

# Park Lab | Program for Hospital and Intensive Care Informatics

## Select Publications

Listing of relevant publications. For More Complete Bibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/1jC6vxijdi-56/bibliography/public/>

### 2025

1. Joshi S, Urteaga I, van Amsterdam WAC, Hripcsak G, Elias P, Recht B, Elhadad N, Fackler J, Sendak MP, Wiens J, Deshpande K, Wald Y, Fiterau M, Lipton Z, Malinsky D, Nayan M, Namkoong H, Park S, Vogt JE, Ranganath R. AI as an intervention: improving clinical outcomes relies on a causal approach to AI development and validation. *J Am Med Inform Assoc*. 2025 Jan 7:ocae301. Online ahead of print. PMID: 39775871.
2. Tran AT, Karam GA, Zeevi D, Qureshi AI, Malhotra A, Majidi S, Murthy SB, Park S, Kontos D, Falcone G, Sheth KN, Payabvash S. Improving the Robustness of Deep-Learning Models in Predicting Hematoma Expansion from Admission Head CT. *AJNR Am J Neuroradiol*. 2025 Jan 10:ajnr.A8650. Online ahead of print. PMID: 39794133.
3. \* Kim EY, Ranard B, Mills A, **Park S**. In Limbo: Physiological Monitoring of Emergency Department Boarders. *Am J Emerg Med*. 2025 Jun;92:219-221. Doi: 10.1016/j.ajem.2025.01.077. Epub 2025 Jan 28. PMID: 39915140. PMC12066217.
4. Armaignac DL\*, Heavner SF\*, Rausen M, Zhang XT, Al-Hakim T, Strekalova YL, Shah N, Remy KE, Manion S, Haendel M, Kramer AA, Scruth EA, Rincon TA, **Park S**, Evans LE, Ozrazgat-Baslanti T, Herasevich V, Laudanski K, Murphy DJ, Engel HJ, Sikora A, Khanna AK, Zimmerman JJ, Reuter-Rice K, Cobb JP, Clermont G. Guiding Principles for Data Sharing and Harmonization: Results of a Systematic Review and Modified Delphi from the Society of Critical Care Medicine Data Science Campaign. *Crit Care Med*. 2025 Mar 1;53(3):e619-e631. Doi: 10.1097/CCM.0000000000006578. Epub 2025 Feb 21. PMID: 39982146.
5. \* Kwon SB,\* Weirnerman B,\* Nametz D, Alalqum T, Lee IS, Megjhani M, McLaren SH, Ranard B, Ku Y, Geneslaw A, **Park S**. (\*co-first authors). Pulse Rate Variability as a Predictor for Length of Stay for Patients with Bronchiolitis in the Pediatric Intensive Care Unit. *J Clin Monit Comput*. 2025 June;39(3):533-539. Doi: 10.1007/s10877-025-01287-x. Epub 2025 Mar 25. PMID: 40131664.
6. Bogossian EG, Kempen B, Veldeman M, **Park S**, Rass V, Marinesco S, Weiss M, Schubert GA, Kastenholz N, Claassen J, Kindl P, Berek A, Anderloni M, Conzen-Dilger C, Schuind S, Balança B, Yannick T, Connolly ES, Meyfroidt G, Helbok R, Carra G, Taccone FS. Visualizing the burden of brain tissue hypoxia and metabolic dysfunction assessed by multimodal neuromonitoring in subarachnoid hemorrhage patients: the TITAN study. *Intensive Care Med*. 2025 Apr;51(4):708-720. Doi: 10.1007/s00134-025-07888-z. Epub 2025 Apr 22. PMID: 40261381.
7. \* Weirnerman B, Kwon SB, Alalqum T, Nametz D, Megjhani M, Clark E, Varner C, Cheung E, **Park S**. Leveraging Pediatric Venous-Arterial Extra Corporeal Membrane Oxygenation Parameters to Identify Early Risk Factors for Mortality. *Perfusion*. 2025 May 7:2676591251340933. Doi:10.1177/02676591251340933. Online ahead of print. PMID: 40331927.

8. Briggs J, Stroh J, Foreman B, Park S, the TRACK-TBI Study Investigators, Bennett TD, Albers DJ. Personalizing the Pressure Reactivity Index for Quantifying Cerebral Autoregulation in Neurocritical Care. IEEE Trans Biomed Eng. 2025 May 15:PP.doi: 10.1109/TBME.2025.3570249. Online ahead of print. PMID: 40372858. PMC12413640.
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## 2024

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3. \* Kwon SB<sup>#</sup>, Weinerman B<sup>#</sup>, Nametz D, Megjhani M, Lee I, Habib A, Bary O, Park S. Non-invasive pulse arrival time is associated with cardiac index in pediatric heart transplant patients with normal ejection fraction. Physiol Meas. 2024 Jul 22;45(7):07NT01. doi: 10.1088/1361-6579/ad61b9. PMID: 38986482. PMC11262133. (<sup>#</sup>Co-First Authors)
4. Ridha M, Hannawi Y, Murthy S, Carvalho Poyraz F, Kumar A, Park S, Roh D, Sekar P, Woo D, Burke J. Premorbid Blood Pressure Control Modifies Risk of DWI Lesions With Acute Blood Pressure Reduction in Intracerebral Hemorrhage. Hypertension. 2024 Oct;81(10):2113-2123. Epub 2024 Jul 29. PMID: 39069917. PMC11410531.
5. Stroh JN, Foreman B, Bennett TD, Briggs JK, Park S, Albers DJ. Intracranial pressure-flow relationships in traumatic brain injury patients expose gaps in the tenets of models and pressure-oriented management. Front Physiol. 2024 Aug 12:15:1381127. eCollection 2024. PMID: 39189028. PMC11345185.
6. Barrit S, Al Barajraji M, El Hadwe S, Niset A, Foreman B, Park S, Lazaridis C, Shutter L, Appavu B, Kirschen MP, Montellano FA, Rass V, Torcida N, Pinggera D, Gilmore E, Ben-Hamouda N,

Massager N, Bernard F, Robba C, Taccone FS on behalf of the Neurocore-iMMM Research Group. Intracranial Multimodal Monitoring in Neurocritical Care (Neurocore-iMMM): an open decentralized consensus. *Crit Care*. 2024 Dec 20;28(1):427. PMID: 39707556. PMC11660549.

7. Dierksen F, Sommer JK, Tran AT, Lin H, Haider SP, Maier IL, Aneja S, Sanelli PC, Malhotra A, Qureshi AI, Claassen J, Park S, Murthy SB, Falcone GJ, Sheth KN, Payabvash S. Machine Learning Models for 3-month outcome prediction using Radiomics of intracerebral hemorrhage and Perihematomal Edema from admission head computed tomography (CT). *Diagnosics*. 2024 Dec 16;14(24):2827. PMID: 39767188. PMC11674633.

## 2023

1. Ridha M, Megjhani M, Nametz D, Kwon SB, Velazquez A, Ghoshal S, Agarwal S, Claassen J, Roh D, Connolly ES Jr, Park S. Suboptimal Cerebral Perfusion is Associated with Ischemia After Intracerebral Hemorrhage. *Neurocrit Care*. 2023 Nov 13. Online ahead of print. PMID: 37957418.
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6. Weirnerman B, Cheung E, Park S. Risk Factors and Post-Operative Management for the Bidirectional Glenn: A Literature Review. *Curr Pediatr Rep* 11, 174-179 (2023). Doi 10.1007/s40124-023-00294-3.
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6. Ranard BL, Megjhani M, Terilli K, Yarmohammadi H, Ausiello J, Park S. Heart rate variability and adrenal size provide clues to sudden cardiac death in hospitalized COVID-19 patients. *J Crit Care*. 2022 Jul 18;71:154114. PMID: 35863211 PMCID: PMC9291038.
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## 2020

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