

Nikhil S. Padhye

Associate Professor, Biostatistician

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EDUCATION:

Ph.D., Physics, The University of Texas at Austin, 1994-98
Concentration: Theoretical plasma physics and fluid dynamics
Dissertation: Topics in Lagrangian and Hamiltonian fluid dynamics: Relabeling symmetry and ion-acoustic wave stability

M.A., Physics, The University of Texas at Austin, 1991-94
Concentration: Statistical dynamics of fluids and plasmas
Thesis: Statistical mechanics of 2-D fluids

B.Tech., Engineering Physics, Indian Institute of Technology, Bombay, India, 1987-91
Areas: Physics, Electrical Engineering, Computer Science
Special Project: Computerized tomography for biomedical imaging

HONORS AND AWARDS:

Invited Speaker, 4th International Conference on Computer Applications in Electrical Engineering Recent Advances, Indian Institute of Technology, Roorkee, India, 2010.

Invited Contributor of Book Chapter (Entropy as Information Content in Medical Research), Nursing, Caring, and Complexity Science, edited by Alice Davidson et al., published by Springer, New York. AJN Book of the Year Winner in Professional Development and Issues, 2011.

First Place, Abstract for Podium Presentation, Hanneman, S. K., Kamat, S., **Padhye, N. S.**, Whitehead, L. W., "Effect of Light at Night on Salivary Interleukin (IL)-6 Levels." UTHealth School of Nursing Research Day, 2017.

PROFESSIONAL EXPERIENCE:

Internship, 1990
Laser Plasma Division, Bhabha Atomic Research Center, India

Teaching Assistant, 1991 – 1993
Department of Physics, The University of Texas at Austin

Assistant Instructor, 1994
Department of Physics, The University of Texas at Austin

Research Assistant, 1994 – 1998
Institute for Fusion Studies, The University of Texas at Austin

Instructor, 1999
Department of Physics, University of Delaware

Postdoctoral Fellow, 1998 - 2001
Bartol Research Institute, University of Delaware

Research Assistant Professor, Biostatistician, 2001 - 2008
Center for Nursing Research,
School of Nursing, The University of Texas Health Science Center at Houston

Research Associate Professor, Biostatistician, 2008 - 2014
Center for Nursing Research,
School of Nursing, The University of Texas Health Science Center at Houston

Associate Professor, Biostatistician, 2014 - Present
Center for Nursing Research,
School of Nursing, The University of Texas Health Science Center at Houston

GRANTS:

Co-Investigator, R01 HD36767, NIH/NICHD, "Heart Rate Variability During Transition to Extrauterine Life," M. Terese Verklan, Ph.D. (PI), (\$743,882), 1998 - 2003.

PARTNERS Research Award, The University of Texas School of Nursing at Houston, "Age-related differences in female circadian temperature rhythms," Sandra K. Hanneman, PhD, RN, FAAN (PI), (\$4,691), 2001.

Co-Investigator, R01 HD42639, NIH/NICHD, "Effects of noise on newborns < 1000 g birthweight," Robert E. Lasky, Ph.D. (PI), (\$972,267), 2004 - 2008.

PARTNERS Research Award, The University of Texas School of Nursing at Houston, "Comparison of Circadian Biomarkers in Women: Pilot Study," Sandra K. Hanneman, PhD, RN, FAAN (PI), (\$19,200), 2005.

Co-Investigator, R01 NR009680, "Preventing Pressure Ulcers: A Multi-site RCT in Nursing Facilities," Nancy Bergstrom, Ph.D. (PI), (\$2,887,511), 2007-2011.

Co-Investigator, Howell Grant, "Heart Rate Variability and Cardiac Time Intervals in Neonates with Congenital Heart Anomalies," M. Terese Verklan, Ph.D. (PI), (\$25,000), 2009.

Biostatistician, PARTNERS Research Grant, "Symptom Management Program for Hemodialysis Patients," F. Danquah, Ph.D. (PI), 2011-2012.

Biostatistician, PARTNERS Research Grant, "Diabetes Go Mobile!- A Pilot Study Testing the Effect of a Behavioral Intervention with Smart Phone Based Self-Monitoring on Weight Loss," J. Wang, Ph.D. (PI). (\$11000), Sep 2011-Sep 2013.

Biostatistician, 2013 American Association of Diabetes Educators/Sigma Theta Tau International Grant, "Implementing a Multiple Behavior Self-Monitoring Intervention within a Diabetes Education Program," J. Wang, Ph.D. (PI). (\$6000), May 2013 - Apr 2014.

Biostatistician, ISAZ/Waltham Research Grant, "Biobehavioral profiles of attachment to cats in community dwelling elderly," S. Branson, Ph.D. (PI), Sep 2014 – Aug 2015.

Co-Investigator, Center for Clinical and Translational Sciences Grant, "Cranial stimulation for symptom reduction in the palliative care setting," D. Kang, Ph.D. (PI), Jan 2015 – Dec 2015.

Statistician, Robert Wood Johnson Foundation Grant, "Interdisciplinary Nursing Quality Research Initiative," D. Grimes, Ph.D. (PI), extension period Apr 2015 – Jun 2015.

Biostatistician, Human Animal Bond Research Initiative Foundation/Morris Animal Foundation, "Biobehavioral Effects of Therapy Dog Visitation in Elderly Intensive Care Unit Patients: a Pilot and Feasibility Study," S. Branson, Ph.D. (PI), May 2015 – Oct 2016.

Co-Investigator, NIH/NICHD, subcontract of R25 HD045810 from the University of California San Francisco Center for AIDS Prevention Studies (CAPS), "Development of a HIV Risk Estimator to Predict Imminent HIV Risk Behaviors in Homeless Youth," D. Santa-Maria, Ph.D. (PI), Sep 2016 – Aug 2017.

Collaborating Investigator, Scientist Development Grant, American Heart Association, "Everything in moderation? Dietary diversity, diet quality and cardiovascular health," M. Otto, Ph.D. (PI), Jul 2017 – Jun 2020.

Principal Investigator, Speros Martel Endowment for the Aging Geriatric Nursing Research Scholarship, "Personalized Assessment of Pressure Ulcer Risk from Skin Temperature and Activity Monitoring," N. Padhye (PI).

PUBLICATIONS:

Articles

Padhye N. Statistical mechanics of 2-D fluids. Master's Thesis, May 1994.

Padhye N, Morrison PJ. Relabeling symmetries in hydrodynamics and magnetohydrodynamics. Plasma Physics Reports, 22(10):869-877, 1996.

Padhye N, Morrison PJ. Fluid element relabeling symmetry. Physics Letters A, 219:287-292, 1996.

Padhye N. Topics in Lagrangian and Hamiltonian fluid dynamics: Relabeling symmetry and ion-acoustic wave stability. Ph.D. Dissertation, May 1998.

Padhye N, Horton W. Alfvén-wave particle interaction in finite-dimensional self-consistent field model. Physics of Plasmas, 6:970-975, 1999.

Hartlep T, Matthaeus WH, **Padhye NS,** Smith CW. Magnetic field strength distribution in interplanetary turbulence. Journal of Geophysical Research, A105:5135-5139, 2000.

Padhye NS, Smith CW, Matthaeus WH. Distribution of magnetic field components in the solar wind plasma. Journal of Geophysical Research, A106:18635-18650, 2001.

Padhye NS. Multiple timescale statistical filter for corrupt RR-series. In Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC '03, Cancun, Mexico, pp. 2432–2434, 2003.

Verklan MT, **Padhye NS.** Heart rate variability as an indicator of outcome in congenital diaphragmatic hernia with and without ECMO support; *Journal of Perinatology*, 24:247-251, 2004.

Verklan MT, **Padhye NS.** Spectral analysis of heart rate variability: An emerging tool for assessing stability during transition to extrauterine life; *JOGNN*, 33:256-265, 2004.

Padhye NS, Duan Z, Verklan MT. Response of fetal heart rate to uterine contractions. In Proceedings of the 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, USA, pp. 3953–3955, 2004.

Brazdeikis A, Guzeldere AK, **Padhye NS,** Verklan MT. Evaluation of the performance of a QRS detector for extracting the heart interbeat RR time series from fetal magnetocardiography recordings. In Proceedings of the 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, USA, pp. 369–372, 2004.

Padhye NS, Brazdeikis A, Verklan MT. Monitoring fetal development with magnetocardiography. In Proceedings of the 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, USA, pp. 3609–3610, 2004.

Engebretson J, **Padhye NS.** New Paradigms in Healing: Research and Clinical Implications. In Proceedings of the World Conference, Expanding Paradigms: Science, Consciousness & Spirituality, New Delhi, India. Published by All India Institute of Medical Sciences, New Delhi, India, 2006.

Padhye NS, Brazdeikis A, Verklan MT. Change in complexity of fetal heart rate variability. In Proceedings of the 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, New York City, NY, USA, pp. 1796–1798, 2006.

Verklan MT, **Padhye NS,** Brazdeikis A. Analysis of fetal heart rate variability obtained by magnetocardiography. *Journal of Perinatal & Neonatal Nursing*, 20:343-348, 2006.

Khattak AZ, **Padhye NS,** Williams AL, Lasky RE, Moya FR, Verklan MT. Longitudinal assessment of heart rate variability in very low birth weight infants during their NICU stay. *Early Human Development*, 83:361-366, 2007.

McCarley C, Hanneman SK, **Padhye NS,** Smolensky MH. A pilot home study of temporal variations of symptoms in chronic obstructive lung disease. *Biological Research for Nursing*, 9:8-20, 2007.

Padhye NS, Hanneman SK. Cosinor analysis for temperature time-series data of long duration. *Biological Research for Nursing*, 9:30-41, 2007.

Brazdeikis A, Vázquez-Flores GJ, Tan IC, **Padhye NS,** Verklan MT. Acquisition of fetal magnetocardiograms in an unshielded hospital setting. *IEEE Transactions on Applied Superconductivity*, 17:823-826, 2007.

Padhye NS, Verklan MT, Brazdeikis A, Williams AL, Khattak AZ, Lasky RE. A comparison of fetal and neonatal heart rate variability at similar post-menstrual ages. In Proceedings of the 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vancouver, BC, Canada, pp. 2801–2804, 2008.

Lasky RE, Parikh NA, Williams AL, **Padhye NS**, Shankaran S. Changes in the PQRST intervals and heart rate variability associated with re-warming in two newborns undergoing hypothermia therapy. *Neonatology*, 96:93-95, 2009.

Padhye NS, Hamlin S, Brazdeikis A, Hanneman SK. Cardiovascular impact of manual and automated turns in ICU. In Proceedings of the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Minneapolis, Minnesota, USA, pp. 1844–1847, 2009.

Padhye NS, Cron SG, Gusick GM, Hamlin SK, Hanneman SK. Randomization for clinical research: An easy-to-use spreadsheet method. *Research in Nursing and Health*, 32:561-566, 2009.

Rapp MP, Bergstrom N, **Padhye NS**. Contribution of skin temperature regularity to the risk of developing pressure ulcers in nursing facility residents. *Advances in Skin & Wound Care*, 22:506-513, 2009.

Padhye NS, Williams AL, Khattak AZ, Lasky RE. Heart rate variability in response to pain stimulus in VLBW infants followed longitudinally during NICU stay. *Developmental Psychobiology*, 51:638-649, 2009.

Zouridakis G, Patidar U, **Padhye NS**, Pollonini L, Passaro A, Papanicolaou AC. Spectral power of brain activity associated with emotion – A pilot MEG study. In A. Supek & S. Sušac (Eds.), 17th International Conference on Biomagnetism Advances in Biomagnetism – Biomag 2010, pp. 354-357, 2010. Berlin: Springer.

Padhye NS, Zhang X, Rapp MP, Bergstrom N. Gabor filter for enhanced recognition of assisted turning events. In Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Boston, MA, USA, pp. 7873–7876, 2011.

Cohen MZ, Rozmus C, Mendoza T, **Padhye NS**, Neumann J, Gning I, Aleman A, Giralt S, & Cleeland C. Symptoms and quality of life in diverse patients undergoing hematopoietic stem cell transplantation. *Journal of Pain and Symptom Management*, 44:168-180, 2012.

Cohen MZ, Rozmus CL, Mendoza TR, **Padhye NS**, Neumann J, Gning I, Aleman A, Giralt S, Cleeland CS. Authors' reply to Tendas et al. *Journal of Pain and Symptom Management*, 45(4):e3-4, 2013. DOI: 10.1016/j.jpainsymman.2013.01.002.

Cahill JE, Lin L, LoBiondo-Wood G, Armstrong TS, Acquaye AA, Vera-Bolanos E, Gilbert MR, **Padhye NS**. Personal health records, symptoms, uncertainty and mood in brain tumor patients. *Neuro-Oncology Practice*, 1(2): 64-70, 2014. DOI: 10.1093/nop/npu005.

Yamine L, Frazier L, **Padhye NS**, Burg MM, Meininger JC. Severe depressive symptoms are associated with elevated endothelin-1 in younger patients with acute coronary syndrome. *Journal of Psychosomatic Research*, 77(5):430–434, 2014.
<http://doi.org/10.1016/j.psychores.2014.07.019>

Mbue ND, Kang D, Meininger JC, Young-McCaughan S, **Padhye NS**, Varghese GN, Shank TC. The role of depression, stress, and self-management behaviors on metabolic control in patients with type 2 diabetes. *Journal of Medical Research and Practice*, 3(2):35-46, 2014.

Hamlin SK, Hanneman SK, **Padhye NS**, Lodato RF. Hemodynamic changes associated with manual and automated lateral turning in mechanically ventilated intensive care unit patients. *American Journal of Critical Care*, 24(2):131-140, 2015.
<http://doi.org/10.4037/ajcc2015782>

Leyden KN, Hanneman SK, **Padhye NS**, Smolensky MH, Kang DH, Chow DSL. The Utility of the Swine Model to Assess Biological Rhythms and Their Characteristics during Different Stages of Residence in a Simulated Intensive Care Unit: A Pilot Study. *Chronobiology International*, 32(7):980-993, 2015. <http://doi.org/10.3109/07420528.2015.1059344>

Padhye NS, Wang J. Pattern of Active and Inactive Sequences of Diabetes Self-Monitoring in Mobile Phone and Paper Diary User. In Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society, pp. 7630-7633, 2015.
<http://doi.org/10.1109/EMBC.2015.7320159>

Pollonini L, **Padhye NS**, Re R, Torricelli A, Simpson RJ, Dacso CC. Pulse transit time measured by photoplethysmography improves the accuracy of heart rate as a surrogate measure of cardiac output, stroke volume and oxygen uptake in response to graded exercise. *Physiological Measurement*, 36(5):911-924, 2015. <http://doi.org/10.1088/0967-3334/36/5/911>

Otto MC, **Padhye NS**, Bertoni AG, Jacobs DR, & Mozaffarian D. Everything in Moderation--Dietary Diversity and Quality, Central Obesity and Risk of Diabetes. *PloS One*, 10(10), e0141341, 2015. <http://doi.org/10.1371/journal.pone.0141341>

Helmreich RJ, Meininger JC, **Padhye NS**, & Verklan MT. The Impact of Obesity on Physiologic Indicators. *GSTF Journal of Nursing and Health Care (JNHC)*, 3(1), 2015. Retrieved from <http://dl6.globalstf.org/index.php/jnhc/article/view/1436>

Yennurajalingam S, Tayjasantant S, Balachandran D, **Padhye NS**, Williams JL, Liu DD, ... Bruera E. Association between Daytime Activity, Fatigue, Sleep, Anxiety, Depression, and Symptom Burden in Advanced Cancer Patients: A Preliminary Report. *Journal of Palliative Medicine*, 2016. <http://doi.org/10.1089/jpm.2015.0276>

Lianyang Li, Arakaki, X., Thao Tran, Harrington, M., **Padhye, N.**, & Zouridakis, G. (2016). Brain activation profiles in mTBI: evidence from ERP activity of working memory response. In 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference, 2016, 1862-1865. <https://doi.org/10.1109/EMBC.2016.7591083>

Padhye, N. S., & Wang, J. (2016). Effect of self-monitoring clusters on weight and hemoglobin A1c. In 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference, 2016, 275-278. <https://doi.org/10.1109/EMBC.2016.7590693>

Clowtis, L. M., Kang, D.-H., **Padhye, N. S.**, Rozmus, C., & Barratt, M. S. (2016). Biobehavioral Factors in Child Health Outcomes: The Roles of Maternal Stress, Maternal-

Child Engagement, Salivary Cortisol, and Salivary Testosterone. *Nursing Research*, 65(5), 340–351. <https://doi.org/10.1097/NNR.0000000000000172>

Park, E., Meininger, J. C., Kang, D.-H., Gabriel, K. P., & **Padhye, N. S.** (2017). Association of cardiorespiratory fitness and adiposity with inflammatory biomarkers in young adults. *American Journal of Human Biology: The Official Journal of the Human Biology Council*, 29(3). <https://doi.org/10.1002/ajhb.22959>

Jang, A., Hwang, S.-K., **Padhye, N. S.**, & Meininger, J. C. (2017). Effects of Cognitive Behavior Therapy on Heart Rate Variability in Young Females with Constipation-predominant Irritable Bowel Syndrome: A Parallel-group Trial. *Journal of Neurogastroenterology and Motility*. <https://doi.org/10.5056/jnm17017>

Yamine, L., Frazier, L., **Padhye, N. S.**, Sanner, J. E., & Burg, M. M. (2017). Two-year prognosis after acute coronary syndrome in younger patients: Association with feeling depressed in the prior year, and BDI-II score and Endothelin-1. *Journal of Psychosomatic Research*, 99, 8–12. <https://doi.org/10.1016/j.jpsychores.2017.05.017>

Branson, S. M., Boss, L., **Padhye, N. S.**, Trötscher, T., & Ward, A. (2017). Effects of Animal-assisted Activities on Biobehavioral Stress Responses in Hospitalized Children: A Randomized Controlled Study. *Journal of Pediatric Nursing*, 36, 84–91. <https://doi.org/10.1016/j.pedn.2017.05.006>

Yennurajalingam, S., Kang, D.-H., Hwu, W.-J., **Padhye, N. S.**, Masino, C., Dibaj, S. S., ... Bruera, E. (2017). Cranial Electrotherapy Stimulation for the Management of Depression, Anxiety, Sleep Disturbance, and Pain in Patients with Advanced Cancer: A preliminary study. *Journal of Pain and Symptom Management*. <https://doi.org/10.1016/j.jpainsymman.2017.08.027>

Book Chapters

Brazdeikis A & **Padhye NS** (2010). Biomagnetic measurements for assessment of fetal neuromaturation and well-being. In *New Developments in Biomedical Engineering*, Domenico Campolo (Ed.), ISBN: 978-953-7619-57-2, Vienna: INTECH. Available from: <http://sciyo.com/articles/show/title/biomagnetic-measurements-for-assessment-of-fetal-neuromaturation-and-well-being>

Padhye NS (2011). Entropy as information content in medical research. In *Nursing, Caring, and Complexity Science*, AW Davidson, MA Ray, & M. C. Turkel (Eds.), ISBN: 978-082-6125-87-3, pp. 143-162, New York, NY: Springer.

Abstracts

Verklan MT, Sparks JW, **Padhye NS**. Heart rate variability during transition to extrauterine life. *Pediatric Research*, 51, p. 385A, 2002.

Khattak AZ, Lasky RE, **Padhye NS**, Verklan MT. Heart rate variability in extremely low birth weight infants during their NICU stay; *Pediatric Research*, 51, p. 372A, 2002.

Verklan MT, **Padhye NS**. Physiologic Variability Forecasts Outcome in Neonates Diagnosed with Congenital Diaphragmatic Hernia. *Nursing and Health Sciences*, 5, p. 97, 2003.

Brazdeikis A, Chu CW, Verklan MT, **Padhye NS**. Fetal magnetocardiograms recorded in a magnetically disturbed environment. In: Applied Superconductivity Conference, ASC 2004, Jacksonville, Florida, 2004.

Verklan MT, Brazdeikis A, **Padhye NS**. Analysis of fetal heart rate obtained by magnetocardiography. In: 2004 Congress Proceedings of the National Congress on the State of the Science in Nursing Research, Washington, D.C., 2004.

Padhye NS. Chronobiological data modeling. In: 2004 Congress Proceedings of the National Congress on the State of the Science in Nursing Research, Washington, D.C., p. 78, 2004.

Rapp MP, Bergstrom N, **Padhye NS**. The contribution of the complexity of mobility and skin temperature to the risk of developing pressure ulcers in nursing facility residents. In: 5th Annual Hartford Geriatric Nursing Initiative (HGNI) Leadership Conference, Orlando, Florida, 2005.

Rapp MP, **Padhye NS**, Bergstrom N. Relationship of pressure ulcers to entropy of skin temperature. In: 23rd Annual Houston Conference on Biomedical Engineering Research, Houston, Texas, 2006.

Tan I, Vazquez G, Brazdeikis A, **Padhye NS**, Verklan MT. Non-invasive monitoring of fetal heart rate; In: 23rd Annual Houston Conference on Biomedical Engineering Research, Houston, Texas, 2006.

Rapp MP, Bergstrom N, **Padhye NS**. Contribution of mobility and skin temperature to pressure ulcer risk. In: 30th Annual Conference of the Midwest Nursing Research Society (MNRS), Milwaukee, Wisconsin, 2006.

Vincent MA, Hanneman SK, **Padhye NS**. Porcine Stress Hormone Circadian Rhythm in Intensive Care. In: 10th Biennial Society for Research on Biological Rhythms Conference, SRBR, Sandestin, Florida, 2006.

Rapp MP, Bergstrom N, **Padhye NS**. Skin temperature as a predictor of pressure ulcer risk. Journal of Wound Ostomy and Continence Nursing, 33, Suppl. 1, S47-S48, 2006.

Hanneman SK, Green K, **Padhye NS**. Ethnic Differences in Salivary Cortisol of Doctoral Nursing Students. In: 17th International Nursing Research Congress Focusing on Evidence-Based Practice, Montreal, Canada, 2006.

Brazdeikis A, Tan I, Vázquez G, **Padhye NS**, Verklan MT. Analysis of Fetal Heart Rate Variability using Fetal Magnetocardiograms Recorded in an Unshielded Clinical Environment. In: 15th International Conference on Biomagnetism, BIOMAG 2006, Vancouver, British Columbia, Canada, 2006.

Brazdeikis A, Tan I, Vázquez G, Chu CW, **Padhye NS**, Verklan MT. Optimization of SQUID gradiometers for acquisition of fetal magnetocardiograms in an unshielded antepartum clinic. In: Applied Superconductivity Conference 2006, Seattle, Washington, 2006.

Hamlin SK, Hanneman SK, Cron S, Gilman S, Gusick G, **Padhye NS**. Multi-site randomized clinical trial of horizontal positioning to prevent and treat pulmonary complications in mechanically ventilated critically ill patients: Hemodynamic substudy. In: Annual Conference of the Southern Nursing Research Society, Galveston, Texas, 2007.

Vincent MA, Hanneman SK, **Padhye NS**. A pilot study of single vs. serial section cosinor analysis. In: Annual Conference of the Southern Nursing Research Society, Birmingham, Alabama, 2008.

Vincent MA, Hanneman SK, **Padhye NS**. Biomarker circadian rhythm profiles in critically ill mechanically ventilated patients: a pilot study. In: 20th Anniversary Meeting of the Society for Research on Biological Rhythms, Destin, Florida, 2008.

Verklan MT, **Padhye NS**, Brazdeikis A. Fetal magnetocardiography to facilitate the study of autonomic nervous system development. In: 2008 Congress Proceedings of the National Congress on the State of the Science in Nursing Research, Washington, D.C., 2008.

Padhye NS, Verklan MT, Brazdeikis A, Williams AL, Khattak AZ, Lasky RE. Heart rate variability in fetuses and neonates. In: 26th Annual Houston Conference on Biomedical Engineering Research, Houston, Texas, 2009.

Popper SF, Trammell J, Villarreal RE, Rapp MP, **Padhye NS**, Bergstrom N. Assessing the accuracy and precision of ankle-worn accelerometers in persons at risk for pressure ulcers. In: 24th Annual Conference of the Southern Nursing Research Society, Austin, Texas, 2010.

Hanneman SK, Vincent MA, **Padhye NS**. Exploration of Porcine Stress-Hormone Response to Critical Care. In: 24th Annual Conference of the Southern Nursing Research Society, Austin, Texas, 2010.

Popper SF, Trammell J, Villarreal RE, Rapp MP, **Padhye NS**, Bergstrom N. Assessing the accuracy and precision of ankle-worn accelerometers in persons at risk for pressure ulcers. In: 34th Annual Conference of the Midwest Nursing Research Society, Kansas City, Missouri, 2010.

Cahill J, **Padhye N**, Vera-Bolanos E, Gning I, Mendoza T, Gilbert M, Armstrong TS. Exploration of symptom clusters in patients with primary and metastatic brain tumors. *Neuro-Oncology*, 13, Suppl. 3, p. 126, 2011.

Bruera E, Yennurajalingam S, Balachandran D, **Padhye NS**, Williams JL, Frisbee-Hume S. Actigraphy findings and cancer-related fatigue (CRF) in advanced cancer patients treated with methylphenidate (MP) and nursing telephone intervention (NTI). Electronic publication associated with 2013 American Society of Clinical Oncology (ASCO) Meeting. *Journal of Clinical Oncology*, 31, Suppl., abstr e20528, 2013.

Yamine L, Sanner JE, **Padhye NS**, Burg MM, Frazier L. The Interaction of depressive symptoms and endothelin-1 predicts poor long-term prognosis in younger patients with acute coronary syndrome. In: 73rd Annual Scientific Meeting of the American Psychosomatic Society, From Cells to Community and Back, Savannah, Georgia, 2015.

Wang J, **Padhye NS**. Adherence to Multiple-Behavior Self-Monitoring in Diabetes with Phone & Paper Diaries: A Pilot Study. In: 36th Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, San Antonio, Texas, 2015.

Helmreich RJ, Meininger JC, **Padhye NS**, Verklan, MT. The Impact of Obesity Physiologic Indicators. In: 3rd Annual Worldwide Nursing Conference, WNC 2015, Singapore, 2015.

Tsusaki R, Wardell D, Mancias P, **Padhye NS**, Kang D. A Pilot Study of Early Postnatal Late Preterm and Term Breastfeeding Patterns using Surface Electromyography. In: 4th Annual Worldwide Nursing Conference, WNC 2016, Singapore, 2016. DOI 10.5176/2315-4330_WNC16.49

Ahn, H., Woods, A., Choi, E., **Padhye, N.**, & Fillingim, R. (2017). (456) Efficacy of Transcranial Direct Current Stimulation on Clinical Pain Severity in Older Adults with Knee Osteoarthritis Pain: A Double-Blind, Randomized, Sham-Controlled Pilot Clinical Study [Abstract]. *The Journal of Pain*, 18(4, Supplement), S87–S88.
<https://doi.org/10.1016/j.jpain.2017.02.306>

PRESENTATIONS:

Poster Presentation, **Padhye NS**, Morrison PJ, "Relabeling symmetries in fluids and MHD," APS Plasma Divisional Meeting in Denver, Colorado, 1996.

Poster Presentation, **Padhye NS**, Morrison PJ, "Hamiltonian formulation of magnetic field lines with symmetry and relabeling symmetry in fluid systems," Sherwood Meeting in Madison, Wisconsin, 1997.

Poster Presentation, **Padhye NS**, Morrison PJ, "On the nonlinear stability of ion-acoustic waves," Sherwood Meeting in Atlanta, Georgia, 1998.

Poster Presentation, **Padhye NS**, Horton W, "Alfven-wave particle interaction in finite-dimensional self-consistent field model," AGU Fall Meeting in San Francisco, California, 1998.

Poster Presentation, **Padhye NS**, Smith CW, Matthaeus WH, "Magnetic field distributions in the solar wind," AGU Spring Meeting in Boston, Massachusetts, 1999.

Poster Presentation, **Padhye NS**, Smith CW, Matthaeus WH, "Distributions of the magnetic field components in the solar wind," AGU Fall Meeting in San Francisco, California, 1999.

Poster Presentation, **Padhye NS**, Matthaeus WH, and Smith CW, "Casting distributions of the interplanetary magnetic field," AGU Spring Meeting in Washington D. C., 2000.

Speaker, "Statistical analysis of the Solar Wind magnetic field," Seminar at the Center for Nursing Research, The University of Texas Health Science Center at Houston, Texas, 2001.

Speaker, "Circadian temperature rhythms in menstrual cycle phases," Biometry Seminar at the School of Public Health, The University of Texas Health Science Center at Houston, Texas, 2002.

Poster Presentation, **Padhye NS**, Hanneman SK, "Circadian Temperature Rhythms in Women," 8th Annual Research Day, The University of Texas Health Science Center at Houston, Texas, 2002.

Paper Presentation, **Padhye NS**, "Multiple timescale statistical filter for corrupt RR-series," 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC '03, Cancun, Mexico, 2003.

Speaker, "Application of time series analysis Parts I and II," Seminar series in two parts at The University of Texas School of Nursing, Houston, Texas, 2004.

Speaker, "Fetal heart rate variability in the presence of uterine contractions," Biostatistics Seminar at The University of Texas School of Public Health, Houston, Texas, 2004.

Poster Presentation, **Padhye NS**, Brazdeikis A, Verklan MT, "Monitoring fetal development with magnetocardiography," 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, 2004.

Paper Presentation, **Padhye NS**, Duan Z, Verklan MT, "Response of fetal heart rate to uterine contractions," 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, 2004.

Speaker, "Chronobiological data modeling," National Congress on the State of the Science in Nursing Research, Washington, D.C., 2004.

Digital Poster Presentation, **Padhye NS**, Verklan MT, "Spectral analysis of fetal heart rate recovery from stress," Annual Conference of the University of Texas Center for Biomedical Engineering, Houston, Texas, 2004.

Speaker, "Longitudinal analysis of neonatal heart rate variability," Biostatistics Seminar at The University of Texas School of Public Health, Houston, Texas, 2005.

Poster Presentation, Rapp MP, **Padhye NS**, Bergstrom N, "Relationship of pressure ulcers to entropy of skin temperature," 23rd Annual Houston Conference on Biomedical Engineering Research, Houston, Texas, 2006.

Poster Presentation, **Padhye NS**, Brazdeikis A, Verklan MT, "Change in complexity of fetal heart rate variability," 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, New York City, NY, 2006.

Poster Presentation, **Padhye NS**, Brazdeikis A, Verklan MT, "Change in complexity of fetal heart rate variability," Research Day: New Pathways to Discovery - Clinical and Translational Research in the 21st Century, The University of Texas Health Science Center, Houston, Texas, 2006.

Speaker, "Uterine contractions and fetal heart rate variability," Biostatistics Seminar at The University of Texas School of Public Health, Houston, Texas, 2007.

Paper Presentation, **Padhye NS**, Verklan MT, Brazdeikis A, Williams AL, Khattak AZ, Lasky RE, "A comparison of fetal and neonatal heart rate variability at similar post-menstrual ages," 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vancouver, Canada, 2008.

Speaker, "Fetal magnetocardiography to facilitate the study of autonomic nervous system development," National Congress on the State of the Science in Nursing Research, Washington, D.C., 2008.

Speaker, "Heart rate variability in fetuses and neonates," 26th Annual Houston Conference on Biomedical Engineering Research, Houston, Texas, 2009.

Poster Presentation, **Padhye NS**, Hamlin S, Brazdeikis A, Hanneman SK, "Cardiovascular impact of manual and automated turns in ICU," 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Minneapolis, Minnesota, USA, 2009.

Poster Presentation, Popper SF, Trammell J, Villarreal RE, Rapp MP, **Padhye NS**, Bergstrom N, "Assessing the accuracy and precision of ankle-worn accelerometers in persons at risk for pressure ulcers," 24th Annual Conference of the Southern Nursing Research Society, Austin, Texas, 2010.

Podium Presentation, Hanneman SK, Vincent MA, **Padhye NS**, "Exploration of Porcine Stress-Hormone Response to Critical Care," 24th Annual Conference of the Southern Nursing Research Society, Austin, Texas, 2010.

Invited Plenary Presentation, **Padhye NS**, Williams AL, Khattak AZ, Lasky RE, Verklan MT, Brazdeikis A, "Heart Rate Variability as a Measure of Neonatal Pain Response and Fetal Autonomic Development," 4th International Conference on Computer Applications in Electrical Engineering Recent Advances, Indian Institute of Technology, Roorkee, India, 2010.

Poster Presentation, Zouridakis G, Patidar U, **Padhye NS**, Pollonini L, Passaro A, Papanicolaou AC, "Spectral power of brain activity associated with emotion – A pilot MEG study," 17th International Conference on Biomagnetism Advances in Biomagnetism – Biomag 2010, Dubrovnik, Croatia, 2010.

Poster Presentation, Popper SF, Trammell J, Villarreal RE, Rapp MP, **Padhye NS**, Bergstrom N, "Assessing the accuracy and precision of ankle-worn accelerometers in persons at risk for pressure ulcers," 34th Annual Conference of the Midwest Nursing Research Society, Kansas City, Missouri, 2010.

Poster Presentation, **Padhye NS**, Zhang X, Rapp MP, Bergstrom N, "Gabor filter for enhanced recognition of assisted turning events," 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Boston, Massachusetts, USA, 2011.

Podium Presentation, **Padhye NS**, Hanneman SK, "Estimation of circadian rhythm with allowance for uncertain time period," in Symposium on Circadian Rhythms in Acute and Chronic Illness at the National State of the Science Congress on Nursing Research, Washington, DC, 2012.

Podium Presentation, Cahill J, **Padhye NS**, Vera-Bolanos E, Gning I, Mendoza T, Gilbert M, Armstrong, T, "Exploration of symptom clusters in patients with primary and metastatic brain cancer," National State of the Science Congress on Nursing Research, Washington, DC, 2012.

Podium Presentation, Hanneman SK, **Padhye NS**, "Circadian Rhythms in a Porcine Adult ICU Model," in Symposium on Circadian Rhythms in Acute and Chronic Illness at the National State of the Science Congress on Nursing Research, Washington, DC, 2012.

Podium Presentation, Vincent MA, Hanneman SK, **Padhye NS**, Smolensky M, Kang D-H, "ICU Patient Core Body and Ambient Temperature 24-Hr Patterns and Illness Severity," in Symposium on Circadian Rhythms in Acute and Chronic Illness at the National State of the Science Congress on Nursing Research, Washington, DC, 2012.

Podium Presentation, Leyden KL, Hanneman SK, McCarley CA, **Padhye NS**, "Activity-rest circadian rhythms in COPD," in a Symposium on Circadian Rhythms in Acute and Chronic Illness at the National State of the Science Congress on Nursing Research, Washington, DC, 2012.

Podium Presentation, Hamlin SK, Hanneman SK, **Padhye NS**, Lodato RF, "Hemodynamic Changes Associated with Manual and Automated Lateral Rotation in Mechanically Ventilated ICU Patients," National State of the Science Congress on Nursing Research, Washington, DC, 2012.

Poster Presentation, Sanner J, Yu E, Udtha M, **Padhye NS**, Frazier L, "Association of serotonin transporter gene polymorphisms with depressive symptoms and adverse cardiac events in patients with acute coronary syndrome," Southern Nursing Research Society, Little Rock, Arkansas, 2013.

Poster Presentation, Yu E, Sanner J, Udtha M, **Padhye NS**, Frazier L, "Association of self-report depression history with depression scores during hospitalization for acute coronary syndrome and cardiac outcomes," Southern Nursing Research Society, Little Rock, Arkansas, 2013.

Poster Presentation, Yennurajalingam S, Balachandran D, **Padhye NS**, Williams JL, Frisbee-Hume S, Bruera E, "Actigraphy findings and cancer-related fatigue (CRF) in advanced cancer patients treated with methylphenidate (MP) and nursing telephone intervention (NTI)," Multinational Association of Supportive Care in Cancer (MASCC) Meeting, Berlin, Germany, 2013.

Poster Presentation, Yammine L, Frazier L, **Padhye NS**, Burg MM, Meininger JC, "Severe depressive symptoms are associated with elevated endothelin-1 in younger patients with acute coronary syndrome," American Heart Association Scientific Sessions, Dallas, Texas, 2013.

Poster Presentation, Cahill JE, Lin L, Armstrong TS, Acquaye AA, Vera-Bolanos E, Gilbert MR, **Padhye NS**, "Personal health records, symptoms, uncertainty and mood in brain tumor patients," 4th Quadrennial Meeting of the World Federation of Neuro-Oncology held in conjunction with the 2013 Scientific Meeting and Education Day of the Society for Neuro-Oncology, San Francisco, California, 2013.

Poster Presentation, Branson S, Baun M, Kang D, **Padhye NS**, Bergstrom N, Barker S, "Dosage effects of therapy dog visitation on loneliness, stress, anxiety and biological responses among the aging," 28th Annual Conference of the Southern Nursing Research Society, San Antonio, Texas, 2014.

Poster Presentation, Mbue ND, Kang D, Meininger JC, Young-McCaughan S, **Padhye NS**, Varghese GN, Shank TC, "The role of depression, stress, and self-management behaviors on metabolic control in patients with type 2 diabetes," 28th Annual Conference of the Southern Nursing Research Society, San Antonio, Texas, 2014.

Poster Presentation, Nguyen T, **Padhye NS**, Awakessien O, Wang, J, "Comparing adherence to diet and physical activity self-monitoring using smart phones versus paper diaries in a pilot intervention study among diabetes patients," 28th Annual Conference of the Southern Nursing Research Society, San Antonio, Texas, 2014.

Poster Presentation, Branson S, Baun M, Kang D, **Padhye NS**, Bergstrom N, Barker S, "Dosage effects of therapy dog visitation on loneliness, stress, anxiety and biological responses among the aging," International Society of Anthrozoology (ISAZ) 2014: Animals and Humans together - Partners in Society, Vienna, Austria, 2014.

Podium Presentation, **Padhye NS**, Wang J, "Pattern of adherence to diet and physical activity self-monitoring using smart phones versus paper diaries in a pilot intervention study among diabetes patients," National State of the Science Congress on Nursing Research, Washington, DC, 2014.

Podium Presentation, **Padhye NS**, Wang J, "Pattern of active and inactive sequences of diabetes self-monitoring in mobile phone and paper diary users," 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Milan, Italy, 2015.

Poster Presentation, Aggarwal S, Armstrong T, Ott S, Meininger J, **Padhye NS**, "Clinical and Demographic Predictors of Concussion Recovery in Adolescents: A Retrospective Study," 4th annual Sport Concussion Symposium, Houston, Texas, 2016.

Poster Presentation, Robertson L, Hanneman SK, **Padhye NS**, Gilder T, "Interrater Reliability Estimates for Scoring the Richards-Campbell Sleep Questionnaire," UTHealth School of Nursing Research Day, 2016.

Podium presentation, Hanneman SK, **Padhye NS**, Whitehead L, "Effect of Light at Night on Salivary Melatonin Levels and Circadian Rhythm," UTHealth School of Nursing Research Day, 2016.

Podium presentation, Hanneman, S. K., **Padhye, N. S.**, Burk, R., Whitehead, L. W., "Effect of Light at Night on Salivary Melatonin Level and Circadian Rhythm," State of the Science Congress, Council for the Advancement of Nursing Science, Washington, D. C., 2016.

Podium presentation, Santa Maria, D. M., **Padhye, N. S.**, Gallardo, K., Johnson, K., Swain, H., Tortolero-Emery, S., Businelle, M., "Use of Ecological Momentary Assessment to Determine the Relation between Stress and Sexual Risk Behaviors among Homeless Youth," State of the Science Congress, Council for the Advancement of Nursing Science, Washington, D. C., 2016.

Podium presentation, **Padhye NS**, Wang J, "Effect of Self-Monitoring Clusters on Weight and Hemoglobin A1c," 38th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, Orlando, Florida, 2016.

Poster presentation, Li L, Arakaki, X, Tran T, Harrington M, **Padhye NS**, Zouridakis G, "Brain Activation Profiles in Mtbi: Evidence from ERP Activity of Working Memory Response," 38th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, Orlando, Florida, 2016.

Poster presentation, Schroedter, T., Coleman, D., Peck, M., **Padhye, N.**, Gong, Y., Wang, J., "Technology Use and Needs for Seniors Aging in Place: A Cross Sectional Survey Study," Southern Nursing Research Society's Annual Conference, Dallas, Texas, 2017.

Poster presentation, Ahn, H., Woods, A., Choi, E., **Padhye, N.**, & Fillingim, R., "Efficacy of Transcranial Direct Current Stimulation on Clinical Pain Severity in Older Adults with Knee Osteoarthritis Pain: A Double-Blind, Randomized, Sham-Controlled Pilot Clinical Study,"

36th Annual Scientific Meeting of the American Pain Society, Pittsburgh, Pennsylvania, 2017.

Podium presentation, Jang, A., Hwang, S.-K., **Padhye, N. S.**, & Meiningner, J. C., "Effects of cognitive behavior therapy on heart rate variability and gastrointestinal symptoms and emotional status in female students with constipation-predominant irritable bowel syndrome: An exploratory subgroup analysis of a randomized controlled trial," Digestive Disease Week, Chicago, Illinois, 2017.

Podium presentation, Hanneman, S. K., Kamat, S., **Padhye, N. S.**, Whitehead, L. W., "Effect of Light at Night on Salivary Interleukin (IL)-6 Levels," UTHealth School of Nursing Research Day, Houston, Texas, 2017.

Podium presentation, Schroedter, T., Coleman, D., Peck, M., **Padhye, N.**, Gong, Y., Wang, J., "Technology Use and Needs for Seniors Aging in Place: A Cross Sectional Survey Study," UTHealth School of Nursing Research Day, Houston, Texas, 2017.

Podium presentation, **Padhye, N. S.**, Bergstrom, N., Rapp, M. P., Etcher, L., Redeker, N. S., "Is the complexity of activity indicative of pressure ulcer risk?," UTHealth School of Nursing Research Day, Houston, Texas, 2017.

Podium presentation, **Padhye, N. S.**, Santa Maria, D. M., Yang, Y., Gallardo, K., Businelle, M., "Drug Use and Sexual Risks among Homeless Youth: Results of an Ecological Momentary Assessment," UTHealth School of Nursing Research Day, Houston, Texas, 2017.

Poster presentation, **Padhye, N. S.**, Bergstrom, N., Rapp, M. P., Etcher, L., Redeker, N. S., "Pressure ulcer risk detection from complexity of activity," 39th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, Jeju Island, South Korea, 2017.

ACADEMIC AND PROFESSIONAL SERVICE:

Member, American Physical Society, 1995 – 2016.

Member, American Geophysical Union, 1998 – 2011.

Member, Center for Computational Biomedicine, The University of Texas Health Science Center at Houston, 2001 – 2004.

Member, IEEE Engineering in Medicine and Biology Society, 2002 – present.

Member, Judging Panel, Best Student Paper International Competition, 24th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Houston, Texas, October 2002.

Member, Sigma Xi Scientific Research Society, 2003 – 2008.

Reviewer, Grant proposal, Science Center Program, U.S. Civilian Research and Development Foundation, U.S. Department of State, 2003.

Member, Judging Panel, Best Poster Competition, Research Day, The University of Texas Health Science Center at Houston, October 2003.

Member, Faculty Life Council, The University of Texas School of Nursing at Houston, Sep 2003 – Aug 2005, Sep 2009 – Aug 2011.

Member, Master's Degree Council, The University of Texas School of Nursing at Houston, Dec 2003 – Jan 2004.

Member, IEEE Signal Processing Society, 2004 – present.

Member, Intramural Scientific Review Panel, The University of Texas School of Nursing at Houston, Sep 2004 – Aug 2008.

Member, Executive Information Technology Governance Committee, The University of Texas Health Science Center at Houston, January 2005 – August 2007.

Member, Research Technology Subcommittee, The University of Texas Health Science Center at Houston, April 2006 – present.

Member, PhD Council (formerly Doctoral Degree Council), The University of Texas School of Nursing at Houston, July 2006 – present.

Member, Judging Panel, Science and Engineering Fair of Houston, March 2008.

Member, Judging Panel, Doctoral Student Writing Award, The University of Texas School of Nursing at Houston, April 2008.

Member, Information Technology Committee, The University of Texas School of Nursing at Houston, May 2008 – present.

Reviewer, Manuscripts, 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vancouver, Canada, August 2008.

Member, Judging Panel, Science and Engineering Fair of Houston, March 2009.

Member, Judging Panel, Doctoral Student Writing Award, The University of Texas School of Nursing at Houston, April 2009.

Member, Manuscript Review Panel, 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Minneapolis, Minnesota, USA, September 2009.

Member, Appointment, Promotion, Tenure, and Review (APTR) Committee, The University of Texas School of Nursing at Houston, Sep 2009 – Aug 2011.

Member, Judging Panel, Science and Engineering Fair of Houston, March 2010.

Member, Manuscript Review Panel, 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Buenos Aires, Argentina, September 2010.

Member, Manuscript Review Panel, 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Boston, Massachusetts, USA, September 2011.

Member, Judging Panel, Science and Engineering Fair of Houston, March 2012.

Member, Interfaculty Council, UTHealth, Sep 2011 – Aug 2014.

Member, Judging Panel, Doctoral Student Writing Award, The University of Texas School of Nursing at Houston, April 2014.

Member, Quantitative Methods Review Panel, Nursing Research, May 2016 – present.

TEACHING:

Courses at the Department of Physics, University of Texas at Austin

Teaching Assistant for several courses from Fall 1991 to Fall 1993.

Assistant Instructor, PS 303, Physical Science: Mechanics and Heat, Introductory course and laboratory for non-science majors, 3 credit hours, Spring 1994.

Courses at the Department of Physics, University of Delaware

Instructor, PHYS 207, Fundamentals of Physics I, Introductory mechanics for science and engineering students, 4 credit hours, Summer 1999.

Courses at The University of Texas School of Nursing at Houston

Instructor, N7700, Independent Study, "Biological Rhythm Analysis," C. McCarley, Ph.D. student, Doctoral Program, 3 credit hours, Fall 2002.

Instructor, N7700, Independent Study, "Research Methods in Biocomplexity," M. P. Rapp, Ph.D. student, Doctoral Program, 3 credit hours, Summer 2004.

Co-Instructor (25%), N7521, Advanced Statistics for Clinical Research Part I, Doctoral Program, 4 credit hours, Spring 2005.

Co-Instructor (30%), N7506, Advanced Statistics for Clinical Research Part II, Doctoral Program, 4 credit hours, Summer 2005.

Instructor, N7700, Independent study, "Time Series Analysis," S. Gilman, Ph.D. student, Doctoral Program, 3 credit hours, Spring 2006.

Instructor, N7700, Independent study, "Biological Rhythm Analysis," M. A. Vincent, Ph.D. student, Doctoral Program, 3 credit hours, Spring 2006.

Course Coordinator and Instructor, N5506, Statistics in Nursing, MSN Program, 2 credit hours, Spring, Summer, and Fall semesters, Fall 2006 – Summer 2017.

Instructor, N7700, Independent study, "Spectral Estimation of Circadian Rhythms," Katrina Leyden, Ph.D. student, Doctoral Program, 2 credit hours, Fall 2010.

Instructor, N7700, Independent study, "Biological Rhythm Analysis," Kristina Leyden, Ph.D. student, Doctoral Program, 3 credit hours, Fall 2008.

Instructor, N7700, Independent study, "Biological Rhythm Analysis," Katrina Leyden, Ph.D. student, Doctoral Program, 3 credit hours, Fall 2008.

Instructor, N7700, Independent Study, "Multivariate Analysis," Jennifer Cahill, Ph.D. student, Doctoral Program, 4 credit hours, Spring 2011.

Instructor, N7700, Independent Study, "Ensemble Averaging," Sheryl Wachtel, Ph.D. student, Doctoral Program, 3 credit hours, Spring 2011.

Instructor, N7505, Advanced Statistics for Clinical Research I, PhD Program, 4 credit hours, Fall 2011 – present (every Fall).

Instructor, N7506, Advanced Statistics for Clinical Research II, PhD Program, 4 credit hours, Spring 2012 – present (every Spring).

Instructor, N7700, Independent Study, "Regression Analysis," Luba Yammine, Ph.D. student, Doctoral Program, 3 credit hours, Summer 2012.

Instructor, N5522, Independent Study, "Longitudinal Data Analysis," Saad Samargandy, M.P.H. student, Master's Program at the School of Public Health, 3 credit hours, Summer 2015.

Instructor, N7700, Independent Study, "Generalized Linear Models," Yousef Aljawarneh, Ph.D. student, Doctoral Program, 3 credit hours, Spring 2017.

Student Committees at The University of Texas School of Nursing at Houston

Poulin, Gregory. Comparison of Continuous and Intermittent Arterial Blood Gas Monitoring in Swine. Member, Thesis Committee, May 2002.

McCarley, Cynthia. Temporal Patterns of Dyspnea, Fatigue, and Pulmonary Expiratory Flow Rate in Patients with Chronic Obstructive Pulmonary Disease. Member, Dissertation Committee, August 2003.

Rapp, Mary Pat. Contribution of Activity and Skin Temperature to the Risk of Developing Pressure Ulcers in Nursing Facility Residents. Member, Dissertation Committee, May 2006.

Helmreich, Rebecca. Obesity on Vagal Tone and HbA1c during Pregnancy. Member, Dissertation Committee, May 2010.

Hamlin, Shannan K. Multi-Site Randomized Clinical Trial of Horizontal Positioning to Prevent and Treat Pulmonary Complications in Mechanically Ventilated Critically Ill Patients: A Hemodynamic Substudy. Member, Dissertation Committee, May 2010.

Vincent, Mary Anne. Biomarker circadian rhythm profiles in mechanically ventilated critically ill patients. Member, Dissertation Committee, May 2011.

Leyden, Katrina L. Circadian rhythm profiles in porcine ICU subjects. Member, Dissertation Committee, Aug 2012.

Yammine, Luba. The relationship between depressive symptom severity and circulating level of endothelin-1 among males ≤ 50 years and females ≤ 55 years of age with ACS. Member, Dissertation Committee, Jun 2013.

Cahill, Jennifer. Personal health records, symptoms, uncertainty and mood in brain tumor patients. Member, Dissertation Committee, Jun 2013.

Mbue, Ngozi. The role of depression, stress, and self-management behaviors on metabolic control in adults with type 2 diabetes. Member, Dissertation Committee, Jun 2013.

Tsusaki, Rebecca. Early Postnatal Breastfeeding Patterns in Late Preterm and Term Infants. Member, Dissertation Committee, Oct 2013.

Wachtel, Sheryl. Oxygenation Response to Manual and Automated Turning in Mechanically Ventilated Critically Ill Patients. Member, Dissertation Committee, Oct 2013.

Leyden, Kristina. Activity-Rest and Skin Temperature Circadian Rhythms and Sleep Patterns in Community-Dwelling Women. Member, Dissertation Committee, Mar 2015.

Aggarwal, Seema. Clinical and Demographic Variables Associated with Cognitive Deficits, Symptom Severity, and Duration after Concussive Injury in Adolescents: A Retrospective Study. Member, Dissertation Committee, Mar 2016.

Other Student Committees

Hymel, Chris M. Application of Signal Advance Technology to Electrophysiology. Graduate School of Biomedical Sciences, The University of Texas Health Science Center at Houston, Member, Dissertation Committee, August 2010.

Sachdeva, Jainy. Identification of tumors on brain MR images. Electrical Engineering Department, Indian Institute of Technology, Roorkee, India, Member, Dissertation Committee, Jan 2013.