

Young-Eun Cho, Ph.D. RN

Assistant Professor

The University of Iowa
College of Nursing
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EDUCATION

Year	Degree	Institution/Location
2010	Doctor of Philosophy	Yonsei University College of Medicine, Seoul, S. Korea
2005	Master of Arts	Yonsei University College of Medicine, Seoul, S. Korea
2001	Bachelor of Science in Nursing	Yonsei University College of Nursing, Seoul, S. Korea

PhD Dissertation:

Enhanced contraction and myosin phosphorylation induced by Ca^{2+} -independent MLCK in spontaneously hypertensive rats (*Cardiovasc Res.* 2011;91(1):162-170)

Master's Thesis:

Intracellular acidosis induced myogenic tone change in rabbit basilar artery: Role of extracellular Ca^{2+} , SR Ca^{2+} release and Ca^{2+} sensitization (*Vascul Pharmacol.* 2007;47(1):74-82)

LICENSURES

Year	Source	License	Number
2000-present	Korean Nursing Association	Registered Nurse	#1666792
2020-present	Iowa Board of Nursing	Registered Nurse	#160789
2020-present	New York Board of Nursing	Registered Nurse	#801172

PROFESSIONAL EXPERIENCE

Year	Position	Institution / Location
Academic Appointments		
8/2019-present	Assistant Professor	University of Iowa College of Nursing, Iowa City, IA
1/2016-8/2019	Research fellow	National Institute of Nursing Research, NIH, Bethesda, MD
9/2014-1/2016	Visiting fellow	National Institute of Nursing Research, NIH, Bethesda, MD
3/2011-8/2014	Postdoctoral Fellow	University of Illinois at Chicago College of Medicine, Chicago IL

Clinical Appointments

10/2002-8/2003	Clinical Research Associate	Choongwae Pharmaceutical Corporation, Seoul, S. Korea
4/2001-10/2002	Registered nurse	Thoracic surgery ICU in Samsung Medical Center, Seoul, S Korea

HONORS AND AWARDS

2025	MNRS Physiology, Behavior, Genomics & Society RIIG Early Career Award
2024	University of Iowa College of Nursing Student Mentorship Award, Graduate
2020	Best Article Award (Journal of Korean Biological Nursing Science)
2018	Performance Award: National Institute of Nursing Research in NIH
2009	Excellent poster presentation award: the 61st federation meeting of the Korean physiological society

SCHOLARSHIP

PUBLICATIONS

KEY: * = data-based; † = mentored work with student/trainee/new author; ^ = co-first author; Underline = Senior but not first author; ¶ = Corresponding author

Research papers under review

*¶**Cho YE**, †Chen S, Shutt D, Kaufman J, ¶Singh B. (2024) Human Breast Milk EVs Mitigate Endothelial Dysfunction. *International Journal of Molecular Sciences* (under review)

Journals (all journal articles are peer-reviewed)

1. Howland C, White SH, †Chen S, **Cho YE**. (2025) Social Determinants of Health and Epigenetic Age Acceleration in Type 2 Diabetes: A Systematic Review. *Biological Research For Nursing*. doi.org/10.1177/10998004251357537
2. *Kwon JH, Jang H, Kim JS, Lee SH, Kim DH, **Cho YE**, Park HS, Cho YE. (2025) Human Breast Milk-Derived Extracellular Vesicles Enhance Osteoblast Activation via BMP2/MAPK Signaling Pathways. *Journal of Medicinal Food*. doi:10.1177/1096620X251360922
3. *¶**Cho YE**, †Chen S, Crouch K, Shutt D, Kaufman J, Singh B. (2024) Human Breast Milk EVs Mitigate Endothelial Dysfunction: Preliminary Study. *bioRxiv*. doi.org/10.1101/2024.05.20.594769
4. *†Zhao Y, Morgan D, Guo D-F, **Cho YE**, Rahmouni K. (2024) Adipocyte-Specific Disruption of the BBSome Causes Metabolic and Autonomic Dysfunction. *American Journal of*

5. ***PCho YE**, †Chen S, Crouch K, †Yun J, Klingelhutz A. (2024) Impact of Aging and High-Fat Diet on Adipose Tissue-Derived Extracellular Vesicle miRNA Profiles in Mice. *Biomedicine* 12(1), 100. doi:10.3390/biomedicines12010100
6. ***Cho YE**, ^Kim J, Vorn R, Baik WH, Park H, Yun S, Kim HS, Cashion AK, Gill J, Koo BN, Lee H. (2024) Extracellular Vesicle MicroRNAs as Predictive Biomarkers in Postoperative Delirium After Spine Surgery: Preliminary Study. *The Journals of Gerontology, Series A: Biological Sciences and Medical Sciences*. 79(11), glae162. doi.org/10.1093/gerona/glae162
7. Moon C, Schneider A, **Cho YE**, †Zhang M, Dang HL, Vu KH. (2024) Sleep Duration, Sleep Efficiency, and Amyloid β Among Cognitively Healthy Later-Life Adults: A Systematic Review and Meta-Analysis. *BMC Geriatr* 24 (408). doi.org/10.1186/s12877-024-05010-4
8. ***PCho YE**, Vorn R, Chimenti M, †Shaoshuai C, Crouch K, †Narayanaswamy J, †Harken A, †Schmidt R, Gill J, Lee H. (2022) Extracellular Vesicle miRNAs in Breast Milk of Obese Mothers. *Frontiers in Nutrition*. doi.org/10.3389/fnut.2022.976886
9. ***PCho YE**, Lee H, Bae HR, Kim H, Yun S, Vorn R, Cashion A, Rucker MJ, Afzal M, Latour L, Gill J. (2022) A Circulating Immune Cell Landscape in Patients Who Had Mild Ischaemic Stroke. *Stroke and Vascular Neurology, svn-2021-001224*. doi: 10.1136/svn-2021-001224
10. *Edwards KA, Motamedi V, Osier ND, Kim HS, Yun S, **Cho YE**, Lai C, Dell KC, Carr W, Walker P, Ahlers S, LoPresti M, Yarnell A, Tschiffley A, Gill J. (2020) A Moderate Blast Exposure Results in Dysregulated Gene Network Activity Related to Cell Death, Survival, Structure, and Metabolism. *Front Neurol*, 26(11):91. doi: 10.3389/fneur.2020.00091
11. ***Kwon YJ**, ^**Cho YE**, Cho AR, Choi WJ, Yun S, Park H, Kim HS, Cashion AK, Gill J, Lee H and Lee JW. (2020) The Possible Influence of Mediterranean Diet on Extracellular Vesicle miRNA Expression in Breast Cancer Survivors. *Cancers (Basel)*, 12(6):1355. doi: 10.3390/cancers12061355
12. ***Cho YE**, Lee H, Yun S, Kim HS, Cashion AK. (2020) Exosomal Protein Profiles as Novel Biomarkers in Weight Gain After Kidney Transplantation: A Pilot Study. *Journal of Korean Biological Nursing Science*, 22(2):1-8. doi.org/10.7586/jkbns.2020.22.2.119
13. *Hladek MD, Szanton SL, **Cho YE**, Lai C, Sacko C, Roberts L, Gill J. (2018) Using Sweat to Measure Cytokines in Older Adults Compared to Younger Adults: A pilot study. *J Immunol Methods*, Mar(454):1-5. doi: 10.1016/j.jim.2017.11.003
14. ***Martin C**, ^**Cho YE**, Kim HS, Yun SJ, Kanefsky R, Lee H, Mysliwiec V, Cashion AK, Gill J. (2018) Altered DNA Methylation Patterns Associated With Clinically Relevant Increases in PTSD symptoms and PTSD Symptom Profiles in Military Personnel. *Biological Research in Nursing*, 20(3):352-358. doi: 10.1177/1099800418758951
15. *Pantik C, **Cho YE**, Hathaway D, Tolley E, Cashion AK. (2017) Characterization of Body

Composition and Fat Mass Distribution 1 year After Kidney Transplantation. *Progress in Transplantation*, 27(1):10-15. doi: 10.1177/1526924816681007

16. ***Cho YE**, Latour L, Kim HS, Olivera A, Livingston W, Wang D, Martin C, Lai C, Gill J and Cashion AK. (2016) Older Age Results in Differential Gene Expression after Mild Traumatic Brain Injury and is Linked to Imaging Differences at Acute Follow-up. *Frontiers in Aging Neuroscience*, 13(8):168. doi: 10.3389/fnagi.2016.00168
17. ***Cho YE**, Kim HS, Lai C, Stanfill A, Cashion AK. (2016) Oxidative Stress is associated with Weight Gain in Recipients at 12-months Following Kidney Transplantation. *Clinical Biochemistry*, 49(3):237-42. doi: 10.1016/j.clinbiochem.2015.11.002
18. **Cho YE**, Cashion AK. (2016) Mechanism of Weight Gain in Kidney Transplantation Recipients. *Keimyung Journal of Nursing Science*, 19(3):71-79
19. *Han Y, **Cho YE**, Ayon R, Youssef K, Pan M, Dai A, Yuan J, Makino A. (2015) SGLT Inhibitors Attenuate NO-dependent Vascular Relaxation in Pulmonary Artery but not in Coronary Artery. *Am J Physiol Lung Cellular and Molecular Physiology*, 309(9):L1027-36. doi:10.1152/ajplung.00167.2015
20. ***Cho YE**, Basu A, Dai A, Heldak M, Makino A. (2013) Coronary Endothelial Dysfunction and Mitochondrial Reactive Oxygen Species in Type 2 Diabetic Mice. *Am J Physiol Cell Physiol*, 305(10):C1033-40. doi: 10.1152/ajpcell.00234.2013
21. *Lim M, Choi SK, **Cho YE**, Yeon SI, Kim EC, Ahn DS, Lee YH. (2012) The Role of Sphingosine Kinase 1/sphingosine-1-phosphate Pathway in the Myogenic Tone of Posterior Cerebral Arteries. *Plos One*, 7(4):e35177. doi: 10.1371/journal.pone.0035177
22. *Sasaki K, Donthamsetty R, Heldak M, **Cho YE**, Scott BT, Makino A. (2012) VDAC: Old Protein with New Roles in Diabetes. *Am J Physiol Cell Physiol*, 303(10):C1055-6. doi: 10.1152/ajpcell.00087.2012
23. ***Cho YE**, Ahn DS, Morgan KG, Lee YH. (2011) Enhanced contraction and myosin phosphorylation induced by Ca^{2+} -independent MLCK in spontaneously hypertensive rats. *Cardiovasc Res*, 91(1):162-170. doi: 10.1093/cvr/cvr043
24. *Ahn DS, Choi SK, Kim YH, **Cho YE**, Shin HM, Morgan KG, Lee YH. (2007) Enhanced Stretch-induced Myogenic Tone in the Basilar Artery of Spontaneously Hypertensive Rats. *J Vasc Res*, 44(3):182-91. doi: 10.1159/000100374
25. ***Cho YE**, Ahn DS, Kim YH, Taggart MJ, Lee YH. (2007) Changes in Stretch-induced Tone induced by Intracellular Acidosis in Rabbit Basilar Artery: Effects on BK_{Ca} Channel Activity. *Vascul Pharmacol*, 47(1):74-82. doi: 10.1016/j.vph.2007.04.006
26. *Ryu SK, Ahn DS, **Cho YE**, Choi SK, Kim YH, Morgan KG, Lee YH. (2006) Augmented sphingosylphosphorylcholine-induced Ca^{2+} -Sensitization of Mesenteric Artery Contraction in Spontaneously Hypertensive Rat. *Naunyn Schmiedeberg's Arch Pharmacol*, 373(1):30-6. doi: 10.1007/s00210-006-0036-7

27. *Jang GJ, Ahn DS, **Cho YE**, Morgan KG, Lee YH. (2005) C2-ceramide Induces Vasodilation in Phenylephrine-induced Pre-contracted Rat Thoracic Aorta: role of RhoA/Rho-kinase and intracellular Ca²⁺ concentration. *Naunyn Schmiedebergs Arch Pharmacol*, 372(3):242-50. doi: 10.1007/s00210-005-0008-3

Abstract

28. *Guo DF, Morgan D, **Cho YE**, Rahmouni K. (2025) Differential Impact of High-Fat and High-Fat High-Sucrose Diets on Sympathetic and Cardiovascular Function in Mice. *Hypertension*
29. ***Cho YE**, Kaufman J, Singh B. (2025) Engineered EVs Mitigate Endothelial Cell Dysfunction. *Physiology* 40, S1. doi.org/10.1152/physiol.2025.40.S1.0515
30. ***Cho YE**, Chen S, Crouch K, Yun J, Klingelutz A. (2024) Impact of Aging and High-Fat Diet on Adipose Tissue-Derived Extracellular Vesicle miRNA Profiles in Mice. *Physiology* 39, S1. doi.org/10.1152/physiol.2024.39.S1.1142
31. ***Cho YE**, Vorn R, Crouch K, †Narayanaswamy J, Chang C. (2021) Characteristics of Extracellular Vesicle miRNAs in the Breast Milk. *Circulation* 144 (Suppl_1), A14050-A14050. doi.org/10.1161/circ.144.suppl_1.14050
32. ***Cho YE**, Martin C, Kim HS, Yun SJ, Kanefsky R, Lee H, Mysliwiec V, Cashion AK, Gill J. (2017) Altered DNA Methylation Patterns Associated with Clinically Relevant Increases in PTSD Symptoms and PTSD Symptom Profiles in Military Personnel. *The FASEB Journal* 31, 1058.7-1058.7
33. ***Cho YE**, Zhang C, Ranjan R, Christman JW, Zhao Q, Xiao L. (2018) Novel Role of microRNA (miR)-451 in Modulation of Oxidative Stress and Kinase Signaling in Mouse Myocardium. *Circulation* 128 (suppl_22), A14003-A14003
34. ***Cho YE**, Zhang C, Ranjan R, Christman JW, Xiao L, Zhao Q. (2015) microRNA (miR)-451 Regulates Cardiac Growth and Myocardial Reactive Oxidative Species (ROS) Level via Nrf2 and AMPK Pathways. *Circulation* 132 (suppl_3), A16546-A16546
35. *Han Y, **Cho YE**, Ayon R, Guo R, Youssef KD, Pan M, Dai A, Yuan J, Makino A. (2015) SGLT inhibitors Attenuate NO-dependent Vascular Relaxation in Mouse Pulmonary Artery. *The FASEB Journal* 28, 677.3
36. *Han Y, **Cho YE**, Ayon R, Pan M, Dai A, Yuan J, Makino A. (2014) Vascular Response to the Sodium-Glucose Cotransporter Inhibitor in Type 2 Diabetic Mice. *Circulation* 130 (suppl_2), A12295-A12295
37. ***Cho YE**, Kim YH, Lee YH, Ahn DS. (2008) Effects of pHi Change on Spontaneous Contraction and Ionic Currents in Pregnant Rat Uterine Smooth Muscle. *The FASEB Journal* 22, 1206.12-1206.12

38. *Choi SK, **Cho YE**, Ahn DS, Lee YH. (2007) Comparison of Difference of Patterns and Mechanisms between SPC-and S1P-induced Contraction in Rabbit Coronary Artery. *Korean Journal of Physiology & Pharmacology* 11, 32-0
39. ***Cho YE**, Ahn DS, Kim YH, Choi SK, Taggart MJ, Lee YH. (2006) Changes in Myogenic Tone induced by Intracellular Acidosis in Rabbit Basilar Artery: Effects on BKCa channel Activity. *Korean Journal of Physiology & Pharmacology* 10, 143-0
40. ***Cho YE**, Choi SK, Kang BS, Lee YH. (2005) Intracellular Acidosis Induced Myogenic Tone Change in Rabbit Basilar Artery-Role of Ca²⁺ Influx, SR Ca²⁺ Release and Ca²⁺ Sensitization. *Korean Journal of Physiology & Pharmacology* 9, 36-0
41. *Kim YH, Choi SK, **Cho YE**, Sa YS, Kang BS, Lee YH. (2004) Effects of Intracellular Alkalosis or Acidosis in Phasic Contractions of Pregnant Rat Uterine Smooth Muscle. *Korean Journal of Physiology & Pharmacology* 8, 26-0
42. *Choi SK, Kim YH, **Cho YE**, Sa YS, Lee YH. (2004) SPC Induces Rho-kinase Mediated Ca²⁺ Sensitization in Rabbit Middle Cerebral Artery. *Korean Journal of Physiology & Pharmacology* 8, 34-0
43. ***Cho YE**, Kim YH, Choi SK, Sa YS, Ahn DS, Lee YH (2004) Elevation of Myogenic Tone Induced Intracellular Acidosis in Rabbit Basilar Artery-Role of Extracellular Ca²⁺ and SR Ca²⁺ Release. *Korean Journal of Physiology & Pharmacology* 8, 29-0
44. *Sa YS, **Cho YE**, Kim YH, Choi SK, Lee YH. (2003) Mechanisms of Vasorelaxation by Ceramide and Its Role on the Production of Hypertension. *Korean Journal of Physiology & Pharmacology* 7, 23-0

Products, Patents, Licenses, Copyrights

- 2024 Provisional application: Extracellular Vesicle MicroRNAs as Predictive Biomarkers in Postoperative Delirium after Spine Surgery (10-2024-0077051)

GRANTS

Scientific and Educational Research Grants

Intramural Research Grants

- 2025 Differential miRNA Cargo in Breast Milk EVs: A Mechanistic Link to Bronchopulmonary Dysplasia in Preterm Neonates, **PIs: Singh B and Cho YE**. Savvy Ferentz Fund, University of Iowa College of Medicine, Stead Family Department of Pediatrics, \$50,000
- 2024 Scored to Funded Initiative, University of Iowa College of Nursing, \$10,000
- 2023 Investment in Strategic Priorities, Office of the Vice President for Research, University of Iowa, \$5,000
- 2024 Targeting Inflamed Endothelial Cells Using Engineered Extracellular Vesicles. **PI: Cho**

YE. The Fraternal Order of Eagles Diabetes Research Center (FOEDRC) in the University of Iowa, College of Medicine. \$5,000
 2020-2022 **PI: Cho YE** Extracellular Vesicles in Breastmilk: A Mediator between Obese Mothers and Children. The Fraternal Order of Eagles Diabetes Research Center (FOEDRC) in the University of Iowa, College of Medicine. \$100,000

Extramural Research Grants

2013-2014 **Cho YE** (Post-doctoral Fellow). Role of p67phox in Myocardial Hypertension. National Research Foundation of Korea, \$33,000
 2013 **Cho YE** (Post-doctoral Fellow). American Heart Association's Council on Basic Cardiovascular Sciences (BCVS) International Travel Grant, \$1,000

Professional development grants

Intramural Research Grants

2021 Old Gold Summer Fellowships, University Iowa, \$6,000
 2021 Summer Grant Writing Support, University Iowa, \$3,000

PRESENTATIONS

Research and Clinical Presentations

KEY: * = data-based; † = mentored work with student/trainee/new author; ^ = co-first author; Underline = Senior but not first author; ¶=Corresponding author

International

1. *Guo DF, Morgan D, **Cho YE**, and Rahmouni K. (2025) *Differential Impact of High-Fat and High-Fat High-Sucrose Diets on Sympathetic and Cardiovascular Function in Mice*. Hypertension Scientific Sessions, Baltimore, MD. [Peer Reviewed, Poster]
2. *¶**Cho YE**, Kaufman JW, Singh B. (2025) *Engineered EVs Mitigate Endothelial Cell Dysfunction*. American Physiology Society, Baltimore, MD. [Peer Reviewed, Poster]
3. *¶**Cho YE**, †Chen S, Crouch K, †Yun J. (2024) *Altered adipose tissue-derived extracellular vesicle miRNAs in different ages and diets*. American Physiology Society, Long Beach, LA. [Peer Reviewed, Poster].
4. *Pavlovic M, †Lee DK, ¶**Cho YE**, ¶Kim JS. (2024) *Inflammatory Response Dynamics to Copper Oxide Nanoparticle Inhalation in Obese Mouse Model*. The Society of Toxicology, Salt Lake City, UT. [Peer Reviewed, Poster]
5. *¶**Cho YE** (2024), *The Impact of Breast Milk Extracellular Vesicles on Cardiovascular Health*, Breast Milk Exosome Summer Symposium at Andong University, South Korea. [Invited, Podium]

6. ***Cho YE**, Chen S, Crouch K, †Yun J. (2023) *Altered adipose tissue-derived extracellular vesicle miRNAs in different ages and diets*. American Association of Extracellular Vesicles. Boston, MA. [Peer Reviewed, Invited, Podium]
7. *†Lee DK, Pavlovic M, **Cho YE**, ¶Kim JS. (2023) *The Role of Exosomes in Cellular Toxicity Induced by Copper Oxide Nanoparticles*. The Society of Toxicology, Nashville, TN. [Peer Reviewed, Poster]
8. ***Cho YE**, †Chen S, Crouch K, Kim J (2022) *The Role of Breast Milk Extracellular Vesicles on Endothelial Dysfunction*. American Heart Association Scientific Sessions, Chicago, IL. [Peer Reviewed, Poster]
9. ***Cho YE**, Vorn R, Crouch K, Chang C, †Narayanaswamy J (2022) *Characteristics of Extracellular Vesicle miRNAs in the Breast Milk*. American Heart Association Scientific Sessions, Boston, MA. Virtual meeting. [Peer Reviewed, Poster]
10. **Cho YE** (2020) *Global Nursing Leadership Project for Undergraduate Students*. Chonnam University College of Nursing in South Korea. [Invited, Online Podium]
11. ***Cho YE**, ^Cho AR, Yun S, Kim H, Lee JW, Cashion A and Lee H (2019) *Changes in circulating miRNA profiles after dietary interventions*. International Society of Nurses in Genetics 2019 Congress, San Antonio, TX. [Peer Reviewed, Poster]
12. ***Cho YE**, Kim H, Yun S, Cashion A and Lee H (2019) *Exosomal protein profiles and weight gain after kidney transplantation*. International Society of Nurses in Genetics, 2018 Congress in Orlando, FL. [Peer Reviewed, Invited, Podium]
13. ***Cho YE**, ^Martin C, Cashion, A, Gill J (2017) *Altered DNA methylation patterns associated with clinically relevant increases in PTSD symptoms and PTSD symptom profiles in military personnel*. Experimental Biology, The American Physiological Society Physiological Genomics Interest Group Annual Research Conference, Chicago, IL. [Peer Reviewed, Invited, Podium]
14. ***Cho YE**, Zhang C, Ranjan R, Christman J, Xiao L and Zhao Q (2015) *microRNA(miR)-451 regulates cardiac growth and myocardial reactive oxidative species (ROS) level via Nrf2 and AMPK and pathways*. American Heart Association Scientific Sessions, Orlando, FL. [Peer Reviewed, Poster]
15. ***Cho YE**, Zhang C, Ranjan R, Christman J, Zhao Q and Xiao L (2013) *Novel role of microRNA (miR)-451 in modulation of oxidative stress and kinase signaling in mouse myocardium*. American Heart Association Scientific Sessions, Dallas, TX. [Peer Reviewed, Invited, Podium]
16. ***Cho YE**, Basu A, Dai A, Meldac M, Makino A (2012), *Role of superoxide in endothelial dysfunction in coronary artery from a mouse model of type 2 diabetes*. Experimental Biology, San Diego, CA. [Peer Reviewed, Poster]

National

1. Zhang M, **Cho YE**, and Moon C (2021) *The Relationship Between Neuropsychiatric Symptoms, Nighttime Behaviors, and Alzheimer's Disease CSF Biomarkers*. The Gerontological Society of America Annual Scientific Meeting, Virtual meeting. [Peer Reviewed, Poster]
2. ***Cho YE**, Choi S, Kim Y, Lee YH (2019) *Role of Ca^{2+} independent myosin light chain kinase in hypertension*. The 61st Federation Meeting of Korean Physiological Society. Seoul, Korea. [Peer Reviewed, Poster]
3. ***Cho YE**, Choi S, Kim Y, Lee YH (2018) *Intracellular acidosis induced myogenic tone change in rabbit basilar artery- Role of Ca^{2+} influx, SR Ca^{2+} release and Ca^{2+} sensitization*. The 57th Federation Meeting of Korean Physiological Society, Seoul, Korea. [Peer Reviewed, Poster]

Regional

1. Howland C, Chen S, **Cho YE**. (2024) *Social Determinants of Health and Accelerated Epigenetic Aging in Type 2 Diabetes: A Systematic Review*. Midwest Nursing Research Society, Minneapolis, MN. [Peer Reviewed, Poster]
2. ***Cho YE**, Kim J, Vorn R, Baik WH, Park H, Yun S, Kim HS, Cashion AK, Gill J, Koo BN, Lee H (2023) *Extracellular Vesicle MicroRNAs as Predictive Biomarkers in Postoperative Delirium after Spine Surgery*. Midwest Nursing Research Society, Des Moines, IA. 20x20 Presentation [Peer Reviewed, Invited, Podium]
3. *Lee D, Pavlovic M, **Cho YE**, and **Kim JS** (2022) *Investigating the roles of exosomes in cellular toxicity induced by copper oxide nanoparticles*, Central States Chapter of the Society of Toxicology (CSSOT), Kansas, MO. [Peer Reviewed, Poster]
4. ***Cho YE**, Vorn R, Crouch K, Chang C, **Narayanaswamy J**. (2022) *Characteristics of Extracellular Vesicle miRNAs in the Breast Milk*, Midwest Nursing Research Society, Chicago, IL. 20x20 Presentation [Peer Reviewed, Podium]
5. ***Cho YE**, Crouch K, **Narayanaswamy J** (2021) *Extracellular Vesicles in Breast Milk; mediators between obese mother and children*, Midwest Nursing Research Society, Virtual Conference. [Peer Reviewed, Poster]
6. ***Cho YE** (2021) *The Single Cell RNA-seq in Mild Stroke Patients*. NINR's NEWS meeting [Invited, Online Podium]
7. ***Cho YE**, Kim H, Yun S, Cashion A, Gill J (2018) *Single-cell clustering of PBMCs by using ddSeq technology*. Molecular Biology in Single Cells Symposium, NIH, Bethesda, MD. [Peer Reviewed, Poster]

Local

1. ***Cho YE** (2021), *Changes in circulating miRNA profiles after dietary interventions*. Presented at the 6th Annual University of Iowa Nursing Recognition Day, Iowa City, IA. [Poster]

2. ***Cho YE** (2021), *Breast milk Extracellular Vesicles, a mediator between mothers and children*. Presented at 2021 DRC Retreat at Levitt Center, Iowa City, IA. [Invited, Podium]
3. ***Cho YE** (2021) *Breast milk Extracellular Vesicles, a mediator between mothers and children*. Presented at Environmental Health Sciences Research Center Monthly Seminar [Invited, Online Podium]
4. ***Cho YE** (2021) *Breast milk Extracellular Vesicles, a mediator between mothers and children*. Presented at Fraternal Order of Eagles Diabetes Research Center Seminar [Invited, Online Podium]
5. **Cho YE** (2019) *Extracellular Vesicles (EVs); potential biomarkers in CVDs*. Presented at Dr. Gray Pierce Lab Meeting (University of Iowa, Department of Health and Human Physiology) [Invited, Podium]
6. **Cho YE** (2014) *Microbiology overview*. Summer Science Camp lecturer in Hanul Family Alliance, Chicago, IL. [Invited, Podium]

SERVICE

PEER REVIEW ACTIVITIES

2022- present	Associate Editor of <i>Frontiers in Cardiovascular Medicine</i>
2021- present	Reviewer of <i>Nutrition</i>
2021- present	Reviewer of <i>International Journal of Molecular Sciences</i>
2020- present	Reviewer of <i>Frontiers in Physiology, section Vascular Physiology</i>

PROFESSIONAL SERVICE ACTIVITIES

Membership

2023- present	American Physiological Society; Regular Member
2021- present	American Heart Association; Professional Member
2020- present	Midwest Nursing Research Society; RIG- Physiology, Behavior, Genomics, & Society
2020-present	Associate Faculty, Center for Advancing Multimorbidity Science: Profiling risk and symptom expression to develop customized therapies for adults with multiple chronic conditions (CAMS, 1 P20 NR018081-01, University of Iowa, College of Nursing),
2019- present	Fraternal Order of Eagles Diabetes Research Center in the University of Iowa
2017- present	International Society of Nurses in Genetics
2021- present	Korean-American Scientists and Engineers Association (KSEA)
2013-2014	Trainee membership; American Heart Association

Professional Service

2022- present	International Society of Nurses in Genetics, Research Committee
2022- present	American Heart Association, Volunteer Peer Reviewer
2020- present	Midwest Nursing Research Society; RIG- Physiology, Behavior, Genomics, &

	Society Abstract Reviewer
2017- 2020	International Society of Nurses in Genetics, Communication Committee
1999	Student Representative in International Council of Nursing (London, UK)

COLLEGIATE SERVICE

2023-present	U of Iowa College of Nursing, IT Committee
2020-present	U of Iowa College of Nursing, BSN Admissions Committee
2022	U of Iowa College of Medicine, Fraternal Order of Eagles Diabetes Research Center (FOEDRC), DRC Pilot & Feasibility Grant Reviewer
2022	U of Iowa College of Public Health, Environmental Health Sciences Research Center (EHSRC), Pilot Grant Reviewer
2022	U of Iowa College of Nursing, Faculty Awards Reviewer
2020	U of Iowa College of Nursing, Nursing Honor Program Reviewer

TEACHING

Instructional Activities

*(Note: * indicates team-teaching courses)*

Courses

Fall 2021-present	NURS: 6826-6829, Doctor of Nursing Practice Project I-IV (graduate course), Course Faculty, 8-10 students
Fall 2021-present	NURS: 3740, End of Life Care for Adults & Families (undergraduate course), Faculty Lead, 30-40 students
Spring 2023	NURS: 3732, Global Health Nursing (undergraduate course), Co-faculty, 14 students
Spring 2021-present	NURS:7404, Biological Markers in Health Research (graduate course), Invited lecturer for 3 classes, 4-10 students
Fall 2020-Spring 2022	NURS: 3734, RN-BSN: Intro in Human Genetics*, Co-faculty (undergraduate course), 14-20 students
Fall 2020-Fall 2021	NURS: 3518, RN-BSN: Pathology*, Co-faculty (undergraduate course), 30-40 students
9/2010-2/2011	Patho-physiology* (undergraduate course, appx. 100 students): Adjunct instructor at Seoul National University College of Nursing: Developed lectures on; ○ Disorders of Hematology System, Cardiovascular System, Respiratory System, Gastrointestinal System, and Urinary System ○ Fluid, Electrolyte & Acid-Base Homeostasis
3/2005-2/2011	Physiology labs* (undergraduate course, appx. 100 medical school students): Teaching assistant in Yonsei University College of Medicine ○ Cellular physiology ○ Respiratory physiology ○ Renal physiology ○ Neuromuscular physiology ○ Cardiovascular physiology

MENTORING AND ADVISEMENT

Mentoring

Graduate Students

2023	Emma Luhmann, Graduate student, Department of Molecular Physiology and Biophysics, Carver College of Medicine; Provided career counseling
2023-2024	Meina Zhang, PhD student, College of Nursing; Provided mentorship in applying for NIH F99K00 award.
2022-present	Dongkeun Lee, Postdoctoral Fellow, Department of Occupational and Environmental Health, College of Public Health; Provided mentorship for extracellular vesicle research
2022-present	Yuying Zhao, PhD student, Department of Neuroscience and Pharmacology, Carver College of Medicine; Provided career counseling and mentoring for the vascular research and extracellular vesicle research
2022-2023	Joseph Yun, Walter Johnson High School; Provided mentoring in general research with big data analysis
2021-present	Chen Shaoshuai, PhD student, Research Assistant, College of Nursing; Provided mentorship in research, lab-based experimentation, and career development
2020-present	Janhavi Narayanaswamy, MS, Volunteer, Provided mentorship in research, lab-based experimentation, and career development

Undergraduate Students

2019-2022	Gracie Torres, Alaria Harken and Reegan Schmidt, College of Nursing; Provided mentoring in clinical study practice as a faculty advisor in the Young Scientist Program
2017-2019	- Taylor Brewer, Summer intern, National Institute of Nursing Research (NINR); Provided mentorship in exosome research - Sara Mithani, Graduate Partnership Program Fellow, NINR; Provided mentorship in traumatic brain injury (TBI) research with big data analysis - Tamar Rodney, Research Resident, NINR (currently an Assistant Professor at Johns Hopkins University); Provided mentorship in TBI research and various laboratory techniques

Advisement

PhD Comprehensive Examination Committees

2025	Hannah E Hazzard, PhD student, Carver College of Medicine; Committee member
2025	Jemmie Hoang, PhD student, College of Nursing; Committee member

PhD Dissertation Committee

2023-2024	Jaewon Bae, PhD, College of Nursing. <i>The role of wound microbiome in acute open wounds</i> : Committee member
2024-2025	Jemie Hoang, PhD, College of Nursing. <i>GI Dysbiosis AND Chemotherapy-Induced GI Mucositis</i> : Committee member