Stanford



Saraswati Kache

Clinical Professor, Pediatrics - Critical Care

CLINICAL OFFICE (PRIMARY)

- **Pediatric Intensive Care**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

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Bio

BIO

Dr. Kache is a Clinical Professor of Pediatrics in the Division of Critical Care Medicine whose work spans pediatric transport, device innovation, global health, and sustainability. A recent Stanford Biodesign Faculty Fellow and recognized educator with multiple teaching awards, she is engaged in device development, building on a career devoted to critically ill children through innovation, education, and global collaboration.

She chairs the Sepsis Steering Committee at LPCH, which she helped launch in 2017 to develop a hospital-specific pathway from international guidelines, identify improvement opportunities, and drive better outcomes through education and evaluation of clinical data. She previously served on the American College of Critical Care Medicine committee that authored the Pediatric Sepsis Guidelines, shaping national and international standards.

As Medical Director of the Transport Program, she focuses on team education and standardized processes to build a high-functioning pediatric critical care transport team dedicated to safe inter-facility transport of critically ill children. She is also partnering with the American Academy of Pediatrics on a national multidisciplinary pediatric transport curriculum.

As a Stanford Innovations in Global Health Faculty Fellow, she founded the pediatric residency's Global Health Track to train physicians in equitable, sustainable pediatric care. Internationally, she has helped establish and support PICUs in Nepal, Uganda, and Zimbabwe, introduced CPAP in low-resource settings, and led PICU education and capacity-building to strengthen critical care infrastructure.

A member of the Maternal Child Health Research Institute, her research integrates guideline development, systems improvement, and global implementation of evidence-based pediatric critical care. She has recently begun examining how healthcare systems affect climate change and how to improve sustainability.

CLINICAL FOCUS

- Pediatric Critical Care Medicine

ACADEMIC APPOINTMENTS

- Clinical Professor, Pediatrics - Critical Care
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Medical Director Pediatric Critical Care Transport Team, Stanford Children's Health - LPCH, (2016- present)
- Chair Sepsis Steering Committee, Stanford Children's Health - LPCH, (2017- present)
- Medical Director Transfer Center, Stanford Children's Health, (2019-2023)

PROFESSIONAL EDUCATION

- Fellowship: UCLA Pediatric Critical Care Medicine Fellowship (2003) CA
- Board Certification: Pediatric Critical Care Medicine, American Board of Pediatrics (2022)
- Board Certification: Pediatrics, American Board of Pediatrics (2022)
- Board Certification: Pediatrics, American Board of Pediatrics (1999)
- Residency: Children's Hospital Los Angeles (1999) CA
- Medical Education: Wayne State University School of Medicine (1996) MI

Publications

PUBLICATIONS

- **A Multidisciplinary ICU Clerkship Curriculum Incorporating Simulation and Competency-Based Education: Design, Implementation, and Early Outcomes.** *Advances in medical education and practice*
  Arkin, N., Ramaswamy, T., Carvalho, B., Kache, S., Nassar, A. K., Johnson, C. L., Hennessey, E., Barr, J.
  2026; 17: 618733
- **To: What's the best strategy for biomarker-guided antibiotic therapy in sepsis.** *Critical care science*
  Lanziotti, V. S., Jabornisky, R., Kache, S.
  2026; 38: e202601852
- **To: Improving the outcomes of sepsis in Brazil: strategies and initiatives.** *Critical care science*
  Lanziotti, V. S., Kache, S.
  2026; 38: e20260226
- **A Multidisciplinary ICU Clerkship Curriculum Incorporating Simulation and Competency-Based Education: Design, Implementation, and Early Outcomes** *ADVANCES IN MEDICAL EDUCATION AND PRACTICE*
  Arkin, N., Ramaswamy, T., Carvalho, B., Kache, S., Nassar, A., Johnson, C. L. C., Hennessey, E., Barr, J.
  2026; 17
- **Impact of the Climate Crisis on Childhood Health.** *Pediatrics in review*
  Henning, A., Kache, S.
  2025; 46 (12): 678-691
- **Validity Evidence for a Transport Medical Control Assessment Tool Using Simulated Interfacility Transport Calls.** *Academic pediatrics*
  Good, R. J., Schwartz, A., Mink, R., Boyer, D. L., Rozenfeld, R. A., Kink, R. J., Miquel-Verges, F., McLean, C. K., Chilakala, S. K., Corden, M. H., Tseng, A. S., Molas-Torreblanca, K., Pfister, et al
  2025: 103153
- **A RARE CAUSE OF SEVERE PEDIATRIC ACUTE RESPIRATORY DISTRESS SYNDROME**
  Lew, A., Koilparampil, L., Kache, S., Haileselassie, B.
  LIPPINCOTT WILLIAMS & WILKINS.2024
- **MYOPERICARDITIS IN A PEDIATRIC PATIENT WITH TYPICAL HEMOLYTIC UREMIC SYNDROME**
  Lew, A., Henning, A., Kache, S.

LIPPINCOTT WILLIAMS & WILKINS.2024: S319

- **A RARE CAUSE OF SEVERE PEDIATRIC ACUTE RESPIRATORY DISTRESS SYNDROME**
  Lew, A., Koilparampil, L., Kache, S., Haileselassie, B.
  LIPPINCOTT WILLIAMS & WILKINS.2024: S412

- **New Phoenix criteria for pediatric sepsis and septic shock: the strengths and the future of a comprehensive perspective.** *Critical care science*
  Lanziotti, V. S., Ventura, A., Kache, S., Fernandez-Sarmiento, J.
  2024; 36: e20240058en

- **MYOPERICARDITIS IN A PEDIATRIC PATIENT WITH TYPICAL HEMOLYTIC UREMIC SYNDROME**
  Lew, A., Henning, A., Kache, S.
  LIPPINCOTT WILLIAMS & WILKINS.2024

- **MYOPERICARDITIS IN A PEDIATRIC PATIENT WITH TYPICAL HEMOLYTIC UREMIC SYNDROME**
  Lew, A., Henning, A., Kache, S.
  SAGE PUBLICATIONS LTD.2023: NP608

- **Prevalence of Anemia and Associated Factors among Infants under Six Months in Rural China.** *Public health nutrition*
  Du, Y., Durstenfeld, A., Dill, S., Wang, Q., Zhou, H., Xue, H., Kache, S., Medina, A., Rozelle, S.
  2022: 1-27

- **DKA PATHWAY TO KEEP ERRORS AT BAY: STANDARDIZING DKA MANAGEMENT IN A PICU**
  Moss, J., Giese-Kim, N., Margossian, S., Dorwart, E., Kache, S., Shah, S.
  LIPPINCOTT WILLIAMS & WILKINS.2022: 632

- **DO TARGETED QUALITY IMPROVEMENT INTERVENTIONS IMPROVE PEDIATRIC SEPSIS BUNDLE COMPLIANCE?**
  Durstenfeld, A., Chen, C., Moss, J., Lopez, M., Pyke-Grimm, K., Weng, Y., Bunning, B., Kache, S.
  LIPPINCOTT WILLIAMS & WILKINS.2021: 623

- **Use of Chimeric Antigen Receptor Modified T Cells With Extensive Leukemic Myocardial Involvement** *JACC: CARDIOONCOLOGY*
  Han, B., Montiel-Esparza, R., Chubb, H., Kache, S., Schultz, L. M., Davis, K. L., Ramakrishna, S., Su, L.
  2020; 2 (4): 666–70

- **Use of Chimeric Antigen Receptor Modified T Cells With Extensive Leukemic Myocardial Involvement.** *JACC. CardioOncology*
  Han, B., Montiel-Esparza, R., Chubb, H., Kache, S., Schultz, L. M., Davis, K. L., Ramakrishna, S., Su, L.
  2020; 2 (4): 666-670

- **Recent outcomes of the extracardiac Fontan procedure in patients with hypoplastic left heart syndrome** *ANNALS OF PEDIATRIC CARDIOLOGY*
  Arunamata, A., Tacy, T. A., Kache, S., Mainwaring, R. D., Ma, M., Maeda, K., Punn, R.
  2020; 13 (3): 186–93

- **Recent outcomes of the extracardiac Fontan procedure in patients with hypoplastic left heart syndrome.** *Annals of pediatric cardiology*
  Arunamata, A., Tacy, T. A., Kache, S., Mainwaring, R. D., Ma, M., Maeda, K., Punn, R.
  2020; 13 (3): 186-193

- **Derivation and validation of a prognostic score for neonatal mortality in Ethiopia: a case-control study.** *BMC pediatrics*
  Mediratta, R. P., Amare, A. T., Behl, R., Efron, B., Narasimhan, B., Teklu, A., Shehibo, A., Ayalew, M., Kache, S.
  2020; 20 (1): 238

- **COVID-19 PICU guidelines: for high- and limited-resource settings.** *Pediatric research*
  Kache, S. n., Chisti, M. J., Gumbo, F. n., Mupere, E. n., Zhi, X. n., Nallasamy, K. n., Nakagawa, S. n., Lee, J. H., Di Nardo, M. n., de la Oliva, P. n., Katyal, C. n., Anand, K. J., de Souza, et al
  2020

- **Differential Lung Ventilation Using a Bronchial Blocker in a Pediatric Patient on Extracorporeal Membrane Oxygenation: A Case Report.** *A&A practice*
  Bhargava, V. n., Arastu, A. n., Darling, C. n., Wang, E. n., Kache, S. n.
  2019

- **DIFFERENTIAL LUNG VENTILATION IN A PEDIATRIC PATIENT ON ECMO USING A BRONCHIAL BLOCKER**
  Bhargava, V., Arastu, A., Darling, C., Wang, E., Kache, S.
  LIPPINCOTT WILLIAMS & WILKINS.2019

- **A Retrospective Evaluation of Echocardiograms to Establish Normative Inferior Vena Cava and Aortic Measurements for Children Younger Than 6 Years** *JOURNAL OF ULTRASOUND IN MEDICINE*
  Stenson, E. K., Punn, R., Ramsi, M., Kache, S.
  2018; 37 (9): 2225–32

- **Challenges to code status discussions for pediatric patients** *PLOS ONE*
  Kruse, K. E., Batten, J., Constantine, M. L., Kache, S., Magnus, D.
  2017; 12 (11): e0187375

- **DEVELOPMENT AND PRELIMINARY CLINICAL EVALUATION OF A MOBILE TECHNOLOGY FOR DIARRHEAL DISEASE OUTBREAK MANAGEMENT**
  Nelson, E. J., Haque, F., Ball, R., Maples, S., Khatun, S., Ahmed, M., Rahman, M., Kache, S., Chisti, M., Sarker, S., Schoolnik, G., Rahman, M.
  AMER SOC TROP MED & HYGIENE.2017: 538–39

- **The American College of Critical Care Medicine Clinical Practice Parameters for Hemodynamic Support of Pediatric and Neonatal Septic Shock: Executive Summary** *PEDIATRIC CRITICAL CARE MEDICINE*
  Davis, A. L., Carcillo, J. A., Aneja, R. K., Deymann, A. J., Lin, J. C., Nguyen, T. C., Okhuysen-Cawley, R. S., Relvas, M. S., Rozenfeld, R. A., Skippen, P. W., Stojadinovic, B. J., Williams, E. A., Yeh, et al
  2017; 18 (9): 884–90

- **American College of Critical Care Medicine Clinical Practice Parameters for Hemodynamic Support of Pediatric and Neonatal Septic Shock** *CRITICAL CARE MEDICINE*
  Davis, A. L., Carcillo, J. A., Aneja, R. K., Deymann, A. J., Lin, J. C., Nguyen, T. C., Okhuysen-Cawley, R. S., Relvas, M. S., Rozenfeld, R. A., Skippen, P. W., Stojadinovic, B. T., Williams, E. A., Yeh, et al
  2017; 45 (6): 1061-1093

- **Evaluation of a Smartphone Decision-Support Tool for Diarrheal Disease Management in a Resource-Limited Setting.** *PLoS neglected tropical diseases*
  Haque, F., Ball, R. L., Khatun, S., Ahmed, M., Kache, S., Chisti, M. J., Sarker, S. A., Maples, S. D., Pieri, D., Vardhan Korrapati, T., Sarnquist, C., Federspiel, N., Rahman, et al
  2017; 11 (1)

- **Clinical practice parameters for hemodynamic support of pediatric and neonatal septic shock: 2007 update from the American College of Critical Care Medicine** *CRITICAL CARE MEDICINE*
  Brierley, J., Carcillo, J. A., Choong, K., Cornell, T., DeCaen, A., Deymann, A., Doctor, A., Davis, A., Duff, J., Dugas, M., Duncan, A., Evans, B., Feldman, et al
  2009; 37 (2): 666-688

- **Glucose control in pediatric intensive care unit patients using an insulin-glucose algorithm** *DIABETES TECHNOLOGY & THERAPEUTICS*
  Wintergerst, K. A., Deiss, D., Buckingham, B., Cantwell, M., Kache, S., Agarwal, S., Wilson, D. M., Steil, G.
  2007; 9 (3): 211-222

- **Association of hypoglycemia, hyperglycemia, and glucose variability with morbidity and death in the pediatric intensive care unit** *PEDIATRICS*
  Wintergerst, K. A., Buckingham, B., Gandrud, L., Wong, B. J., Kache, S., Wilson, D. M.
  2006; 118 (1): 173-179

- **Changing outcomes for children requiring intensive care following hematopoietic stem cell transplantation** *PEDIATRIC TRANSPLANTATION*
  Kache, S., Weiss, I. K., Moore, T. B.
  2006; 10 (3): 299-303