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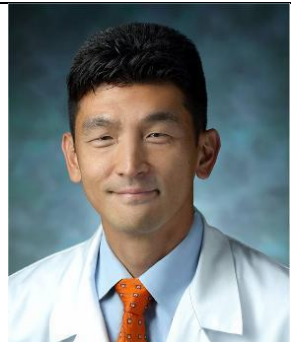
The 55th Annual Scientific Meeting of the Korean Society for Thoracic & Cardiovascular Surgery

"Post Pandemic, New Standards"

November 2(Thu) ~ 4(Sat), 2023 | Grand Intercontinental Seoul Parnas, Seoul, Korea



Curriculum Vitae

Name	First Name	Bo	Last Name	Kim
Country	United States of America			
Affiliation	Johns Hopkins University			
E-mail	Bkim38@jhmi.edu			

Educational Background

- 1988-1992: BA, Economics, Williams College, Williamstown MA
1998-2002: MD, Jefferson Medical College, Philadelphia, PA
2002-2005: Residency, Internal Medicine, Thomas Jefferson University Hospital, Philadelphia, PA
2005-2006: Chief Residency, Internal Medicine, Thomas Jefferson University Hospital, Philadelphia, PA
2007-2011: Fellowship, Pulmonary and Critical Care Medicine, Johns Hopkins University, Baltimore, MD

Professional Career

- 2006-2007: Assistant Residency Program Director, Department of Medicine, Philadelphia, PA
2006-2007: Instructor, Internal Medicine, Jefferson Medical College, Philadelphia, PA
2011-2013: Instructor, Johns Hopkins University School of Medicine, Baltimore, MD
2011-Present: Intensivist in CVSICU, Department of Surgery, Johns Hopkins University, Baltimore, MD
2013-Present: Assistant Professor of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD
2020-Present: Advanced Critical Care Clerkship Director, Johns Hopkins University, Baltimore, MD
2020-Present: Medical Director, Adult ECMO Program, Johns Hopkins University, Baltimore, MD
2021-Present: Assistant Professor of Surgery, Johns Hopkins University, Baltimore, MD

Research Field

- 2010-2017: Role of xanthine oxidoreductase in ventilator associated lung injury
2018-2020: PCSK9 and LOX-1 as novel biomarkers in ARDS
2020-Present: Clinical research in ECMO

Papers, Books, etc. presented or published by your name

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Please see the accompanying Curriculum Vitae for a full list

1. Damico R., Simms T., **Kim B.**, Tekeste Z., Amankwan H., Damarla M., and Hassoun P.M., (2010) *p53 Mediates Cigarette Smoke Induced Apoptosis of Pulmonary Endothelial Cells: Inhibitory Effects of Macrophage Migration Inhibitory Factor*. Am J Respir Cell Mol Biol Mar;44(3):323-32. Data analysis. Manuscript writing. Joint authorship.
2. **Kim BS**, Serebreni L, Hamdan O, Wang L, Parniani A, Sussan T, Stephens RS, Boyer L, Damarla M, Hassoun PM, Damico RL. *Xanthine oxidoreductase is a critical mediator of cigarette smoke-induced endothelial cell DNA damage and apoptosis*. Free Radic Biol Med. 2013 Jul;60:336-46.
3. Fallica J, Boyer L, **Kim B**, Serebreni L, Varela L, Hamdan O, Wang L, Simms T, Damarla M, Kolb TM, Bucala R, Mitzner W, Hassoun PM, Damico R. *Macrophage migration inhibitory factor (MIF) is a novel determinant of cigarette smoke-induced lung damage*. Am J Respir Cell Mol Biol. Feb; 2014. Data analysis. Joint authorship.
4. Damarla M, Parniani AR, Johnston L, Maredia H, Serebreni L, Hamdan O, Sidhaye VK, Shimoda LA, Myers AC, Crow MT, Schmidt EP, Machamer CE, Gaestel M, Rane MJ, Kolb TM, **Kim BS**, Damico RL, Hassoun PM. *MK2 mediates apoptosis during lung vascular permeability by regulating movement of cleaved caspase 3*. Am J Respir Cell Mol Biol. May; 2014. Data analysis. Joint authorship.
5. **Kim BS**, Serebreni L, Fallica J, Hamdan O, Wang L, Johnston L, Kolb T, Damarla M, Damico R, and Hassoun PM, 'Cyclin-Dependent Kinase Five Mediates Activation of Lung Xanthine Oxidoreductase in Response to Hypoxia', PLoS One, 10 (2015), e0124189.
6. Grimm, J.C., Valero V, Magruder J.T., Kilic, A., Dungan, S., Silhan, L., Shah, P., **Kim BS**, Merlo CA, Sciortino CM, Shah AS. *A novel risk score that incorporates recipient and donor variables to predict 1-year mortality in the current era of lung transplantation*. J Heart Lung Transplant, 2015. Data analysis. Joint authorship.
7. Fallica, J., Varela, L., Johnston, L., **Kim B.**, Serebreni L, Wang L, Damarla M, Kolb TM, Hassoun PM, Damico R. *Macrophage Migration Inhibitory Factor (MIF) is a Novel Inhibitor of ASK1-p38-XOR-Dependent Cigarette Smoke-Induced Apoptosis*. Am J Respir Cell Mol Biol, 2015. Data analysis. Joint authorship.
8. Stephens RS, Johnston L, Servinsky L, **Kim B**, Damarla M. *The Tyrosine Kinase Inhibitor Imatinib Prevents Lung Injury and Death After Intravenous Lipopolysaccharide in Mice*. Phys Rep. 2015. Data analysis. Joint authorship.
9. Magruder JT, Crawford TC, Grimm JC, **Kim B**, Shah AS, Bush EL, Higgins RS, Merlo CA. *Risk factors for De Novo Malignancy Following Lung Transplantation*. Am J Transplant 2016 Jun 20. Data analysis. Joint authorship.
10. Magruder JT, Shah AS, Crawford TC, Grimm JC, **Kim B**, Orens JB, Bush EL, Higgins RS, Merlo CA. *Simulated regionalization of heart and lung transplantation in the United States*. Am J Transplant 2016 Sept 12. Data analysis. Joint authorship.
11. Crawford TC, Magruder JT, Grimm JC, Sciortino C, Conte JV, **Kim BS**, Higgins RS, Cameron DE, Sussman M, Whitman GJ. *Early extubation: A proposed new metric*. Semin Thorac Cardiovasc Surg. 2016 Apr 26. Data analysis. Joint authorship.
12. Crawford TC, Grimm JC, Magruder JT, Ha J, Sciortino CM, **Kim BS**, Bush EL, Conte JV, Higgins RS, Shah AS, Merlo CA. *Lung transplant mortality is improving in recipients with a lung allocation score in the upper quartile*. Ann Thoracic Surg. 2017 May. Data analysis. Joint authorship.
13. Reed RM, Borgan SM, Eberlein M, Goldklang M, Lewis J, Miller M, Navab M, **Kim BS**. [Tobacco Smoke Exposure Reduces Paraoxonase Activity in a Murine Model](#). Int J Biomed Sci. 2017 Mar;13(1):20-25.
14. Crawford TC, Magruder JT, Grimm JC, Saurez-Pierre A, Zhou X, Ha JS, Broderick SR, Merlo CA, **Kim B**, Bush EL. *Impaired preoperative renal function should not be a barrier to transplantation in patients with cystic fibrosis*. J Hea Lun T. 2017 April. Data analysis. Joint authorship.
15. Damarla M, Johnston LF, Liu G, Gao L, Wang L, Varela L, Kolb TM, **Kim BS**, Damico RL, Hassoun PM. [XOR inhibition with febuxostat accelerates pulmonary endothelial barrier recovery and improves survival in lipopolysaccharide-induced murine sepsis](#). Physiol Rep. 2017 Aug;5(15). Data analysis. Joint authorship.
16. Magruder JT, Grimm JC, Crawford TC, Johnston L, Santhanam L, Stephens RS, Berkowitz DE, Shah AS, Bush EL, Damico RL, Hassoun PM, **Kim BS**. *Imatinib is protective against ischemia-reperfusion injury in an ex vivo rabbit model of lung injury*. Ann Thoracic Surg. 2018 Mar; 105 (3):950-956.

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17. Metkus TS, Guallar E, Sokoll L, Morrow DA, Tomaselli G, Brower R, **Kim BS**, Schulman S, Korley FK. *Progressive myocardial injury is associated with mortality in the acute respiratory distress syndrome*. J Crit Care. 2018 Dec; 48: 26-31. Data analysis. Joint authorship.
18. Crawford TC, Lui C, Magruder JT, Suarez-Pierre A, Ha JS, Higgins RS, Broderick SR, Merlo CA, **Kim BS**, Bush EL. *Traumatically brain-injured donors and the impact on lung transplant survival*. Ann Thorac Surg 2018 Sep; 106(3):842-847. Data analysis. Joint authorship.
19. Crawford TC, Magruder JT, Lui C, Ha J, Higgins RS, Merlo CA, **Kim BS**, Bush EL. *5-Year mortality hazard is reduced in COPD patients receiving double versus single lung transplants*. J Surg Res. 2019 May. Data analysis. Joint authorship.
20. Hsu J, Krishnan A, Lee SA, Dodd-O JM, **Kim BS**, Illei P, Yarnoff K, Hamad AA, Rabb H, Bush EL. *CD3+CD4-CD8- Double-negative $\alpha\beta$ T cells attenuate lung ischemia-reperfusion injury*. J Thorac Cardiovasc Surg. 2019 Nov 2. Data analysis. Joint authorship.
21. Goyanes AM, Modobaeva A, Marimoutou M, Varela LC, Wang L, Johnston LF, Aladdin MM, Peloquin GL, **Kim BS**, Damarla M, Suresh K, Sato T, Kolb TM, Hassoun PM, Damico RL. *Functional impact of human genetic variants of COL18A1/Endostatin on Pulmonary Endothelium*. Am J Respir Cell Mol Biol. 2020 Apr. Data analysis. Joint authorship.
22. Cho SM, Geocadin RG, Caturegli G, Chan V, White B, Dodd-O J, **Kim BS**, Sussman M, Choi CW, Whitman G, Chen LL. *Understanding characteristics of acute brain injury in adult extracorporeal membrane oxygenation: an autopsy study*. Crit Care Med. 2020 Jun; 48(6). Data analysis. Joint authorship.
23. Gladstone DE, **Kim BS**, Mooney K, Karaba AH, D'Alessio FR. *Regulatory T Cells for Treating Patients With COVID-19 and Acute Respiratory Distress Syndrome: Two Case Reports*. Ann Intern Med. 2020 Nov 17; 173(10):852-853. Data analysis, manuscript writing. Joint authorship.
24. Metkus TS, **Kim BS**, Jones SR, Martin SS, Schulman SP, Leucker TM. *Plasma proprotein convertase subtilisin/kexin type 9 (PCSK9) in the acute respiratory distress syndrome*. PLOS one, in submission 2020. Data analysis. Joint authorship.
25. Cho SM, Canner J, Caturegli G, Choi CW, Chiarini G, Calligy K, Rycus P, Lorusso R, **Kim BS**, Sussman M, Suarez JI, Romergryko G, Bush EL, Ziai W, Whitman G. *Risk factors of ischemic and hemorrhagic stroke during veno-venous extracorporeal membrane oxygenation: analysis of data from the extracorporeal life support organization registry*. Crit Care Med. 2021 Jan 1; 49(1):91-101. Data analysis. Joint authorship.
26. Garibaldi BT, Fiksel J, Muschelli J, Robinson M, Rouhizadeh M, Perin J, Schumock G, Nagy P, Gray JH, Malapati H, Ghobadi-Krueger M, Niessen TM, **Kim BS**, Hill PM, Ahmed MS, Dobkin ED, Blanding R, Abele J, Woods B, Harkness K, Thiemann DR, Bowring MG, Eng AB, Wang MC, Bandeen-Roche K, Rosen A, Zeger SL, Gupta A. *Patient trajectories and risk factors for severe outcomes among persons hospitalized for COVID-19 in the Maryland/DC region*. Ann Intern Med. 2021 Jan; 174(1):33-41. Data analysis. Joint authorship.
27. Mayer KP, Sarah EJ, Etchill EW, Fakhri S, Hoffman J, Sevin CM, Zwischenberger JB, Rove JY, ORACLE group authors **Kim BS**. *Long-term recovery of survivors of coronavirus disease (COVID-19) treated with extracorporeal membrane oxygenation: the next imperative*. JTCVS Open. 2021 Mar; 5:163-168. Data analysis. Joint authorship.
28. Kannapadi NV, Jami M, Premraj L, Etchill EW, Giuliano K, Bush EL, **Kim BS**, Seal S, Whitman G, Cho SM. *Neurologic injury in patients with COVID-19 who receive VV-ECMO therapy: a cohort study*. J Cardiothorac Vasc Anesth. 2021 May 13; S1053-0770(21)00428-6. Data analysis. Joint authorship.
29. Wilcox C, Etchill E, Giuliano K, Mayasi Y, Gusdon AM, Cho I CW, **Kim BS**, Bush EL, Geocadin RG, Whitman GJ, Cho SM. *Acute brain injury in postcardiotomy shock treated with venoarterial extracorporeal membrane oxygenation*. J Cardiothorac Vasc Anesth. 2021 Jul; 35(7):1989-1996. Data analysis. Joint authorship.
30. Niedermeyer SE, Stephens RS, **Kim BS**, Metkus TS. *Calculated plasma volume status is associated with mortality in acute respiratory distress syndrome*. Crit Care Explor. 2021 Sep 3; 3(9):e0534. Data analysis. Joint authorship.
31. Al-Kawaz MN, Canner J, Caturegli G, Kannapadi N, Balucani C, Shelley L, **Kim BS**, Choi CW, Geocadin RG, Whitman G, Cho SM. *Duration of hyperoxia and neurologic outcomes in patients undergoing extracorporeal membrane oxygenation*. Crit Care Med 2021 Oct 1; 49(10):e968-e977. Data analysis. Joint authorship.
32. Ong CS, Etchill E, Dong J, Shou BL, Shelley L, Giuliano K, Al-Kawaz M, Ritzl EK, Geocadin RG, **Kim BS**, Bush EL, Choi CW, Whitman GJR, Cho SM. *Neuromonitoring detects brain injury in patients receiving extracorporeal membrane oxygenation support*. J Thorac Cardiovasc Surg. 2021 Oct 30; 502-5223(21). Data analysis. Joint authorship.

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33. Kannapadi NV, Jami M, Premraj L, Etchill EW, Giuliano K, Bush EL, **Kim BS**, Seal S, Whitman G, Cho SM. *Neurological complications in COVID-19 patients with ECMO support: a systematic review and meta-analysis*. Heart Lung Circ. 2022 Feb; 31(2):292-298. Data analysis. Joint authorship.
34. Kannapadi NV, Jami M, Premraj L, Etchill EW, Giuliano K, Bush EL, **Kim BS**, Seal S, Whitman G, *Cho SM. *Neurologic injury in patients with COVID-19 who receive VV-ECMO therapy: a cohort study*. J Cardiothorac Vasc Anesth. 2021; 35:3456-3461. Data analysis. Joint authorship.
35. Hwang J, Bronder J, Martinez NC, Geocadin RG, **Kim BS**, Bush EL, Whitman G, Choi CW, **Ritzl EK, **Cho SM. *Continuous Electroencephalography Markers of Prognostication in Comatose Patients on Extracorporeal Membrane Oxygenation*. Neurocritical Care. 2022. **Contributed as co-senior authors. Data analysis. Joint authorship.
36. Taylor LJ, Jolley SE, Ramani C, Mayer KP, Etchill EW, Mart MF, Fakhri S, Peterson S, Colborn K, Sevin CM, Kadl A, Enfield K, Whitman GJR, Zwischenberger JB, Rove JY, The ORACLE Investigators, Montgomery-Yates AA, Parker AM, Teman NR, Hoffman J, Bartels K, **Kim BS**, Cho SM, Hippensteel JA. *Early Post-Hospitalization Recovery after Extracorporeal Membrane Oxygenation in Survivors of COVID-19*. Journal of Thoracic and Cardiovascular Surgery. Data analysis. Joint authorship.
37. Cho SM, Wilcox C, Keller S, Acton M, Rondo H, Etchill E, Giuliano K, Bush B, Sair HI, Pitts J, **Kim BS**, Whitman G. *Assessing the SAfety and FEasibility of bedside portable low-field brain Magnetic Resonance Imaging in patients on ECMO (SAFE-MRI ECMO study) – Study Protocol and First Experience*. Critical Care. 2022. Data analysis. Joint authorship.
38. Ong CS, Brown P, Shou BL, Wilcox C, Cho SM, Mendez-Tellez PA, **Kim BS**, Whitman G. *Resting Energy Expenditure of Patients on Venovenous Extracorporeal Membrane Oxygenation (VV-ECMO) for Adult Respiratory Distress Syndrome (ARDS)*. Critical Care Exploration. 2022. Data analysis. Joint authorship.
39. Caturegli G, Kapoor S, **Kim BS**, Whitman GR, **Cho SM, **Ziai W. *Transcranial Doppler Microemboli and Acute Brain Injury in ECMO: A Prospective Observational Study*. JTCVS Tech., 2022 Aug 20;15:111-122. Data analysis. Joint authorship.
40. Carlson J, Etchill E, Choi CW, **Kim BS**, Geocadin R, Whitman GR, **Cho SM *Early Withdrawal of Life Sustaining Therapy in Extracorporeal Cardiopulmonary Resuscitation (ECPR): Results from the Extracorporeal Life Support Organization Registry*. Resuscitation. 2022. Oct;179:71-77. Data analysis. Joint authorship.
41. Shou BL, Ong CS, Premraj L, Brown P, Tonna JE, Dalton HJ, **Kim BS**, Keller SP, Whitman GJR, Cho SM. *Arterial oxygen and carbon dioxide tension and acute brain injury in extracorporeal cardiopulmonary resuscitation patients: Analysis of the extracorporeal life support organization registry*. J Heart Lung Transplant. 2022 Nov 5;S1053-2498(22)02199-4. Data analysis. Joint authorship.
42. Wilcox C, Acton M, Rando H, Keller S, Sair HI, Chinedozi I, Pitts J, **Kim BS**, Whitman G, Cho SM. *Safety of Bedside Portable Low-Field Brain MRI in ECMO Patients Supported on Intra-Aortic Balloon Pump*. Diagnostics (Basel). 2022 Nov 19;12(11):2871. Data analysis. Joint authorship.
43. Caturegli G, Zhang LQ, Mayasi Y, Gusdon AM, Ergin B, Ponomarev V, **Kim BS**, Keller S, Geocadin RG, Whitman GJR, Cho SM, Ziai W; HERALD Investigators. *Characterization of Cerebral Hemodynamics with TCD in Patients Undergoing VA-ECMO and VV-ECMO: a Prospective Observational Study*. Neurocrit Care. 2022 Dec 13:1-7. Data analysis. Joint authorship.
44. Cha S, **Kim BS**, Ha JS, Bush EL. *How to Do it: A Safe Bedside Protocol for Dual-Lumen Right Internal Jugular Cannulation for Venovenous Extracorporeal Membrane Oxygenation in COVID-19 Patients With Severe Acute Respiratory Distress Syndrome*. ASAIO J. 2023 Jan 1;69(1):31-35. Data analysis. Joint authorship.
45. Prokupets R, Kannapadi N, Chang H, Caturegli G, Bush EL, **Kim BS**, Keller S, Geocadin RG, Whitman GJR, Cho SM; HERALD Investigators. *Innovations (Phila)*. 2023 Jan-Feb;18(1):49-57. Data analysis. Joint authorship.
46. Fanning JP, Weaver N, Fanning RB, Griffie MJ, Cho SM, Panigada M, Obonyo NG, Zaaqoq AM, Rando H, Chia YW, Fan BE, Sela D, Chiumella D, Coppola S, Labib A, Whitman GJR, Arora RC, **Kim BS**, Motos A, Torres A, Barbe F, Grasselli G, Zanella A, Etchill E, Usman AA, Feth M, White NM, Suen JY, Li Bassi G, Peek GJ, Fraser JF, Dalton H; COVID-19 Critical Care Consortium. *Hemorrhage, Disseminated Intravascular Coagulopathy, and Thrombosis Complications Among Critically Ill Patients with COVID-19: An International COVID-19 Critical Care Consortium Study*. Crit Care Med. 2023 Feb 28:e005798. Data analysis. Joint authorship.

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47. Rando HJ, Fassbinder M, Velez AK, Etchill EW, Holmes SD, Whitman G, Cho SM, Keller S, **Kim BS**. HERALD Investigators. *Rising Mortality in Coronavirus-19 Patients Supported with Extracorporeal Membrane Oxygenation*. ASAIO J. 2023 Mar 1;69(3):254-259. Data analysis. Manuscript writing. Joint authorship.
48. Shou BL, Wilcox C, Florissi I, Krishnan A, **Kim BS**, Keller SP, Whitman GJR, Uchino K, Bush EL, Cho SM. HERALD Investigators. *National trends, risk factors, and outcomes of acute in-hospital stroke following lung transplantation in the United States: Analysis of the United Network for Organ Sharing registry*. Chest 2023 Apr 11. Data analysis. Joint authorship.
49. Akbar AF, Shou BL, Feng CY, Zhao DX, **Kim BS**, Whitman G, Bush EL, Cho SM, HERALD Investigators. *Lower oxygen tension and intracranial hemorrhage in veno-venous extracorporeal membrane oxygenation*. Lung Apr 22. Data analysis. Joint authorship.
50. Shu HT, Cho SM, Harris AB, Jami M, Shou BL, Griffie MJ, Zaaqoq AM, Wilcox C, Anders M, Rycus P, Whitman G, **Kim BS**, Shafiq B; HERALD Investigators. *Is fasciotomy associated with increased mortality in extracorporeal cardiopulmonary resuscitation?* ASAIO J. 2023 May. Data analysis. Joint authorship.
51. Sun PY, Fanning J, Peeler A, Shou B, Lindsley J, Caturegli G, Whitman G, Cha S, **Kim BS**, Cho SM; HERALD Investigators. *Characterization of delirium and its association with sedation and in-hospital mortality in patients with COVID-19 on veno-venous extracorporeal membrane oxygenation*. Front Med (Lausanne). 2023 May 25. Data analysis. Joint authorship.
52. Shou BL, Wilcox C, Florissi I, Kalra A, Caturegli G, Zhang LQ, Bush E, **Kim B**, Keller SP, Whitman GJR, Cho SM; HERALD Investigators. *Early low pulse pressure in VA-ECMO is associated with acute brain injury*. Neurocrit Care. 2023 Jun. Data analysis. Joint authorship.
53. **Kim BS**, Keller SP, Dodd-O JM. *A case series evaluating the effect of esmolol therapy to treat hypoxemia in COVID-19 patients on VV-ECMO*. Int J Artif Organs. 2023 Jun 46(6):381-383. Data analysis. Manuscript writing. Joint authorship.
54. Zhao DX, Caturegli G, Wilcox C, Stephens RS, **Kim BS**, Keller S, Geocadin RG, Suarez JL, Whitman GJ, Cho SM. *Challenges in determining death by neurologic criteria in extracorporeal membrane oxygenation – A single center experience*. Perfusion 2023 Jun. Data analysis. Joint authorship.
55. Rando HJ, Fanning JP, Cho SM, **Kim BS**, Whitman G, Bush EL, Keller SP. *Extracorporeal Membrane Oxygenation as a bridge to lung transplantation: practice patterns and patient outcomes*. J Heart Lung Transplant. 2023 Jun 30. Data analysis. Joint authorship.
56. Kalra A, Shou BL, Zhao D, Wilcox C, Keller SP, Whitman GJR, **Kim BS**, Cho SM, HERALD Investigators. *Racial and ethnical discrepancy in hypoxemia detection in patients on extracorporeal membrane oxygenation*. JTCVS Open. 2023 Mar. eCollection 2023 Jun. Data analysis. Joint authorship.