Stanford



Timothy Thomas Cornell

Chambers-Okamura Endowed Professor of Pediatric Critical Care Medicine

Pediatrics - Critical Care

Curriculum Vitae available Online

CLINICAL OFFICE (PRIMARY)

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

  Vicki Spencer - Administrative Manager

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Bio

CLINICAL FOCUS

- Pediatric Critical Care Medicine

ACADEMIC APPOINTMENTS

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

PROFESSIONAL EDUCATION

- Fellowship: University of Michigan (2007) MI
- Fellowship: Baylor College Dept of Pediatric Cardiology (2002) TX
- Board Certification: Pediatric Critical Care Medicine, American Board of Pediatrics (2008)
- Residency: Childrens National Medical Center Pediatric Residency (1998) DC
- Medical Education: Southern Illinois University School of Medicine Registrar (1995) IL

Research & Scholarship

CLINICAL TRIALS

- GD2 CAR T Cells in Diffuse Intrinsic Pontine Gliomas(DIPG) & Spinal Diffuse Midline Glioma(DMG), Recruiting
- Pediatric Influence of Cooling Duration on Efficacy in Cardiac Arrest Patients (P-ICECAP), Recruiting

Publications

PUBLICATIONS

- **Variability in Vasoactive Medication use Across Pediatric Intensive Care Units: A PICU Data Collaborative Study, 2010-2022.** *Journal of intensive care medicine*

  Brown, S. R., Heneghan, J. A., Badke, C., Dziorny, A. C., Flynn, A., Farris, R. W., Bennett, T. D., Tawfik, D., Cornell, T. T., Wetzel, R., Nishisaki, A., Rogerson, C.

2026: 8850666261459351

- **External Validation, Recalibration, and Extension of a Prediction Model of Early Acute Kidney Injury in Critically Ill Children Using Multicenter Data.** *Critical care explorations*
  Dziorny, A. C., Drury, S., Clark, A., Farris, R. W., Nishisaki, A., Cornell, T. T., Tawfik, D. S., Bennett, T. D., Shah, S. S., Weiss, S. L., Mohamed, T., Shah, N., McMahon, et al
  2026; 8 (6): e1425

- **QUANTIFYING LABORATORY ORDERING PRACTICE VARIATION IN THE PICU: OPPORTUNITIES FOR IMPROVEMENT**
  Dziorny, A., Nishisaki, A., Spaeder, M., Kausch, S., Sanchez-Pinto, N., Tawfik, D., Cornell, T., Bennett, T., Mai, M., Wetzel, R., Shah, S.
  LIPPINCOTT WILLIAMS & WILKINS.2026

- **APPLYING INFORMATION THEORY TO QUANTIFY AGE-RELATED REDUNDANCY IN PEDIATRIC ICU LABORATORY TESTING**
  Shah, S., Aczon, M., Ho, L., Huang, R., Cornell, T., Farris, R., Nishisaki, A., Tawfik, D., Wetzel, R., Bennett, T., Sanchez-Pinto, N., Dziorny, A.
  LIPPINCOTT WILLIAMS & WILKINS.2026

- **Temporal trends and risk factors for bleeding and thrombosis in pediatric ECMO: A multicenter cohort study.** *Perfusion*
  Doré, K. J., Kelly, C. M., Cornell, T. T., Rasmussen, L. K., Burk, S., Loftis, L. L., Allen, C., Bembea, M. M., Boville, B. M., Furlong-Dillard, J., Kaipa, S., Norton, B., Viamonte, et al
  2025: 2676591251365417

- **The PICU Data Collaborative: A Novel, Multi-Institutional, Pediatric Critical Care Dataset.** *Pediatric critical care medicine : a journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies*
  Farris, R. W., Shah, S. S., Bennett, T. D., Brown, S. R., Cornell, T. T., Dziorny, A. C., Flynn, A., Grunwell, J., Heneghan, J. A., Kennedy, C. E., Kretsu, A., Mendonca, E., Nishisaki, et al
  2025

- **Excessive mitochondrial fission and associated extracellular mitochondria mediate cardiac dysfunction in obesity cardiomyopathy.** *Life sciences*
  Li, S. J., Tetri, L. H., Vijayan, V., Elezaby, A., Chiang, C. H., Lopez, I., Ostberg, N. P., Cornell, T. T., Chen, C. Y., Haileselassie, B.
  2025: 123658

- **Rapid, Sensitive Detection of Protein Biomarkers in Minimally-Processed Blood Products with a Monolithic Sandwich Immunoassay Reagent.** *Advanced materials (Deerfield Beach, Fla.)*
  Maganzini, N., Reschke, A., Cartwright, A. P., Gidi, Y., Thompson, I. A., Yee, S., Hariri, A., Dory, C., Rosenberg-Hasson, Y., Pan, J., Eisenstein, M., Vuckovic, J., Cornell, et al
  2025: e2412613

- **Author Correction: Intravenous and intracranial GD2-CAR T cells for H3K27M+ diffuse midline gliomas.** *Nature*
  Monje, M., Mahdi, J., Majzner, R., Yeom, K. W., Schultz, L. M., Richards, R. M., Barsan, V., Song, K. W., Kamens, J., Baggott, C., Kunicki, M., Rietberg, S. P., Lim, et al
  2024

- **Intravenous and intracranial GD2-CAR T cells for H3K27M+ diffuse midline gliomas.** *Nature*
  Monje, M., Mahdi, J., Majzner, R., Yeom, K. W., Schultz, L. M., Richards, R. M., Barsan, V., Song, K. W., Kamens, J., Baggott, C., Kunicki, M., Rietberg, S. P., Lim, et al
  2024

- **SEQUENTIAL INTRAVENOUS AND INTRACEREBROVENTRICULAR GD2-CAR T-CELL THERAPY FOR H3K27M-MUTATED DIFFUSE MIDLINE GLIOMAS**
  Monje, M., Mahdi, J., Majzner, R. G., Yeom, K., Schultz, L. M., Richards, R., Barsan, V., Song, K., Kamens, J., Baggott, C., Kunicki, M., Lim, A., Reschke, et al
  OXFORD UNIV PRESS INC.2024

- **EXCESS DAILY BLOOD COUNT SAMPLING IN CHILDREN: A PICU DATA COLLABORATIVE STUDY**
  Shah, S., Dziorny, A., Flynn, A., Aczon, M., Farris, R., Horvat, C., Tawfik, D., Bennett, T., Cornell, T., Nishisaki, A., Kennedy, C., Sanchez-Pinto, L., Wetzel, et al
  LIPPINCOTT WILLIAMS & WILKINS.2024

- **EXCESS DAILY BLOOD COUNT SAMPLING IN CHILDREN: A PICU DATA COLLABORATIVE STUDY**
  Shah, S., Dziorny, A., Flynn, A., Aczon, M., Farris, R., Horvat, C., Tawfik, D., Bennett, T., Cornell, T., Nishisaki, A., Kennedy, C., Nelson Sanchez-Pinto, L., Wetzel, et al

LIPPINCOTT WILLIAMS & WILKINS.2024: S616

- **Prevalence of burnout and its relation to the neuroendocrine system among pediatric residents during the early Covid-19 pandemic: A pilot feasibility study.** *Comprehensive psychoneuroendocrinology*
  Tawfik, D. S., Rovnaghi, C., Profit, J., Cornell, T. T., Anand, K. J.
  2023; 14: 100174

- **Drp1/p53 interaction mediates p53 mitochondrial localization and dysfunction in septic cardiomyopathy.** *Journal of molecular and cellular cardiology*
  Mukherjee, R., Tetri, L. H., Li, S. J., Fajardo, G., Ostberg, N. P., Tsegay, K. B., Gera, K., Cornell, T. T., Bernstein, D., Mochly-Rosen, D., Haileselassie, B.
  2023; 177: 28-37

- **DRP1/P53 INTERACTION PLAYS A KEY ROLE IN MITOCHONDRIAL DYSFUNCTION OF SEPTIC CARDIOMYOPATHY**
  Tetri, L., Mukherjee, R., Li, S., Fajardo, G., Ostberg, N., Tsegay, K., Gera, K., Cornell, T., Bernstein, D., Mochly-Rosen, D., Haileselassie, B.
  LIPPINCOTT WILLIAMS & WILKINS.2023: 617

- **MITOCHONDRIAL FISSION & CELL-FREE MITOCHONDRIA MEDIATE CARDIAC DYSFUNCTION IN OBESITY CARDIOMYOPATHY**
  Li, S., Chen, C., Ostberg, N., Tetri, L., Cornell, T., Mochly-Rosen, D., Haileselassie, B.
  LIPPINCOTT WILLIAMS & WILKINS.2023: 50

- **New and Progressive Medical Conditions After Pediatric Sepsis Hospitalization Requiring Critical Care.** *JAMA pediatrics*
  Carlton, E. F., Gebremariam, A., Maddux, A. B., McNamara, N., Barbaro, R. P., Cornell, T. T., Iwashyna, T. J., Prosser, L. A., Zimmerman, J., Weiss, S., Prescott, H. C.
  2022: e223554

- **GD2-CAR T cell therapy for H3K27M-mutated diffuse midline gliomas.** *Nature*
  Majzner, R. G., Ramakrishna, S., Yeom, K. W., Patel, S., Chinnasamy, H., Schultz, L. M., Richards, R. M., Jiang, L., Barsan, V., Mancusi, R., Geraghty, A. C., Good, Z., Mochizuki, et al
  2022

- **Drp1/Fis1-Dependent Pathologic Fission and Associated Damaged Extracellular Mitochondria Contribute to Macrophage Dysfunction in Endotoxin Tolerance.** *Critical care medicine*
  Mukherjee, R., Tompkins, C. A., Ostberg, N. P., Joshi, A. U., Massis, L. M., Vijayan, V., Gera, K., Monack, D., Cornell, T. T., Hall, M. W., Mochly-Rosen, D., Haileselassie, B.
  1800

- **Pediatric Organ Dysfunction Information Update Mandate (PODIUM) Contemporary Organ Dysfunction Criteria: Executive Summary.** *Pediatrics*
  Bembea, M. M., Agus, M., Akcan-Arikan, A., Alexander, P., Basu, R., Bennett, T. D., Bohn, D., Brandao, L. R., Brown, A., Carcillo, J. A., Checchia, P., Cholette, J., Cheifetz, et al
  1800; 149 (Supplement_1): S1-S12

- **FACTORS ASSOCIATED WITH PROLONGED DISCHARGE DELAYS IN A PEDIATRIC ICU**
  Ostberg, N., Winter, S., Ling, J., Cornell, T., Scheinker, D.
  LIPPINCOTT WILLIAMS & WILKINS.2022: 158

- **PATHOGENIC AND POTENTIALLY PATHOGENIC INBORN ERRORS OF IMMUNITY VARIANTS IN PEDIATRIC SEVERE SEPSIS**
  Kernan, K., Ghaloul-Gonzalez, L., Vockley, J., Lamb, J., Hollingshead, D., Sethi, R., Park, H., Carcillo, J., Berg, R., Wessel, D., Pollack, M., Meert, K., Hall, et al
  LIPPINCOTT WILLIAMS & WILKINS.2022: 723

- **Immune System Dysfunction Criteria in Critically Ill Children: The PODIUM Consensus Conference.** *Pediatrics*
  Hall, M. W., Carcillo, J. A., Cornell, T.
  1800; 149 (Supplement_1): S91-S98

- **GD2 CAR T cells mediate clinical activity and manageable toxicity in children and young adults with DIPG and H3K27M-mutated diffuse midline gliomas.**
  Majzner, R. G., Ramakrishna, S., Mochizuki, A., Patel, S., Chinnasamy, H., Yeom, K., Schultz, L., Richards, R., Campen, C., Reschke, A., Mahdi, J., Toland, A., Baggott, et al
  AMER ASSOC CANCER RESEARCH.2021

- **SINGLE CELL RNA SEQUENCING FROM THE CSF OF SUBJECTS WITH H3K27M+DIPG/DMG TREATED WITH GD2 CAR T-CELLULAR THERAPY**
  Mochizuki, A., Ramakrishna, S., Good, Z., Patel, S., Chinnasamy, H., Yeom, K., Schultz, L., Richards, R., Campen, C., Reschke, A., Mahdi, J., Toland, A., Baggot, et al
  OXFORD UNIV PRESS INC.2021: 39

- **GD2 CAR T-CELLS MEDIATE CLINICAL ACTIVITY AND MANAGEABLE TOXICITY IN CHILDREN AND YOUNG ADULTS WITH H3K27M-MUTATED DIPG AND SPINAL CORD DMG**
  Majzner, R., Ramakrishna, S., Mochizuki, A., Patel, S., Chinnasamy, H., Yeom, K., Schultz, L., Richards, R., Campen, C., Reschke, A., Mahdi, J., Martin, A., Toland, et al
  OXFORD UNIV PRESS INC.2021: 49-50

- **Quantifying Pediatric Intensive Care Unit Staffing Levels at a Pediatric Academic Medical Center: A Mixed Methods Approach.** *Journal of nursing management*
  Ostberg, N., Ling, J., Winter, S. G., Som, S., Vasilakis, C., Shin, A. Y., Cornell, T. T., Scheinker, D.
  2021

- **Acute kidney injury after in-hospital cardiac arrest.** *Resuscitation*
  Mah, K. E., Alten, J. A., Cornell, T. T., Selewski, D. T., Askenazi, D. n., Fitzgerald, J. C., Topjian, A. n., Page, K. n., Holubkov, R. n., Slomine, B. S., Christensen, J. R., Dean, J. M., Moler, et al
  2021

- **THE PEDIATRIC ICU DATA COLLABORATIVE**
  Bennett, T., Flynn, A., Sanchez-Pinto, L., Farris, R., Kennedy, C., Cornell, T., Dziorny, A., Nishisaki, A., Shah, S., Horvat, C., Wetzel, R.
  LIPPINCOTT WILLIAMS & WILKINS.2021: 262

- **Clinician Accuracy in Identifying and Predicting Organ Dysfunction in Critically Ill Children.** *Critical care medicine*
  Carlton, E. F., Close, J., Paice, K., Dews, A., Gorga, S. M., Sturza, J., Barbaro, R. P., Cornell, T. T., Prescott, H. C.
  2020

- **New Medical Device Acquisition During Pediatric Severe Sepsis Hospitalizations.** *Critical care medicine*
  Carlton, E. F., Donnelly, J. P., Hensley, M. K., Cornell, T. T., Prescott, H. C.
  2020

- **Cardiac Dysfunction Identified by Strain Echocardiography Is Associated With Illness Severity in Pediatric Sepsis.** *Pediatric critical care medicine : a journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies*
  Patel, M. D., Mariano, K. n., Dunbar, T. n., Cornell, T. T., Punn, R. n., Haileselassie, B. n.
  2020

- **Characteristics of Pediatric Extracorporeal Membrane Oxygenation Programs in the United States and Canada.** *ASAIO journal (American Society for Artificial Internal Organs : 1992)*
  Troy, L. n., Su, F. n., Kilbaugh, T. n., Rasmussen, L. n., Kuo, T. n., Jett, E. n., Cornell, T. n., Berg, M. n., Haileselassie, B. n.
  2020

- **Acute kidney injury after out of hospital pediatric cardiac arrest** *RESUSCITATION*
  Cornell, T. T., Selewski, D. T., Alten, J. A., Askenazi, D., Fitzgerald, J. C., Topjian, A., Holubkov, R., Page, K., Slomine, B. S., Christensen, J. R., Dean, J., Moler, F. W.
  2018; 131: 63-68

- **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

- **Myeloid-Specific Gene Deletion of Protein Phosphatase 2A Magnifies MyD88-and TRIF-Dependent Inflammation following Endotoxin Challenge** *JOURNAL OF IMMUNOLOGY*
  Sun, L., Pham, T. T., Cornell, T. T., McDonough, K. L., McHugh, W. M., Blatt, N. B., Dahmer, M. K., Shanley, T. P.
  2017; 198 (1): 404-416