/03
- Graduate Research Assistant, Department of Pharmacology and Physiology, Toxicology, Texas A&M University, 6/97 – 7/01
- Biochemistry Teaching Assistant, Biochemistry 412 and 413 Courses, Department of Biochemistry, Texas A&M University, 9/96-5/97

Fields of Competence:

Molecular Toxicology, Molecular Biology, Carcinogenesis, Hormonal Oncogenesis, Tumor Biology, Tumor Microenvironment, Spheroid/Organoid Development (Ex Vivo Model), Drug Discovery, Breast Cancer, Canine Mammary Cancer, Lens Biology; Environmental Health, Public Health; STEM and STEM-related outreach programs; Small Business Development, Management

Honors and Awards:

- 2020 PepGel® Award in Application, recognition in innovative model of *in vitro* 3D tumor
- 2019 John Doull Award, Central States Society of Toxicology
- 2019 Zaffarano Memorial Lecturer, Iowa State University

- 2018 Outstanding Member Award of the American Associate of University Women (AAUW) Manhattan Branch
- 2017 Inspiring Leaders in STEM Award by the INSIGHT Into Diversity
- 2016 Outstanding Department/Unit Award for Enhancing Diversity
- 2016 AAAS-Lemelson Invention Ambassador Nominee
- 2015, Invention, hydrogel biomaterial and its application, at the Innovation Festival – Smithsonian and US Patent and Trademark Office
- 2012, Inaugural K-State Women of Distinction
- 2011 University Distinguished Faculty Award for Mentoring Undergraduate Students in Research – the highest honor for mentoring students in research at Kansas State University
- Kansas Technology Enterprise Corporation Scholar – 2008-2009
- NIH Loan Repayment Award – 7/2004 to 6/2008
- Faculty Travel Fellowship – Terry C. Johnson Center for Basis Cancer Research – 11/2003
- ISER Travel Grant – The ICER Conference, Geneva, Switzerland – 10/2002
- NEI Travel Grant – ARVO Conference, Fort Lauderdale, FL – 3/2002

Intellectual Property:

- Title: Cell Linkers for Heterotypic Cell Spheroids
Inventor: **Thu A. Nguyen**, Ralph E. Parchment, and Robert Kinders
PCT Application No.: PCT/US2019/041800
Issued: July 15, 2019
- Title: Polymer-cast Inserts for Cell Histology and Microscopy (PICHAMs) – System for High Throughput 3D Cell Culture and Screening Microscopy
Inventors: **Thu A. Nguyen** and Ralph E. Parchment
Provisional filed: March, 2018
- Title: Peptide-Albumin Hydrogel Properties and its Applications
Inventors: Hongzhou Huang, **Thu A. Nguyen**, and Xiuzhi S. Sun
EPO Patent: 13861358.3
Issued: October, 2015
US Patent: 20160030629A1
Issued: February, 2016

- Title: Compounds affecting gap junction activity
Inventors: Duy Hua, Dolores Takemoto, and **Thu A. Nguyen**
US Patent: 8809368
Issued: August, 2014
- Title: Use of siRNA and RNA against Connexin 46 for Medicinal/Disease Treatments
Inventors: **Thu A. Nguyen** and Dolores Takemoto
Filed: June, 2008
- Title: C1B domain peptide of PKC γ causes prolonged growth suppression of human cancer cells in vitro and in vivo
Inventors: **Thu A. Nguyen** and Masaaki Tamura
Filed: August, 2006

Funding:

- NCI-Leidos: HHSN261200800001E (**T.A. Nguyen, PI**) – Bio-active H9e Peptide Derivatives Form Novel Hydrogels – 2019-2020
- Flossie E. West Trust (**T.A. Nguyen, PI**) – Development of 3D Heterogeneous Tumor Spheroids – 2016-2020
- Boehringer Ingelheim Veterinary Research Scholars Program (**T.A. Nguyen, PI**) – The Veterinary Research Scholars Program at Kansas State University – 2018-2019
- Merial Veterinary Research Scholars Program (**T.A. Nguyen, PI**) – The Veterinary Research Scholars Program at Kansas State University – 2013-2017
- CEVA Biomune (**T.A. Nguyen, PI**) – Veterinary Research Scholar Training – 2015-2018
- NSF – STTR I and IB 1321261 (PepGel, **T.A. Nguyen**, X.S. Sun, and M. Weiss) - Novel Peptide Hydrogel for 3D Cell Culture – 2013-2016
- National Bio and Agro-defense Facility (NBAF) (**T. A. Nguyen, PI**) – Veterinary Research Scholar Training – 2015
- PepGel, LLC (**T.A. Nguyen, PI**) – Implantation of hydrogel in mice – 2015
- K-State Office of International Programs (**T.A. Nguyen, PI**) – Internationalization Activities with the Vietnam National University of Agricultural – 2015
- Morris Animal Foundation (**T.A. Nguyen, PI**) – Efficacy of Anticancer Drugs in Canine Mammary Carcinoma – 2015

- NIH/NCI – R15CA159250-01 (J. Li, PI, **T.A. Nguyen, Co-PI**, and D.H. Hua, Co-PI) – Nanoelectrode Array Based Electronic Biosensors for Rapid Profiling of Cancerous Enzymes – 2011-2015
- Center for Basic Cancer Research (**T.A. Nguyen, PI**) – Targeting Gap Junction Intercellular Communication for Triple Negative Breast Cancer Treatment – 2013
- Sustained Momentum for Investigators with Laboratories Established (SMILE) (**T.A. Nguyen, PI**) – Tumor recurrence after treatment with gap junction enhancers and the effects of long-term exposure in a spontaneous mammary tumor model – 2013
- NIH – 2T35OD010979-16 (PIs: B. Schultz, **T.A. Nguyen**, and E.G. Davis) – Short Term Training in Health Professional Schools – 2013-2018
- NIH/NCI – R15CA152922-01 (**T.A. Nguyen, PI**) – Increasing efficacy of antineoplastic drugs with gap junction enhancers – 2010-2013
- NIH – P20RR016475-11 (J. Hunt, PI; D. Hua and **T.A. Nguyen, Project Leader**) – The Molecular Target of Gap Junction Enhancers – 2012-2013
- NIH – P20RR016475 (Joan Hunt, PI; **T.A. Nguyen, Project Leader**) – Anticancer Effect of Substituted Quinolines in Breast Cancer Cells – 2009-2012
- Center for Basic Cancer Research (**T.A. Nguyen, PI**) – Integrated Cellular System in Breast Cancer Cells – 2006
- NIH – P20RR017686 (Daniel Marcus, PI; **T.A. Nguyen, Project Leader**) – Center for Epithelial Function in Health and Disease – Regulation of Gap Junction in Colon Cancer Cells – 2004-2008
- Center for Basic Cancer Research (**T.A. Nguyen, PI**) – The Effects of Estrogen on Gap Junction in Breast Cancer Cells – 2005
- NIH/NEI LRP (**T.A. Nguyen, PI**) – Regulation of Gap Junction Activity in Colon Cancer Cells – 2004-2008
- NIH/NEI NRSA (**T.A. Nguyen, PI**) – Modulation of PKC γ on gap junction in lens – 2001-2004

Publications:

- Tiffany Carter, Guangyan Qi, Weiqun Wang, **T. Annelise Nguyen**, Nikki Cheng, Young Min Ju, Sang Jin Lee, James Yoo, Anthony Atala, and Xiuzhi Susan Sun. (2020) Self-

Assembling Peptide Solution Accelerates Hemostasis. *Advances in Wound Care*, <https://doi.org/10.1089/wound.2019.1109>.

- Stephani Shishido and **Thu Annelise Nguyen**. (2020) Combinational Treatment of Gap Junction Enhancers and Paclitaxel Attenuates Mammary Tumor Growth. *Anti-Cancer Drugs*, DOI: 10.1097/CAD.0000000000000879
- Savannah Luu, Cynthia Bell, and **Thu Annelise Nguyen**. (2019) Expression of connexins in canine mammary carcinoma. *Veterinary Science*, 6, 101; doi:10.3390/vetsci6040101.
- S.N. Shishido and **T. A. Nguyen**. (2017) “Cell-Cell Communications through Gap Junctions and Cancer in 3D Systems”. Taylor & Francis book entitled *Engineering 3D Tissue Test Systems*. Eds. Didier Dreau, Karen Burg, and Tim Burg.
- Stephanie N. Shishido and **Thu A. Nguyen**. (2016) Induction of apoptosis by PQ1, a gap junction enhancer that upregulates connexin 43 and activates the MAPK signaling pathway in mammary carcinoma cells. *International Journal of Molecular Sciences*, 17(2), 178.
- Luxi Z. Swisher, Allan M. Prior, Medha J. Gunaratna, Stephanie Shishido, Foram Madiyar, **Thu A. Nguyen**, Duy H. Hua, Jun Li. (2015) Quantitative electrochemical detection of cathepsin B activity in breast cancer cell lysates using carbon nanofiber nanoelectrode arrays toward identification of cancer formation. *Nanomedicine*, 11(7), 1695-1704. Doi:10.1016/j.nano.2015.04.014
- Kristina Bigelow and **Thu A. Nguyen**. (2014) Increase of gap junction activities in SW480 human colorectal cancer cells. *BMC Cancer*, 14, 502. doi:10.1186/1471-2407-14-502
- Stephanie Shishido, Adelaide Delahaye, Amanda Beck, **Thu Nguyen**. (2014) The anticancer effect of PQ1 in the MMTV-PyVT mouse model. *International Journal of Cancer*, 134(6), 1474-1483. DOI: 10.1002/ijc.28461. PMID:24038078
- LZ Swisher, AM Prior, S Shishido, **TA Nguyen**, DH Hua, J Li. (2014) Quantitative electrochemical detection of cathepsin B activity in complex tissue lysates using enhanced AC voltammetry at carbon nanofiber nanoelectrode arrays. *Biosensors and Bioelectronics* 56, 129-136.
- Stephanie Shishido, Adélaïde Delahaye, Amanda Beck, and **Thu Annelise Nguyen**. (2013) The MMTV-PyVT transgenic mouse as a multistage model for mammary carcinoma and the efficacy of antineoplastic treatment. *Journal of Cancer Therapy*, 4, 1187-1197.

- Stephanie N Shishido, Keshar Prasain, Amanda Beck, Thi DT Nguyen, Duy H Hua and **Thu A. Nguyen**. (2013) Bioavailability and efficacy of a gap junction enhancer (PQ7) in a mouse mammary tumor model. *PLoS ONE* 8(6): e67174. doi:10.1371/journal.pone.0067174.
- Stephanie N. Shishido, Emma B. Faulkner, Amanda Beck, and **Thu A. Nguyen**. (2013) The Effect of Antineoplastic Drugs in a Male Spontaneous Mammary Tumor Model. *PLoS ONE*, 8(6): e64866. Doi: 10.1371/journal.pone.0064866
- Ying Ding and **T. A. Nguyen**. (2013) PQ1, a Quinoline Derivative, Induces Apoptosis in Breast Cancer Cells through both Intrinsic and Extrinsic Pathways. *Apoptosis*, doi 10.1007/s10495-013-0855-1.
- Huang H, Ding Y, Sun XS, **Nguyen TA**. (2013) Peptide Hydrogelation and Cell Encapsulation for 3D Culture of MCF-7 Breast Cancer Cells. *PLoS ONE* 8(3): e59482. doi:10.1371/journal.pone.0059482
- Swisher, L. Z., Syed, L. U., Prior, A. M., Madiyar, F. R., Carlson, K. R., **Nguyen, T. A.**, et al. (2013) Electrochemical protease biosensor based on enhanced AC voltammetry using carbon nanofiber nanoelectrode arrays. *Journal of Physical Chemistry*, 117(8), 4268-4277.
- Shishido, SN and **Nguyen, TA**. (2012) Gap Junction Enhancer Increases Efficacy of Cisplatin to Attenuate Mammary Tumor Growth. *PLoS ONE* 7(9): e44963.doi:10.1371
- Ying Ding and **T.A. Nguyen**. (2012) Gap Junction Enhancer Potentiates Cytotoxicity of Cisplatin in Breast Cancer Cells. *Journal of Cancer Science & Therapy*, 4(11): 371-378.
- Shishido, SN and **Nguyen, TA**. (2012) Gap Junction Enhancer Increases Efficacy of Cisplatin to Attenuate Mammary Tumor Growth. *PLoS ONE* 7(9): e44963.doi:10.1371
- Kawabata, A., Matsuzuka, T., Doi, C., Seiler, G., Reischman, J., Pickel, L., Ayuzawa R, **Nguyen TA**, Tamura M. (2012) C1B domain peptide of protein kinase C γ significantly suppresses growth of human colon cancer cells in vitro and in an in vivo mouse xenograft model through induction of cell cycle arrest and apoptosis. *Cancer Biology and Therapy*, 13(10), 880-889.
- Ding Y, Prasain K, Nguyen TD, Hua DH, **Nguyen TA**. (2012) The effect of the PQ1 anti-breast cancer agent on normal tissues. *Anticancer Drugs*, 23(9): 897-905.

- Julie Bernzweig, Brian Heiniger, Keshar Prasain, Jianyu Lu, Duy H. Hua and **Thu A. Nguyen**. (2011) Anti-breast Cancer Agents, Quinolines, Targeting Gap Junction. *Med Chem*. 7(5):448-453.
- Gunjan Gakhar, Duy H. Hua, and **Thu Annelise Nguyen**. (2010) Combinational treatment of PQ1 and tamoxifen induces increased apoptosis in T47D breast cancer cells. *Anti-Cancer Drugs* 21: 77-88.
- EM Perchellet, KR Crow, G Gakhar, **TA Nguyen**, DH Hua, JP Perchellet. (2010) Bioactivity and molecular targets of novel substituted quinolines in murine and human tumor cell lines in vitro. *Intl. Journal of Oncology* 36(3):673-688.
- Debarshi Banerjee, D. Madgwick, Gunjan Gakhar, Dolores Takemoto, and **Thu Annelise Nguyen**. (2010) A novel role of gap junction connexin46 protein to protect breast tumors from hypoxia. *Intl. Journal of Cancer* 127(4): 839-848.
- Brian Heiniger, Gunjan Gakhar, Keshar Prasain, Duy H. Hua, and **Thu Annelise Nguyen**. (2010) Second Generation of Substituted Quinolines as Anticancer Drugs for Breast Cancer. *Journal of Anticancer Research* 30(10): 3927-32.
- Gunjan Gakhar, Mary Wight-Carter, Gordon Andrews, Sally Olson, **Thu Annelise Nguyen**. (2009) Hydronephrosis and Urine Retention in Estrogen-Implanted Athymic Nude Mice. *Veterinary Pathology* 46(3): 505-508.
- Gakhar G, Diane Schrempp and **Nguyen TA**. (2008) Regulation of gap junctional intercellular communication by TCDD in HMEC and MCF-7 breast cancer cells. *Toxicology and Applied Pharmacology* 235(2):171-181.
- Gunjan Gakhar, Takahiro Ohira, Aibin Shi, Duy H. Hua and **Thu Annelise Nguyen**. (2008) Antitumor Effect of Substituted Quinolines via Gap Junctional Intercellular Communication in Breast Cancer Cells. *Drug Development Research* 69: 526–534.
- Aibin Shi, **Thu A. Nguyen**, Sandeep Rana, Dolores J. Takemoto, Peter K. Chiang, and Duy H. Hua. (2008) Synthesis and Bioevaluation of Substituted Quinolines. *Bioorg Med Chem Lett* 18:3364-3368.
- J.R. Sabah, B.D. Schultz, Z.W. Brown, **T.A. Nguyen**, J. Reddan, L.J. Takemoto. (2007). Transcytotic Passage of Albumin through Lens Epithelial Cells. *IOVS*, 48: 1237-1244.
- **T. A. Nguyen**. Book review. Rajeh K. Naz (Ed.), Endocrine Disruptors: Effects on Male and Female Reproductive Systems, second ed. (2005) *Toxicology Letters* 157, 173.

- **T. A. Nguyen**, L. J. Takemoto, and D. J. Takemoto. Inhibition of gap junction activity through the release of the C1B domain of PKC γ from 14-3-3: Identification of PKC γ binding sites. (2004) *J. Biol. Chem.* 279(50): 52714-25.
- **T.A. Nguyen**, D. Boyle, L.M. Wagner, T. Shinohara, and D.J. Takemoto. (2003) LEDGF Activation of PKC γ and Gap Junction Disassembly in Lens Epithelial Cells. *Experimental Eye Research* 76: 565-572.
- Kim K, **T Nguyen**, Saville B, and Safe S. (2003) Domains of Estrogen Receptor $\{\alpha\}$ (ER $\{\alpha\}$) Required for ER $\{\alpha\}$ /Sp1-Mediated Activation of GC-Rich Promoters by Estrogens AND Antiestrogens in Breast Cancer Cells. *Mol Endocrinol.* 17: 804-817.
- C. Qin, **T. Nguyen**, J. Stewart, I. Samudio, R. Burghardt, and S. Safe. (2002) Estrogen Up-Regulation of p53 Gene Expression in MCF-7 Breast Cancer Cells Is Mediated by Calmodulin Kinase IV-Dependent Activation of a Nuclear Factor kappaB/CCAAT-Binding Transcription Factor-1 Complex. *Mol Endocrinol.* 16: 1793-1809.
- Matthew Stoner, Fan Wang, Mark Wormke, **Thu Nguyen**, Ismael Samudio, Carrie Vyhlidal, Dieter Marme, Gunter Finkenzeller, and Stephen Safe. (2000) Inhibition of Vascular Endothelial Growth Factor Expression in HEC1A Endometrial Cancer Cells through Interactions of Estrogen Receptor α and Sp3 Proteins. *J. Biol. Chem.* 275: 22769-22779.
- Brad Saville, Mark Wormke, Fan Wang, **Thu Nguyen**, Eva Enmark, George Kuiper, Jan-Ake Gustafsson, and Stephen Safe. (2000) Ligand-, Cell-, and Estrogen Receptor Subtype (α/β)-dependent Activation at GC-rich (Sp1) Promoter Elements. *J. Biol. Chem.* 275: 5379-5387.
- **Thu A. Nguyen**, Debie Hoivik, Jeong-Eun, and Stephen Safe. (1999) Interactions of Nuclear Receptor Coactivator/Corepressor Proteins with the Aryl Hydrocarbon Receptor Complex. *Archives of Biochemistry and Biophysics* 367: 250-257.
- **Thu Nguyen**, Debie Hoivik, and Stephen Safe. (1998) Functional and Physical Interactions of Steroid Receptor Coactivator 1 (SRC-1) and the Aryl Hydrocarbon Receptor Complex. *Organohalogen Compounds.* 37: 169-173.
- Debie Hoivik, **Thu Nguyen**, Jane Thompsen, and Stephen Safe. (1997) Evidence Suggestion ERAP140 Interacts with the Aryl Hydrocarbon Receptor. *Organohalogen Compounds* 34: 342-347.

Published Abstracts/Proceedings:

- Emma Hawkins and **Annelise Nguyen**. (2019) Development of Heterogeneous Spheroids of Colon Cancerous and Non-cancerous cells. Central States Society of Toxicology – Des Moines, Iowa.
- James Osborn and **Annelise Nguyen**. (2019) Heterogeneous Spheroids of Prostate Tumors. Central States Society of Toxicology – Des Moines, Iowa.
- Savannah Luu and **Annelise Nguyen**. (2018) Gap junction intercellular communication in canine mammary carcinoma. Annual Meeting of Society of Toxicology – San Antonio, TX.
- Margherita Zecchin and **Annelise Nguyen**. (2017) Protein Kinase C Isoforms in Combinational Treatment of Paclitaxel and Substituted Quinolines. NIH-Boehringer Ingelheim Veterinary Research Symposium – Bethesda, MD.
- Savannah Luu and **Annelise Nguyen**. (2017) Comparative approach of gap junction intercellular communication in canine mammary carcinoma. Annual Meeting of Society of Toxicology – Baltimore, MD.
- Savannah Luu and **Annelise Nguyen**. (2016) Profile of Gap Junction Intercellular Communication in Canine Mammary Carcinoma. NIH-Merial Veterinary Research Symposium – Columbus, OH.
- Leigh Ann Feuerbacher and **Thu Annelise Nguyen**. (2015) Effect of PQ1 on tumor recurrence in a spontaneous murine mammary tumor model. Annual Meeting of Central States Society of Toxicology – Kansas City, KS.
- Marine Colson and **Annelise Nguyen**. (2015) Characterized canine cancerous cells. NIH-Merial Veterinary Research Symposium – Davis, CA.
- Giovanni Finesso and **Annelise Nguyen**. (2015) Efficacy of Anticancer Drugs in Canine Mammary Carcinoma. NIH-Merial Veterinary Research Symposium – Davis, CA.
- Luke Kicklighter, Leigh Ann Feuerbacher, and Annelise Nguyen. (2015) Targeting Gap Junction Intercellular Communication for Triple Negative Breast Cancer Treatment. K-INBRE Symposium – Topeka, KS.
- Hannah Gray and **Annelise Nguyen**. (2014) Biomarkers and Anticancer Drugs in Spontaneous Mammary Tumors. Developing Scholars Program Symposium – Manhattan,

KS.

- Nallely Barron and **Annelise Nguyen**. (2014) Effect of Tamoxifen on Canine Mammary Cancer. Developing Scholars Program Symposium – Manhattan, KS.
- Kristina Bigelow and **Thu Annelise Nguyen**. (2014) Shift of Cx43 isoform expression by PQ1 in SW480 Human colorectal Cancer Cells. Annual Meeting of American Association for Cancer Research – San Diego, CA.
- Michael Porta and **Annelise Nguyen**. (2014) Efficacy of Fulvestrant in Canine Mammary Carcinoma Cells. NIH-Merial Veterinary Research Symposium – Ithaca, NY.
- Stephanie Shishido and **Thu Annelise Nguyen**. (2013) Induction of apoptosis by PQ1, a gap junction enhancer that upregulates Cx43 and activates the p38-MAPK signaling pathway in mammary carcinoma cells. Annual Meeting of Central States Society of Toxicology – Ames, IA.
- Kristina Bigelow and **Thu Annelise Nguyen**. (2013) Cytotoxic Effect of Substituted Quinolines on SW480 Human Colon Cancer Cells. Annual Meeting of Central States Society of Toxicology – Ames, IA.
- Jessica Chavera and **Annelise Nguyen**. (2013) Characterization of Canine Mammary Carcinoma Cells for Hormonal Receptors, Kinases, and Intercellular Communication. East Lansing, MI.
- Stephanie Shishido and **Annelise Nguyen**. (2013) The effect of anticancer compounds and the role of connexins in a new continuous cell line derived from a metastatic murine mammary carcinoma. Annual Meeting of American Association for Cancer Research, Washington, D.C.
- Kristina Bigelow and **Annelise Nguyen**. (2013) Effect of Gap Junction Enhancer in Colon Cancer Cells. K-INBRE symposium – Kansas City, MO.
- Nallely Barron, Stephanie Shishido, and **Annelise Nguyen**. (2013) Differential Pattern of Connexins in Mammary Cancer Cells of MMTV-PyVT Mouse. Developing Scholars Program Symposium – Manhattan, KS.
- Stephanie Shishido and **T.A. Nguyen**. (2012) Establishment and characterization of new continuous cell lines derived from murine mammary carcinomas and their response to anti-cancer compounds. Annual Meeting of Central States Society of Toxicology – Manhattan, KS.

- Ying Ding and **Thu Annelise Nguyen**. (2012) Enhancement Effect of Gap Junction Enhancer on Cisplatin Cytotoxicity in Breast Cancer Cells. Annual Meeting of Central States Society of Toxicology – Manhattan, KS.
- Stephanie Shishido, Keshar Prasain, Thi D.T. Nguyen, and **Annelise Nguyen**. (2012) The distribution of a gap junction enhancer and its effects on a mouse mammary tumor model. Capitol Graduate Research Summit – Topeka, KS.
- Kristina Bigelow and **Annelise Nguyen**. (2012) Upregulation of Gap Junctions with Substituted Quinolines in Colon Cancer Cells. Biennial Meeting of IDeA Symposium of Biomedical Research Excellence – Bethesda, MD.
- Ying Ding and **Thu Annelise Nguyen**. (2012) Gap junction enhancer as an anti-cancer agent via GJIC-dependent and independent pathways. Annual Meeting of American Association for Cancer Research – Chicago, IL.
- Stephanie Shishido and **Annelise Nguyen**. (2012) Histological and biological effects of substituted quinolines (gap junction enhancers) in a spontaneous mammary tumor model of PyVT mice. Annual Meeting of American Association for Cancer Research – Chicago, IL.
- Stephanie Shishido and **Annelise Nguyen**. (2012) Gap Junction Enhancer Increases Efficacy of Cisplatin to Attenuate Mammary Tumor Growth. Annual Meeting of Society of Toxicology – San Francisco, CA.
- Ying Ding and **Annelise Nguyen**. (2012) PQ1 Induces Cytotoxicity in Breast cancer Cells by Activating Both Intrinsic and Extrinsic Pathways of Apoptosis. Annual Meeting of Society of Toxicology – San Francisco, CA.
- Jonathan Bernard and **Annelise Nguyen**. (2012) Increase of cell communication in colorectal cancer. Developing Scholars Program symposium – Manhattan, KS.
- Felicia Walker and **Annelise Nguyen**. (2012) Screening of new anti-cancer drugs for breast cancer. Developing Scholars Program symposium –Manhattan, KS.
- Nallely Barron and **Annelise Nguyen**. (2012) Effect of Substituted Quinolines on Gene Expression of Gap Junction Proteins. Developing Scholars Program symposium – Manhattan, KS.

- Adelaide Delahaye, Stepahnie Shishido, and **Annelise Nguyen**. (2011) Histological and biological effects of substituted quinolines in a spontaneous mammary tumor model of PyVT mice. NIH-Merial Veterinary Research Symposium – Fort Collins, CO.
- Stephanie Shishido and **Annelise Nguyen**. (2011) Gap Junction Enhancer Increases Efficacy of Cisplatin to Attenuate Mammary Tumor Growth. *American Association for Cancer Research* – Orlando, FL.
- Kristina Bigelow and **Annelise Nguyen**. (2011) Upregulation of Gap Junctions with Substituted Quinolines in Colon Cancer Cells. *American Association for Cancer Research* – Orlando, FL.
- Ying Ding, Keshar Prasain, Duy Hua, and **Annelise Nguyen**. (2011) Bioavailability of Substituted Quinoline, a Gap Junction Enhancer. *American Association for Cancer Research* – Orlando, FL.
- Kristina Bigelow and **Annelise Nguyen**. (2010) Decreased interaction of Nedd4 and Cx46 by Gap Junction Enhancers in Breast Cancer Cells. *K-INBRE Annual Meeting* – Kansas City, MO.
- Jennifer Darby and **Annelise Nguyen**. (2010) Gap Junctional Intercellular Communication of Normal, Dysplastic, and Neoplastic Feline Mammary Tissues. *Morris Animal Foundation Annual Meeting* – Denver, CO.
- G. Gakhar, Duy Hua, and **T. A. Nguyen**. (2010) Increased apoptosis by combinational treatment of gap junction activator and tamoxifen in breast cancer cells. *Society of Toxicology* – Salt Lake City, UT.
- **T.A.Nguyen**, Ying Ding, and Kristina Bigelow. (2010) Disruption of Nedd4 and Cx46 by Gap Junction Enhancers in T47D Cells. *American Association for Cancer Research* – Washington D.C.
- Kristina Bigelow and **Annelise Nguyen**. (2010) Regulation of Gap Junctions in Colon Cancer Cells. *2th Biennial IDeA Conference* – Bethesda, MD.
- Brian Heiniger, Gunjan Gakhar, Keshar Prasain, Duy Hua, and **Annelise Nguyen**. (2010) Anti-breast Cancer Activities of Substituted Quinolines. *American Society of Cell Biology* – Philadelphia, PA.

- G. Gakhar, Duy Hua, and **T. A. Nguyen**. (2009) Combinational therapy of tamoxifen and primaquine compound affects GJIC and inhibits colony growth in T47D human breast cancer cells. *American Association for Cancer Research* – Denver, CO.
- Kristina Bigelow and **Annelise Nguyen**. (2009) Regulation of Gap Junctions in Colon Cancer Cells. *9th Annual Research Poster Symposium* – Manhattan, KS.
- Jennifer Darby and **Annelise Nguyen**. (2009) Gap Junctional Intercellular Communication of Normal, Dysplastic, and Neoplastic Feline Mammary Tissues. *Merck-Merial NIH Veterinary Scholars Symposium* – Raleigh, NC.
- G. Gakhar, Duy Hua, and **T. A. Nguyen**. (2009) Combinational of gap junction activator and tamoxifen in breast cancer cells. *Central States Society of Toxicology* – Ames, IA.
- G. Gakhar, Duy Hua, and **T. A. Nguyen**. (2009) Increased apoptosis by combinational treatment of gap junction activator and tamoxifen in breast cancer cells. *American Society for Cell Biology* – Washington D.C.
- D. Banerjee, D. Madgwick, G. Gakhar, D.J. Takemoto, **T. A. Nguyen**. (2008) Cx46, a Hypoxic-specific Gap Junction Which Protect Tumors from Hypoxia. *American Society for Cell Biology* – San Francisco, CA.
- Ofelia Zegarra-Moro and **Thu Annelise Nguyen**. (2008) Integrated Cellular System plays a crucial role in breast cancer development. *American Association for Cancer Research* – San Diego, CA.
- G. Gakhar, Takahiro Ohira, Duy Hua, and **T. A. Nguyen**. (2008) Primaquine-inhibited gap junctions via regulation of connexins 43 and 46. *American Association for Cancer Research* – San Diego, CA.
- Areli Monarrez and **T. Annelise Nguyen**. (2008) Changes in Gap Junctional Connexin Isoforms During Colorectal Cancer Progression. *American Association for Cancer Research* – San Diego, CA.
- Sola Kim and **T. Annelise Nguyen**. (2008) Antitumor effect of substituted quinolines in SW620 Human Colorectal Cancer. *American Association for Cancer Research* – San Diego, CA.
- G. Gakhar, Takahiro Ohira, Duy Hua, and **T. A. Nguyen**. (2007) Antitumor Effect of Substituted Quinolines via Gap Junctional Intercellular Communication in Breast Cancer Cells. *American Association for Cancer Research* – Los Angeles, CA.

- Areli Monarrez and **T. Annelise Nguyen**. (2007) Changes in Gap Junctional Connexin Isoforms During Colorectal Cancer Progression. *8th Annual Undergraduate Research Forum* – Manhattan, KS.
- Sola Kim and **T. Annelise Nguyen**. (2007) Modulation of Substituted Quinolines on Gap Junctional Intercellular Communication in SW620 Human Colorectal Cancer. *8th Annual Undergraduate Research Forum* – Manhattan, KS.
- Rachel Lawn and **T. Annelise Nguyen**. (2007) Interaction of PKC γ and 14-3-3 in Caco-2 colorectal cancer cells. *8th Annual Undergraduate Research Forum* – Manhattan, KS.
- Takahiro Ohira and **T. Annelise Nguyen**. (2007) Inhibition of Cancer Cell Growth by Primaquine. *8th Annual Undergraduate Research Forum* – Manhattan, KS.
- Jerilynn Weisshaar and **Annelise Nguyen**. (2006) The Effect of Indole-3-Carbinol on Gap Junction Intercellular Communication in MCF-7 and MDA-453 Breast Cancer Cells. *Merck-Merial National Scholar Symposium* – Baton Rouge, LA.
- Vijaya Nareddy and **Annelise Nguyen**. (2006) Inhibition of Gap Junction Intercellular Communication via Phorbol Ester-Activated PKC γ in SW480 Epithelial Colon Cancer Cells. *National IDeA Symposium of Biomedical Research Excellence (NISBRE)* – Washington D.C.
- V. B. Nareddy and **T. A. Nguyen**. (2006) Regulation of Gap Junctions by TPA in Colon Cancer Cells. *Society of Toxicology* – San Diego, CA.
- G. Gakhar, D. Lawn, and **T. A. Nguyen**. (2006) Regulation of Gap Junctions by TCDD in Breast Cancer Cells. *Society of Toxicology* – San Diego, CA.
- Diane Schrempp and **Annelise Nguyen**. (2005) Regulation of Gap Junctions by TCDD in MDA-MB-231 and MCF-7 Breast Cancer Cells. *Merck-Merial National Scholar Symposium* – Athens, GA.
- **T A Nguyen**, A J Jurgensmeier, and D J Takemoto. (2004) Regulation of PKC by Phorbol Ester in Colon Cancer Cells. *American Society for Cell Biology (ASCB) Conference*, Washington D.C.

Teaching:

- DMP 801 – Veterinary Toxicology, 2006-2010, 10 hours of lecture

- DMP 802 / MPH 802 – Environmental Health, 2015- present, course coordinator as well as sole instructor, 45 hours of lecture
 - Teacher effectiveness: 4.8 out of maximum 5
 - Increase desire to learn: 4.8 out of maximum 5
 - Amount learned: 4.6 out of maximum 5
- DMP 804 – Ecotoxicology, 2 hours of lecture
- DMP 806 / MPH 806 – Environmental Toxicology, 2005-2017, 15 hours of lecture; 2018-present, course coordinator and sole instructor, 30 hours of lecture
 - Teacher effectiveness: 5 out of maximum 5
 - Increase desire to learn: 5 out of maximum 5
 - Amount learned: 5 out of maximum 5
- DMP 810 – Cancer Pathogenesis, course coordinator and sole instructor, 30 hours of lecture
 - Teacher effectiveness: 5 out of maximum 5
 - Increase desire to learn: 5 out of maximum 5
 - Amount learned: 4.8 out of maximum 5

Student Training:

- Major Professor for:
 - Brittany Blattner, MPH, 2020
 - Savannah Luu, MS, 2018
 - Elena Aronson, MPH, 2017
 - Deidre Bean, MPH, 2017
 - Cassandra Jones, MPH, 2016, epidemiologist at Tennessee Department of Public Health
 - Terra Dawes, MPH, 2016, US Captain at Fort Carson
 - Cassidy Keim, MPH, 2016
 - Rebecca Megee, MPH, 2016
 - Riley Evans, MS in Biochemistry, 2015
 - Kristina Bigelow, MS in Biomedical Sciences, 2014, PhD student at Johns Hopkins
 - Stephanie Shishido, PhD candidate in Pathobiology, 2013, Research Associate at USC Michelson Center, The Kuhn Laboratory

- Ying Ding, PhD in Biochemistry, 2013, Research Associate at Miami School of Medicine
- Kealan Schroeder, MPH, 2013
- Gunjan Gakhar, PhD in Pathobiology, 2009, currently assistant professor at Washington State University
- Vijaya Nareddy, MS in Biomedical Sciences, 2007, currently DVM at Ames, IA
- Major Professor for Undergraduate Students:
 - Emma Hawkins, 2020
 - Lana Herman, 2020
 - James Osborn, 2020
 - India Barrett, 2019
 - Daniel Avalos, 2019
 - Kevin Loya, 2018
 - Martha Nguyen, 2018, BS in Microbiology
 - Carolina Bueno, 2017
 - Matthew Thornsby, 2017, 1st year PhD student at KUMC
 - Kseniya Chumachenko, 2017, 2nd year PhD student at Kansas State University
 - Noah Trapp, 2017, high school science teacher in Mississippi
 - Luke Kicklighter, 2017, 2nd year medical student at Medical University of South Carolina
 - Carolina Garcia, 2016, MS at Kansas State University
 - Vinh Hoang, 2016, chemist at The Great Plains Laboratory
 - Hannah Grey, 2016, peace corps
 - Alan Duong, 2015, currently PhD student in aerospace engineering at Notre Dame
 - Andy Luu, 2015, BS in industrial engineering
 - Jonathan Bernard, 2014, 4th-year medical student at KUMC
 - Nallely Barron-Garcia, 2013, MD at KUMC
 - Felicia Walker, 2013, program animal specialist at Oakland Zoo
 - Clayton Habiger, 2013, MD
 - Emma Faulkner, 2013, DVM
 - Luis Chavez, 2012, MS in kinesiology

- Morgan Armbruster, 2012, ICU nurse in Wichita, KS
- Kristin Bigelow, 2012, currently PhD student at Johns Hopkins
- Jessica Rodriguez, 2011, currently doctoral student at Northwestern University
- Linette Ngaba, 2010
- Brian Heiniger, 2010, currently MD Internist at UT Southwestern University
- Randi King, 2008, currently associate scientist at Catalent Pharma Solutions
- Takahiro Ohira, 2008, chemist at Asahi in Japan
- Areli Monarrez, 2008, currently director of diagnostic lab in Kearne, NE
- Rachel Lawn, 2007, currently DVM in Waterloo, IL
- Sola Kim, 2007, currently MD in Kansas City, MO
- David Lawn, 2006, currently PharmD in Manhattan, KS
- Andrew Jurgensmeier, 2006, currently MD in Kansas City, MO
- Major Professor for Veterinary Research Scholars:
 - Margherita Zecchin (2017), 4th-year veterinary student
 - Savannah Luu (2016), 2nd-year veterinary student
 - Marine Colson (2015), 4th-year veterinary student
 - Giovanni Finesso (2015), DVM, Anatomic Pathology Resident at UPenn
 - Michael Porta (2014), DVM at Wheat Ridge Animal Hospital, Wheat Ridge, CO
 - Jessica Chavera (2013), DVM, neurology resident at Washington State University
 - Adelaide Delahaye (2011), DVM, MS in Houston, TX
 - Julie Bernzweig (2010), DVM in Arizona
 - Jennifer Darby (2009), DVM at Pet Doctors of America, Jacksonville, FL
 - Jerilynn Weisshaar (2007), DVM at West Ridge Animal Hospital, Topeka, KS
 - Diana Schrempp (2005), DVM oncologist at VCA Veterinary Care Animal Hospital, Albuquerque, New Mexico
- Graduate Committee for:
 - Patricia McKenna, 2020
 - Amy Wedel, 2018
 - Linda Adnan Alyahya, 2017
 - Yue Qi, Biochemistry, 2016
 - Luxi Swisher, Chemistry, 2015

- Sara Duhachek-Muggy, PhD candidate in Biochemistry, 2014
- Allan Prior, PhD candidate in Chemistry, 2013
- Allison Crow, MPH, 2013
- Gabriel Kenne, MPH/MS, 2013
- Cristina Bonnelly, MPH, 2012
- Erica McCain, PhD in Biology, 2011
- Xiaoxia Wang, MS in Biomedical Sciences, 2011
- Debarshi Banerjee, PhD in Biochemistry, 2010
- Kanithaporn Puangsombat, PhD in Food Science, 2010
- Shanzhong Gong, MS in Pathobiology, 2010
- Lalitha Peddireddi, PhD in Pathobiology, 2009
- Kamesh Reddy Sirigireddy, PhD in Pathobiology, 2007
- Orn-usa Suwitheecon, MS in Clinical Sciences, 2007
- Research advisor for veterinary oncology resident:
 - Sabina Sheppard, current oncology resident

Professional Membership:

- Association for Women in Science
- American Society for Cell Biology
- Society of Toxicology
- American Association for Cancer Research
- Sigma Chapter of Phi Zeta Society
- Kansas Public Health Association

Significant Service Activities:

- **National:**
 - Appointed Member of the PubMed Central (PMC) Scientific Review Panel – 2018
 - Appointed Member of the Literature Selection Technical Review Committee for the National Library of Medicine – 2013-2017; Appointed chair for 2016-2017
 - Appointed Member for Education Committee, Society of Toxicology – 2013-2016

- Co-chair, Society of Toxicology Regional Chapter Collaboration and communication Committee, 2018-2019
- President, Central States of Society of Toxicology – 2012-2013, 2018-2019
- Councilor, Central States of Society of Toxicology –2007-2009
- Chair Session of Breast Cancer at Society of Toxicology, Seattle, Washington, March 19, 2008
- **University:**
 - Research Committee, School of Veterinary Medicine, Texas Tech University, present
 - Johnson Cancer Research Center Director Search Committee, 8/2019
 - GROW, EXCITE, and SUCCEED Steering Committee, Office for the Advancement of Women in Science and Engineering – 2018-2020
 - Chair of KSU-Institutional Biosafety Committee (IBC) – 5/2018-8/2019; member of KSU- IBC – 2009-2018
 - Faculty Senate – elected to serve 3-yr term, 2018-2021; chair of Faculty Affairs Subcommittee, 2019-2020
 - Advisory Council for the Office of Undergraduate Research and Creative Inquiry – 2014-2016
 - Vice President for Research Search Committee, 2014 and 2016
 - University Task Force for Undergraduate Research – 2011
 - Faculty Advisor, Vietnamese Student Association of Kansas State University – 2001-present
 - Faculty Advisor, American Association for University Women (AAUW) Student Chapter at Kansas State University – 2016-present
- **College:**
 - Dean Search Committee, College of Veterinary Medicine, Kansas State University, 2019
 - Chair of Multicultural Perspectives and Initiatives, Kansas State University – 2011-2015
 - President – Phi Zeta Society – 3/2009-3/2010

- Chair of the International Activity Committee of Kansas State University-College of Veterinary Medicine – 2008-2011
- CVM Representative for Global Food Initiatives of KSU-Shawnee Mission School District
- Anatomy and Physiology Department Head Search Committee, 2016
- Chair of Veterinary Immunologist Search Committee, 2016
- Coordinator of the Parallel Paths, a college-wide faculty mentoring activity for promotion and tenure
- **Department:**
 - Elected Member of Graduate Faculty Committee of Diagnostic Medicine and Pathobiology Department at Kansas State University – 2014-2020
 - Seminar Coordinator, 2011-2014
 - Faculty Mentoring Committees:
 - Chair for Dr. Nora Springer, 2017-2020
 - Chair for Dr. Lalitha Peddireddi, 2015-2018
 - Chair for Dr. Susan Moore, 2015-2020
 - Member for Dr. Sarah Schneider, 2019-2020
 - Member for Dr. Raelene Wouda, 2014-2020
 - Member for Dr. Wenjun Ma, 2012-2016

Community Service

- Pilot International – Little Apple Pilot Club (non-profit service organization), Chair of Fundraising Division
- American Association of University Women (AAUW), Founder and Advisor for student organization at Kansas State University
- Kansas Cancer Focus Group
- Kansas Public Health Association

Entrepreneurship

- President and CEO of Mini Properties, LLC – commercial building real estate