



David Kim

Assistant Professor of Emergency Medicine (Adult Clinical/Academic) and, by courtesy, of Biomedical Data Science

CLINICAL OFFICE (PRIMARY)

- **Stanford Dept of Emergency Medicine**

900 Welch Rd Ste 350

MC 5768

Stanford, CA 94305

Tel (650) 725-9445 **Fax** (650) 723-0121

Bio

CLINICAL FOCUS

- Emergency Medicine
- Machine Learning
- Population Health
- Epidemiology
- Network Science

ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Emergency Medicine
- Assistant Professor - University Medical Line (By courtesy), Department of Biomedical Data Science
- Member, Wu Tsai Neurosciences Institute

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Society of Academic Emergency Medicine (2016 - present)
- Member, American College of Emergency Physicians (2016 - present)

PROFESSIONAL EDUCATION

- Board Certification: Emergency Medicine, American Board of Emergency Medicine (2021)
- Residency: Stanford University Emergency Medicine Residency (2020) CA
- Medical Education: Harvard Medical School (2016) MA
- MD, Harvard Medical School (2016)
- PhD, Harvard Graduate School of Arts & Sciences (2015)
- BSc, University of Toronto (2007)

Publications

PUBLICATIONS

- **Predicting Future Organ Support Needs Using Longitudinal Emergency Department Data: A Proof-of-Concept Study.** *Research square*
Chiacchia, S., Lebold, K., Moore, A., Hedlin, H., Rose, C., Kim, D., Wilson, J.
2026
- **Opportunistic Cardiovascular Risk Assessment Using Routine Head CT in the Emergency Department.** *Journal of the American College of Cardiology*
Zhang, X., Acosta, J. N., Dogra, S., Silva, E. N., Basu, S., Krumholz, H. M., Khera, R., Rajpurkar, P., Kim, D.
2026
- **A clinical environment simulator for dynamic AI evaluation.** *Nature medicine*
Luo, L., Kim, S. E., Zhang, X., Kernbach, J. M., Kenia, R., Acosta, J. N., Nathanson, L. A., Haimovich, A. D., Rodman, A., Goh, E., Chen, J. H., Shah, N. H., Kim, et al
2026
- **In reply.** *Annals of emergency medicine*
Kim, D.
2026; 87 (3): 395-396
- **Brief Instrumented Mobility Testing Improves Fall Risk Stratification in Older Emergency Department Patients.** *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*
Suffoletto, B., Ashenburg, N., Losak, M., Kim, D.
2026; 33 (3): e70259
- **ED-Explain: Personalized Video Instructions for Patients Discharged from the Emergency Department.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
Luo, L., Chen, E., Zhang, X., Acosta, J. N., Jin, B. T., Gunturkun, F., Rose, C., Preiksaitis, C., Suffoletto, B., Rajpurkar, P., Kim, D. A.
2026; 31: 280-293
- **Evaluation of Large Language Models as Emergency Department Revisit Predictors.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
Chen, E., Luo, L., Gunturkun, F., Sambara, S., Arora, R., Jin, B. T., Rajpurkar, P., Kim, D. A.
2026; 31: 130-143
- **NotifAI-OS: an AI framework for automated CT-based opportunistic screening in post-acute value-based care.** *Nature biomedical engineering*
Reddy, R., Pickhardt, P. J., Manrai, A., Summers, R. M., Kim, D., Rajpurkar, P.
2025
- **Feasibility and Acceptability of a Large Language Model-Based Motivational Interviewing Agent in the Emergency Department.** *Annals of emergency medicine*
Suffoletto, B., Prieksaitis, C., Rose, C., Kim, D., Pillai, N., Pitre, V.
2025
- **Fully Automated Diagnosis of Acute Myocardial Infarction Using Electrocardiograms and Multimodal Deep Learning.** *JACC. Advances*
Hilgendorf, L., Petursson, P., Andersson, E., Rawshani, A., Bhatt, D. L., Råmunddal, T., Gupta, V., Skoglund, K., Omerovic, E., Sjöland, H., Taha, A., Kim, D., Lundgren, et al
2025; 4 (8): 102011
- **Opportunistic Screening for Atrial Fibrillation With Continuous ECG Monitoring in the Emergency Department.** *Annals of emergency medicine*
Bismuth, E., Jin, B. T., Molins, E., Nakhasi, A., Pritchard, A., Wang, Y., Rose, C., Preiksaitis, C., Kim, D.
2025
- **MC-MED, multimodal clinical monitoring in the emergency department.** *Scientific data*
Kansal, A., Chen, E., Jin, B. T., Rajpurkar, P., Kim, D. A.
2025; 12 (1): 1094

- **Evaluation of a text message + pedometer intervention to increase steps after emergency department discharge: a pilot study.** *Aging clinical and experimental research*
Suffoletto, B., Mayer, W., Toth, C., Ashenburg, N., Lin, M., Losak, M., Kim, D.
2025; 37 (1): 131
- **An evaluation framework for clinical use of large language models in patient interaction tasks.** *Nature medicine*
Johri, S., Jeong, J., Tran, B. A., Schlessinger, D. I., Wongvibulsin, S., Barnes, L. A., Zhou, H. Y., Cai, Z. R., Van Allen, E. M., Kim, D., Daneshjou, R., Rajpurkar, P.
2025
- **Multimodal Clinical Monitoring in the Emergency Department (MC-MED)** *PhysioNet*
Kansal, A., Chen, E., Jin, B. T., Rajpurkar, P., Kim, D.
2025
- **Development of a model predicting falls in older emergency department patients using smartphone-based mobility measures.** *Journal of the American Geriatrics Society*
Suffoletto, B., Kim, D., Toth, C., Mayer, W., Ashenburg, N., Lin, M., Losak, M.
2024
- **Feasibility of Measuring Smartphone Accelerometry Data During a Weekly Instrumented Timed Up-and-Go Test After Emergency Department Discharge: Prospective Observational Cohort Study.** *JMIR aging*
Suffoletto, B., Kim, D., Toth, C., Mayer, W., Glaister, S., Cinkowski, C., Ashenburg, N., Lin, M., Losak, M.
2024; 7: e57601
- **GPT4 Accurately Classifies the Clinical Actionability of Emergency Department Imaging Reports** *GPT4 Accurately Classifies the Clinical Actionability of Emergency Department Imaging Reports*
Tang, K., Reisler, J., Rose, C., Suffoletto, B., Kim, D.
2024; 7 (36)
- **A framework for integrating artificial intelligence for clinical care with continuous therapeutic monitoring.** *Nature biomedical engineering*
Chen, E., Prakash, S., Janapa Reddi, V., Kim, D., Rajpurkar, P.
2023
- **Development and external validation of a pretrained deep learning model for the prediction of non-accidental trauma.** *NPJ digital medicine*
Huang, D., Cogill, S., Hsia, R. Y., Yang, S., Kim, D.
2023; 6 (1): 131
- **Maximizing Equity in Acute Coronary Syndrome Screening across Sociodemographic Characteristics of Patients.** *Diagnostics (Basel, Switzerland)*
Bunney, G., Bloos, S. M., Graber-Naidich, A., Pasao, M. A., Kabeer, R., Kim, D., Miller, K., Yiadom, M. Y.
2023; 13 (12)
- **Association of physician malpractice claims rates with admissions for low-risk chest pain.** *American journal of medicine open*
Quinn, J., Chung, S., Kim, D.
2023; 9: 100041
- **Predicting patient decompensation from continuous physiologic monitoring in the emergency department.** *NPJ digital medicine*
Sundrani, S., Chen, J., Jin, B. T., Abad, Z. S., Rajpurkar, P., Kim, D.
2023; 6 (1): 60
- **Association of Physician Malpractice Claims Rates with Admissions for Low-Risk Chest Pain** *American Journal of Medicine Open*
Quinn, J. V., Chung, S., Kim, D. A.
2023
- **Multimodal Clinical Benchmark for Emergency Care (MC-BEC): A Comprehensive Benchmark for Evaluating Foundation Models in Emergency Medicine**
Chen, E., Kansal, A., Chen, J., Jin, B., Reisler, J., Kim, D. A., Rajpurkar, P.
edited by Oh, A., Neumann, T., Globerson, A., Saenko, K., Hardt, M., Levine, S.
NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2023

- **Development and external validation of a pretrained deep learning model for the prediction of non-accidental trauma** *npj Digital Medicine*
Huang, D., Cogill, S., Hsia, R. Y., Yang, S., Kim, D.
2023; 6 (131)
- **Factors Predicting Misidentification of Acute Ischemic Stroke and Large Vessel Occlusion by Paramedics.** *Critical pathways in cardiology*
Glober, N. K., Fulks, T., Supples, M., Panagos, P., Kim, D.
2022; 21 (4): 172-175
- **Natural language processing to classify electrocardiograms in patients with syncope: A preliminary study.** *Health science reports*
Quinn, J., Kim, D., Rice, B. T., Hao, W. D.
2022; 5 (6): e904
- **Using a 29-mRNA Host Response Classifier To Detect Bacterial Coinfections and Predict Outcomes in COVID-19 Patients Presenting to the Emergency Department.** *Microbiology spectrum*
Ram-Mohan, N., Rogers, A. J., Blish, C. A., Nadeau, K. C., Zudock, E. J., Kim, D., Quinn, J. V., Sun, L., Liesenfeld, O., Yang, S.
2022: e0230522
- **Development and Comparative Performance of Physiologic Monitoring Strategies in the Emergency Department.** *JAMA network open*
Kim, D., Jin, B. T.
2022; 5 (9): e2233712
- **Predicting malnutrition from longitudinal patient trajectories with deep learning.** *PloS one*
Jin, B. T., Choi, M. H., Moyer, M. F., Kim, D. A.
2022; 17 (7): e0271487
- **Detection of bacterial co-infections and prediction of fatal outcomes in COVID-19 patients presenting to the emergency department using a 29 mRNA host response classifier.** *medRxiv : the preprint server for health sciences*
Ram-Mohan, N., Rogers, A. J., Blish, C. A., Nadeau, K. C., Zudock, E. J., Kim, D., Quinn, J. V., Sun, L., Liesenfeld, O., Stanford COVID-19 Biobank Study Group, Yang, S.
2022
- **A Novel Emergency Medical Services Protocol To Improve Treatment Time For Large Vessel Occlusion Strokes**
Glober, N., Supples, M., Persaud, S., Kim, D., Liao, M., Glidden, M., O'Donnell, D., Tainter, C., Boustani, M., Alexander, A.
LIPPINCOTT WILLIAMS & WILKINS.2022
- **A novel emergency medical services protocol to improve treatment time for large vessel occlusion strokes.** *PloS one*
Glober, N., Supples, M., Persaud, S., Kim, D., Liao, M., Glidden, M., O'Donnell, D., Tainter, C., Boustani, M., Alexander, A.
2022; 17 (2): e0264539
- **Transfer learning enables prediction of myocardial injury from continuous single-lead electrocardiography** *Journal of the American Medical Informatics Association*
Jin, B. T., Palleti, R., Shi, S., Ng, A., Quinn, J. V., Rajpurkar, P., Kim, D.
2022
- **Natural Language Processing to Classify Electrocardiograms in Patients With Syncope** *Academic Emergency Medicine*
Quinn, J. V., Kim, D. A., Hao, D., Rice, B. T.
2022; 29 (S1)
- **Predicting Myocardial Injury From Continuous Single-Lead Electrocardiography in the Emergency Department** *Academic Emergency Medicine*
Kim, D. A., Jin, B. T., Palleti, R., Shi, S., Ng, A., Quinn, J. V., Rajpurkar, P.
2022; 29 (S1)
- **Association Between SARS-CoV-2 RNAemia and Postacute Sequelae of COVID-19.** *Open forum infectious diseases*
Ram-Mohan, N., Kim, D., Rogers, A. J., Blish, C. A., Nadeau, K. C., Blomkalns, A. L., Yang, S.
2022; 9 (2): ofab646
- **SARS-CoV-2 RNAemia predicts clinical deterioration and extrapulmonary complications from COVID-19.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
Ram-Mohan, N. n., Kim, D. n., Zudock, E. J., Hashemi, M. M., Tjandra, K. C., Rogers, A. J., Blish, C. A., Nadeau, K. C., Newberry, J. A., Quinn, J. V., O'Hara, R. n., Ashley, E. n., Nguyen, et al

2021

- **Malpractice Claim Rates Are Associated with Admission of Low-Risk Chest Pain** *Academic Emergency Medicine*
Kim, D., Chung, S., Quinn, J.
2021; 28 (S1)
- **Association Between SARS-CoV-2 RNAemia and Post-Acute Sequelae of COVID-19.** *medRxiv : the preprint server for health sciences*
Ram-Mohan, N., Kim, D., Rogers, A. J., Blish, C. A., Nadeau, K. C., Blomkalns, A. L., Yang, S.
2021
- **Social Determinants of Hallway Bed Use.** *The western journal of emergency medicine*
Kim, D. A., Sanchez, L. D., Chiu, D., Brown, I. P.
2020; 21 (4): 949–58
- **Rates of Co-infection Between SARS-CoV-2 and Other Respiratory Pathogens.** *JAMA*
Kim, D., Quinn, J., Pinsky, B., Shah, N. H., Brown, I.
2020
- **A Body Bag Can Save Your Life: A Novel Method of Cold Water Immersion for Heat Stroke Treatment** *A Body Bag Can Save Your Life: A Novel Method of Cold Water Immersion for Heat Stroke Treatment*
Kim, D. A., Lindquist, B. D., Shen, S. H., Wagner, A. M., Lipman, G. S.
2020: 4
- **A body bag can save your life: a novel method of cold water immersion for heat stroke treatment.** *Journal of the American College of Emergency Physicians open*
Kim, D. A., Lindquist, B. D., Shen, S. H., Wagner, A. M., Lipman, G. S.
2020; 1 (1): 49–52
- **SARS-CoV-2 RNAemia predicts clinical deterioration and extrapulmonary complications from COVID-19.** *medRxiv : the preprint server for health sciences*
Ram-Mohan, N. n., Kim, D. n., Zudock, E. J., Hashemi, M. M., Tjandra, K. C., Rogers, A. J., Blish, C. A., Nadeau, K. C., Newberry, J. A., Quinn, J. V., O'Hara, R. n., Ashley, E. n., Nguyen, et al
2020
- **Validation of the NUE rule to predict futile resuscitation of out-of-hospital cardiac arrest.** *Prehospital emergency care : official journal of the National Association of EMS Physicians and the National Association of State EMS Directors*
Glober, N. K., Lardaro, T. n., Christopher, S. n., Tainter, C. R., Weinstein, E. n., Kim, D. n.
2020: 1–8
- **An Interpretable Deep Learning Model for the Prevention of Self-Harm and Suicide**
Kim, D., Cogill, S., Yang, S.
MOSBY-ELSEVIER.2019: S6
- **A simple decision rule predicts futile resuscitation of out-of-hospital cardiac arrest.** *Resuscitation*
Glober, N. K., Tainter, C. R., Abramson, T. M., Staats, K. n., Gilbert, G. n., Kim, D. n.
2019
- **Reply to "the futility of resuscitating an out-of-hospital cardiac arrest cannot be summarized by three simple criteria."** *Resuscitation*
Glober, N. K., Tainter, C. R., Kim, D. n.
2019
- **Predicting First Episodes of Non-Accidental Trauma With Machine Learning**
Kim, D., Cogill, S., Yang, S.
MOSBY-ELSEVIER.2018: S145
- **Exposure, hazard, and survival analysis of diffusion on social networks** *STATISTICS IN MEDICINE*
Wu, J., Crawford, F. W., Kim, D. A., Stafford, D., Christakis, N. A.
2018; 37 (17): 2561–85
- **Social connectedness is associated with fibrinogen level in a human social network** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*

Kim, D. A., Benjamin, E. J., Fowler, J. H., Christakis, N. A.
2016; 283 (1837)

- **Social network targeting to maximise population behaviour change: a cluster randomised controlled trial.** *Lancet (London, England)*

Kim, D. A., Hwang, A. R., Stafford, D., Hughes, D. A., O'Malley, A. J., Fowler, J. H., Christakis, N. A.
2015; 386 (9989): 145-53

- **In Bad Taste: Evidence for the Oral Origins of Moral Disgust** *SCIENCE*

Chapman, H. A., Kim, D. A., Susskind, J. M., Anderson, A. K.
2009; 323 (5918): 1222-26