Stanford



Karl G. Sylvester

Professor of Surgery (Pediatric Surgery)

Surgery - Pediatric Surgery

CLINICAL OFFICE (PRIMARY)

- **Pediatric General Surgery**

  730 Welch Rd 2nd Fl

  MC 5733

  Palo Alto, CA 94304

  Tel (650) 723-6439 **Fax** (650) 724-5577

ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

  Ivonne Navarrete - Administrative Asccociat

  Email inavarrete@stanfordchildrens.org

  Tel 6507236439

Bio

CLINICAL FOCUS

- Surgery, Pediatric
- Pediatric Surgery
- Neonatal and Fetal Surgery

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Surgery - Pediatric Surgery
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Chief Research Operations Officer, Stanford Medicine Childrens Health, (2025- present)
- Director Clinical Research Support Office, Stanford Children's Health, (2018- present)
- Co-Director Stanford Metabolic Health Center, Stanford University School of Medicine, (2017- present)
- Associate Dean Maternal Child Health - Research, Stanford University School of Medicine, (2016- present)

PROFESSIONAL EDUCATION

- Medical Education: Sidney Kimmel Medical College Thomas Jefferson University (1992) PA
- Fellowship: Yale University Pediatric Surgery (2001) CT
- Residency: Hospital of the University of Pennsylvania General Surgery Residency (1999) PA
- Residency: Children's Hospital of Philadelphia Pediatric Surgery Residency (1997) PA
- Internship: Hospital of the University of Pennsylvania General Surgery Residency (1993) PA
- Board Certification: Pediatric Surgery, American Board of Surgery (2002)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Scholarly interests include investigation of molecular markers of human disease that provide diagnostic function, serve as targets for possible therapeutic manipulation, or provide insight into mechanisms of human disease. Specific diseases of interest include common conditions of pregnancy, gut microbial ecology and Necrotizing Enterocolitis (NEC).

Teaching

STANFORD ADVISEES

Postdoctoral Research Mentor

Yijie Li

Publications

PUBLICATIONS

- **Early gestational prediction of spontaneous preterm birth using a validated three-protein serum biomarker panel.** *BMC medicine*
  Luo, Q., Wei, J., Ding, Y., Chen, Y., Wu, L., Chou, C. J., Luo, X., Ghafourian, N., Tao, J., Jin, B., Su, K. J., Mortensen, R. D., Schilling, et al
  2026
- **An encyclopedia of the cord blood metabolome reveals maternal-fetal interactions and disease risk.** *Cell reports. Medicine*
  Lancaster, S., Mataraso, S., Reiss, J. D., Contrepois, K., Trowbridge, C. A., Michael, B., Simms, I., Ellenberger, M., Gibson, M., Clary, M., McGuire, L., Wong, F., Canfield, et al
  2026: 102548
- **Quantitative assessment of neonatal health using dried blood spot metabolite profiles and deep learning.** *Science translational medicine*
  Chang, A. L., Reiss, J. D., Culos, A., Becker, M., Mayo, J. A., Marić, I., De Francesco, D., Phongpreecha, T., Espinosa, C. A., Mataraso, S. J., Berson, E., Kim, Y., Xue, et al
  2026; 18 (833): eadv4942
- **Development and validation of a pre-trained language model for neonatal morbidities: a retrospective, multicentre, prognostic study.** *The Lancet. Digital health*
  Xie, F., Chung, P., Reiss, J. D., Tjoa, E., De Francesco, D., Phongpreecha, T., Haberkorn, W., Chakraborty, D., Chang, A. L., James, T., Kim, Y., Mataraso, S., Espinosa, et al
  2025: 100926
- **Outcomes of Sutureless versus Sutured Closure for Gastroschisis: A Systematic Review and Meta-Analysis.** *Journal of pediatric surgery*
  Rao, A. G., Awan, A. R., Ayazuddin, M., Thobani, H., Ehsan, A. N., Fatimi, A. S., Minhas, A., Javid, A., Tirrell, T. F., Sylvester, K. G., Islam, S., Khan, F. A.
  2025: 162867
- **AI learning for pediatric right ventricular assessment: development and validation across multiple centers.** *NPJ digital medicine*
  Reddy, C., Yan, Y., Qiu, M., Tang, Y., Jin, B., Han, Z., Li, Y., Zhou, S., Tang, Q., Xiao, H., Yang, S., Wen, Q., Wu, et al
  2025; 8 (1): 752
- **Using simulation to prepare multidisciplinary teams and clinical environments for complex fetal interventions and resuscitation.** *Journal of perinatology : official journal of the California Perinatal Association*
  Halamek, L. P., Blumenfeld, Y. J., Balikrishnan, K., Sylvester, K., Galindo, R. B., Davis, A. S., Yamada, N. K., Hintz, S. R.
  2025
- **Outcomes of Pouch Creation in 2-Stage Versus 3-Stage Procedures for Pediatric Ulcerative Colitis: A Propensity Score Matched Comparative Analysis.** *Inflammatory bowel diseases*
  Thobani, H., Ehsan, A. N., Moturu, A., Nepomuceno, H. M., Taufiq, M., Zahid, N., Tirrell, T. F., Sylvester, K. G., Islam, S., Khan, F. A.
  2025

- **Real-world risk stratification for coronary heart disease: a one-year prediction model using health information exchange data.** *BMC public health*
  Zhang, Y., Mo, Y., Ozawa, N., Ichikawa, T., Huang, C. J., Han, Z., Tian, L., Alfreds, S. T., Sylvester, K. G., McElhinney, D. B., Ling, X. B.
  2025; 25 (1): 3218

- **Antibiotic Prophylaxis for Gastrointestinal Surgery Among Neonates and Very Young Infants: National Patterns, Outcomes, and Opportunities for Precision Stewardship.** *The Journal of pediatrics*
  Thobani, H., Mathew, R., Ehsan, A. N., Moturu, A., Khan, M. O., Bio, L., Sankar, M., Tirrell, T. F., Shah, A. A., Thorson, C. M., Raymond, S. L., Islam, S., Sylvester, et al
  2025: 114839

- **A plasma metabolite-based test to detect minimal residual disease in post-surgery patients with colorectal cancer.** *iScience*
  Zhou, Z., Mortensen, R., Hu, P., Jin, B., Zheng, X. B., Li, X., Schilling, J., Chou, C. J., Sylvester, K. G., Cong, Y., Wu, X., Gao, F., Ling, et al
  2025; 28 (9): 113138

- **Antibiotic Stewardship in Pediatric Complicated Appendicitis: Assessing the Role of Oral Antibiotics after Discharge.** *Journal of pediatric surgery*
  Thobani, H., Nepomuceno, H. M., Schwab, M. E., Emengo, P. O., Khan, R., Raymond, S. L., Shah, A. A., Mathew, R., Tirrell, T. F., Islam, S., Sylvester, K. G., Khan, F. A.
  2025: 162594

- **Water Soluble Contrast Administration in the Management of Pediatric Adhesive Small Bowel Obstruction: A Systematic Review and Meta-Analysis.** *Journal of pediatric surgery*
  Thobani, H., Khan, M. O., Minhas, A., Fatimi, A. S., Khan, R., Tirrell, T. F., Sylvester, K. G., Islam, S., Khan, F. A.
  2025: 162465

- **Early Versus Late Inguinal Hernia Repair in Preterm Neonates: An Updated Systematic Review and Meta-Analysis with Trial Sequential Analysis.** *Journal of pediatric surgery*
  Khan, M. O., Fatimi, A. S., Thobani, H., Ehsan, A. N., Saqib, S., Tahan, D., Tirrell, T. F., Sylvester, K. G., Islam, S., Khan, F. A.
  2025: 162463

- **Predicting Placenta Accreta Spectrum Disorder Through Machine Learning Using Metabolomic and Lipidomic Profiling and Clinical Characteristics.** *Obstetrics and gynecology*
  Miller, S., Lyell, D., Maric, I., Lancaster, S., Sylvester, K., Contrepois, K., Kruger, S., Burgess, J., Stevenson, D., Aghaeepour, N., Snyder, M., Zhang, E., Badillo, et al
  2025; 145 (6): 721-731

- **Metabolic pathway alterations in cerebrospinal fluid as diagnostic biomarkers for primary central nervous system lymphoma.** *Clinica chimica acta; international journal of clinical chemistry*
  Ma, J., Wang, D., Li, X., Zhang, Y., Tang, Q., Ding, Y., Li, X., Jin, B., Luo, R. Y., Thyparambil, S., Han, Z., Chou, C. J., Zhou, et al
  2025: 120377

- **Author Correction: AI-guided precision parenteral nutrition for neonatal intensive care units.** *Nature medicine*
  Phongpreecha, T., Ghanem, M., Reiss, J. D., Oskotsky, T. T., Mataraso, S. J., De Francesco, D., Reincke, S. M., Espinosa, C., Chung, P., Ng, T., Costello, J. M., Sequoia, J. A., Razdan, et al
  2025

- **Protective effect of soluble protein hydrolysate against H2O2#induced intestinal injury: An interventional study.** *Molecular medicine reports*
  Wei, J., Tao, G., Liu, J., Framroze, B., Sylvester, K. G.
  2025; 31 (4)

- **Intravenous Immunoglobulin Alone for Coronary Artery Lesion Treatment of Kawasaki Disease: A Randomized Clinical Trial.** *JAMA network open*
  Kuo, H. C., Lin, M. C., Kao, C. C., Weng, K. P., Ding, Y., Han, Z., Chen, C. J., Jan, S. L., Chien, K. J., Ko, C. H., Lin, C. Y., Lei, W. T., Guo, et al
  2025; 8 (4): e253063

- **AI-guided precision parenteral nutrition for neonatal intensive care units.** *Nature medicine*
  Phongpreecha, T., Ghanem, M., Reiss, J. D., Oskotsky, T., Mataraso, S. J., De Francesco, D., Reincke, S. M., Espinosa, C., Chung, P., Ng, T., Costello, J. M., Sequoia, J. A., Razdan, et al
  2025

- **Transgenerational associations between newborn metabolic profiles and bronchopulmonary dysplasia in neonates born to mothers with an obese phenotype.** *Scientific reports*
  Reiss, J. D., Yang, W., Chang, A. L., Long, J. Z., Marić, I., Profit, J., Sylvester, K. G., Stevenson, D. K., Aghaeepour, N., Shaw, G. M.
  2025; 15 (1): 1144
- **Sodium formate induces development-dependent intestinal epithelial injury via necroptosis and apoptosis.** *Redox report : communications in free radical research*
  Wei, J., Tian, Y., Guan, M., Wei, J., Ji, Y., Tao, G., Sylvester, K. G.
  2024; 29 (1): 2433393
- **Prediction of risk for early or very early preterm births using high-resolution urinary metabolomic profiling.** *BMC pregnancy and childbirth*
  Zhang, Y., Sylvester, K. G., Wong, R. J., Blumenfeld, Y. J., Hwa, K. Y., Chou, C. J., Thyparambil, S., Liao, W., Han, Z., Schilling, J., Jin, B., Marić, I., Aghaeepour, et al
  2024; 24 (1): 783
- **Towards a new taxonomy of preterm birth.** *Journal of perinatology : official journal of the California Perinatal Association*
  Stevenson, D. K., Chang, A. L., Wong, R. J., Reiss, J. D., Gaudillière, B., Sylvester, K. G., Ling, X. B., Angst, M. S., Shaw, G. M., Katz, M., Aghaeepour, N., Marić, I.
  2024
- **Towards a new taxonomy of preterm birth** *Journal of Perinatology*
  Stevenson, D. K., Chang, A. L., Wong, R. J., Reiss, J. D., Gaudillière, B., Sylvester, K. G., Ling, X. B., Angst, M. S., Shaw, G. M., Katz, M., Aghaeepour, N., Marić , I.
  2024
- **Targeted Multiplex Proteomics for the Development and Validation of Biomarkers in Primary Aldosteronism Subtyping.** *European journal of endocrinology*
  Zhou, F., Ding, Y., Chen, T., Tang, Q., Zhang, J., Thyparambil, S., Jin, B., Han, Z., Chou, C. J., Schilling, J., Luo, R. Y., Tian, H., Sylvester, et al
  2024
- **Surgical Necrotizing Enterocolitis and Spontaneous Intestinal Perforation Lead to Severe Growth Failure in Infants.** *Annals of surgery*
  Speer, A. L., Lally, K. P., Pedroza, C., Zhang, Y., Poindexter, B. B., Chwals, W. J., Hintz, S. R., Besner, G. E., Stevenson, D. K., Ohls, R. K., Truog, W. E., Stoll, B. J., Rysavy, et al
  2024; 280 (3): 432-443
- **Targeted multiplex validation of CSF proteomic biomarkers: implications for differentiation of PCNSL from tumor-free controls and other brain tumors.** *Frontiers in immunology*
  Ma, J., Lin, Z., Zhang, Y., Ding, Y., Tang, Q., Qian, Y., Jin, B., Luo, R. Y., Liao, W. L., Thyparambil, S., Han, Z., Chou, C. J., Schilling, et al
  2024; 15: 1343109
- **Global metabolomics revealed deviations from the metabolic aging clock in colorectal cancer patients.** *Theranostics*
  Zhang, L., Mo, S., Zhu, X., Chou, C. J., Jin, B., Han, Z., Schilling, J., Liao, W., Thyparambil, S., Luo, R. Y., Whitin, J. C., Tian, L., Nagpal, et al
  2024; 14 (4): 1602-1614
- **Wnt/β-catenin signaling activation promotes lipogenesis in the steatotic liver via physical mTOR interaction.** *Frontiers in endocrinology*
  Wang, K., Zhang, R., Lehwald, N., Tao, G. Z., Liu, B., Liu, B., Koh, Y., Sylvester, K. G.
  2023; 14: 1289004
- **Correction: Exploring the feasibility of using long-term stored newborn dried blood spots to identify metabolic features for congenital heart disease screening.** *Biomarker research*
  Ceresnak, S. R., Zhang, Y., Ling, X. B., Su, K. J., Tang, Q., Jin, B., Schilling, J., Chou, C. J., Han, Z., Floyd, B. J., Whitin, J. C., Hwa, K. Y., Sylvester, et al
  2023; 11 (1): 101
- **Exploring the feasibility of using long-term stored newborn dried blood spots to identify metabolic features for congenital heart disease screening.** *Biomarker research*
  Ceresnak, S. R., Zhang, Y., Ling, X. B., Su, K. J., Tang, Q., Jin, B., Schilling, J., Chou, C. J., Han, Z., Floyd, B. J., Whitin, J. C., Hwa, K. Y., Sylvester, et al
  2023; 11 (1): 97
- **High-throughput quantitation of amino acids and acylcarnitine in cerebrospinal fluid: identification of PCNSL biomarkers and potential metabolic messengers** *FRONTIERS IN MOLECULAR BIOSCIENCES*

Ma, J., Chen, K., Ding, Y., Li, X., Tang, Q., Jin, B., Luo, R. Y., Thyparambil, S., Han, Z., Chou, C., Zhou, A., Schilling, J., Lin, et al
2023; 10

- **High-throughput quantitation of amino acids and acylcarnitine in cerebrospinal fluid: identification of PCNSL biomarkers and potential metabolic messengers.** *Frontiers in molecular biosciences*
  Ma, J., Chen, K., Ding, Y., Li, X., Tang, Q., Jin, B., Luo, R. Y., Thyparambil, S., Han, Z., Chou, C. J., Zhou, A., Schilling, J., Lin, et al
  2023; 10: 1257079
- **Altered expression of the L-arginine/nitric oxide pathway in ovarian cancer: metabolic biomarkers and biological implications.** *BMC cancer*
  Chen, L., Tang, Q., Zhang, K., Huang, Q., Ding, Y., Jin, B., Liu, S., Hwa, K., Chou, C. J., Zhang, Y., Thyparambil, S., Liao, W., Han, et al
  2023; 23 (1): 844
- **Development of a Urine Metabolomics Biomarker-Based Prediction Model for Preeclampsia during Early Pregnancy.** *Metabolites*
  Zhang, Y., Sylvester, K. G., Jin, B., Wong, R. J., Schilling, J., Chou, C. J., Han, Z., Luo, R. Y., Tian, L., Ladella, S., Mo, L., Maric, I., Blumenfeld, et al
  2023; 13 (6)
- **Fecal Keratin 8 Is a Noninvasive and Specific Marker for Intestinal Injury in Necrotizing Enterocolitis.** *Journal of immunology research*
  Wang, K., Tao, G., Sun, Z., Wei, J., Liu, J., Taylor, J., Gibson, M., Mostaghimi, M., Good, M., Sylvester, K. G.
  2023; 2023: 5356646
- **Data-driven longitudinal characterization of neonatal health and morbidity.** *Science translational medicine*
  De Francesco, D., Reiss, J. D., Roger, J., Tang, A. S., Chang, A. L., Becker, M., Phongpreecha, T., Espinosa, C., Morin, S., Berson, E., Thuraiappah, M., Le, B. L., Ravindra, et al
  2023; 15 (683): eadc9854
- **Early prediction and longitudinal modeling of preeclampsia from multiomics.** *Patterns (New York, N.Y.)*
  Maric, I., Contrepois, K., Moufarrej, M. N., Stelzer, I. A., Feyaerts, D., Han, X., Tang, A., Stanley, N., Wong, R. J., Traber, G. M., Ellenberger, M., Chang, A. L., Fallahzadeh, et al
  2022; 3 (12): 100655
- **Butyrate induces development-dependent necrotizing enterocolitis-like intestinal epithelial injury via necroptosis.** *Pediatric research*
  Wang, K., Tao, G., Salimi-Jazi, F., Lin, P., Sun, Z., Liu, B., Sinclair, T., Mostaghimi, M., Dunn, J., Sylvester, K. G.
  2022
- **Single center blind testing of a US multi-center validated diagnostic algorithm for Kawasaki disease in Taiwan.** *Frontiers in immunology*
  Kuo, H. C., Hao, S., Jin, B., Chou, C. J., Han, Z., Chang, L. S., Huang, Y. H., Hwa, K., Whitin, J. C., Sylvester, K. G., Reddy, C. D., Chubb, H., Ceresnak, et al
  2022; 13: 1031387
- **Soluble Protein Hydrolysate Ameliorates Gastrointestinal Inflammation and Injury in 2,4,6-Trinitrobenzene Sulfonic Acid-Induced Colitis in Mice.** *Biomolecules*
  Wei, J., Tao, G., Xu, B., Wang, K., Liu, J., Chen, C., Dunn, J. C., Currie, C., Framroze, B., Sylvester, K. G.
  2022; 12 (9)
- **Progressive Metabolic Abnormalities Associated with the Development of Neonatal Bronchopulmonary Dysplasia.** *Nutrients*
  Ye, C., Wu, J., Reiss, J. D., Sinclair, T. J., Stevenson, D. K., Shaw, G. M., Chace, D. H., Clark, R. H., Prince, L. S., Ling, X. B., Sylvester, K. G.
  2022; 14 (17)
- **Gestational Dating by Urine Metabolic Profile at High Resolution Weekly Sampling Timepoints: Discovery and Validation.** *Frontiers in molecular medicine*
  Sylvester, K. G., Hao, S., Li, Z., Han, Z., Tian, L., Ladella, S., Wong, R. J., Shaw, G. M., Stevenson, D. K., Cohen, H. J., Whitin, J. C., McElhinney, D. B., Ling, et al
  2022; 2: 844280
- **A data-driven health index for neonatal morbidities.** *iScience*
  De Francesco, D., Blumenfeld, Y. J., Maric, I., Mayo, J. A., Chang, A. L., Fallahzadeh, R., Phongpreecha, T., Butwick, A. J., Xenochristou, M., Phibbs, C. S., Bidoki, N. H., Becker, M., Culos, et al
  2022; 25 (4): 104143
- **Virtual reality experience for in utero fetal surgery: a new era of patient counselling and medical education** *BMJ INNOVATIONS*
  Blumenfeld, Y. J., Axelrod, D. M., Sarno, D., Hintz, S. R., Sylvester, K. G., Grant, G. A., Belfort, M. A., Shamshirsaz, A. A., El-Sayed, Y. Y.

2022; 8 (2): 95-97

- **Deviation from the precisely timed age-associated patterns revealed by blood metabolomics to find CRC patients at risk of relapse at the CRC diagnosis**
  Thyparambil, S. P., Zhu, X., Zhang, Y., Sun, H., Peng, J., Cai, S., Li, Y., Fu, C., Bao, P., Hao, S., Li, Z., Ding, Y., Yao, et al
  LIPPINCOTT WILLIAMS & WILKINS.2022

- **Metabolic model of necrotizing enterocolitis in the premature newborn gut resulting from enteric dysbiosis.** *Frontiers in pediatrics*
  Casaburi, G., Wei, J., Kazi, S., Liu, J., Wang, K., Tao, G., Lin, P., Dunn, J. C., Henrick, B. M., Frese, S. A., Sylvester, K. G.
  2022; 10: 893059

- **Serological Phenotyping Analysis Uncovers a Unique Metabolomic Pattern Associated With Early Onset of Type 2 Diabetes Mellitus.** *Frontiers in molecular biosciences*
  Zhu, L., Huang, Q., Li, X., Jin, B., Ding, Y., Chou, C. J., Su, K., Zhang, Y., Chen, X., Hwa, K. Y., Thyparambil, S., Liao, W., Han, et al
  2022; 9: 841209

- **Perinatal infection, inflammation, preterm birth, and brain injury: A review with proposals for future investigations.** *Experimental neurology*
  Reiss, J. D., Peterson, L. S., Nesamoney, S. N., Chang, A. L., Pasca, A. M., Marić, I., Shaw, G. M., Gaudilliere, B., Wong, R. J., Sylvester, K. G., Bonifacio, S. L., Aghaeepour, N., Gibbs, et al
  2022: 113988

- **Perinatal infection, inflammation, preterm birth, and brain injury: A review with proposals for future investigations.** *Experimental neurology*
  Reiss, J. D., Peterson, L. S., Nesamoney, S. N., Chang, A. L., Pasca, A. M., Marić, I., Shaw, G. M., Gaudilliere, B., Wong, R. J., Sylvester, K. G., Bonifacio, S. L., Aghaeepour, N., Gibbs, et al
  2022: 113988

- **Early-pregnancy prediction of risk for pre-eclampsia using maternal blood leptin/ceramide ratio: discovery and confirmation.** *BMJ open*
  Huang, Q., Hao, S., You, J., Yao, X., Li, Z., Schilling, J., Thyparambil, S., Liao, W., Zhou, X., Mo, L., Ladella, S., Davies-Balch, S. R., Zhao, et al
  2021; 11 (11): e050963

- **Newborn screen metabolic panels reflect the impact of common disorders of pregnancy.** *Pediatric research*
  Reiss, J. D., Chang, A. L., Mayo, J. A., Bianco, K., Lee, H. C., Stevenson, D. K., Shaw, G. M., Aghaeepour, N., Sylvester, K. G.
  2021

- **Initial Laparotomy Versus Peritoneal Drainage in Extremely Low Birthweight Infants With Surgical Necrotizing Enterocolitis or Isolated Intestinal Perforation: A Multicenter Randomized Clinical Trial.** *Annals of surgery*
  Blakely, M. L., Tyson, J. E., Lally, K. P., Hintz, S. R., Eggleston, B., Stevenson, D. K., Besner, G. E., Das, A., Ohls, R. K., Truog, W. E., Nelin, L. D., Poindexter, B. B., Pedroza, et al
  2021; 274 (4): e370-e380

- **Novel Approaches to Develop Critical Reference Materials for Noninvasive Prenatal Testing: A Pilot Study.** *The journal of applied laboratory medicine*
  Bianco, K., Sherwin, E. B., Konigshofer, Y., Girsen, A. I., Sylvester, K. G., Garlick, R. K.
  2021

- **Author Correction: Metagenomic insights of the infant microbiome community structure and function across multiple sites in the United States.** *Scientific reports*
  Casaburi, G., Duar, R. M., Brown, H., Mitchell, R. D., Kazi, S., Chew, S., Cagney, O., Flannery, R. L., Sylvester, K. G., Frese, S. A., Henrick, B. M., Freeman, S. L.
  2021; 11 (1): 11050

- **Multi-omics longitudinal analyses in stages I to III CRC patients: Surveillance liquid biopsy test to predict early recurrence and enable risk-stratified postoperative CRC management.**
  Liu, X., Zhang, Y., Zhu, X., Thyparambil, S. P., Liao, W., Zheng, X., You, J., Masood, A., Li, Z., Yang, G., Yao, X., Hao, S., Heaton, et al
  LIPPINCOTT WILLIAMS & WILKINS.2021

- **Integrated trajectories of the maternal metabolome, proteome, and immunome predict labor onset.** *Science translational medicine*
  Stelzer, I. A., Ghaemi, M. S., Han, X., Ando, K., Hedou, J. J., Feyaerts, D., Peterson, L. S., Rumer, K. K., Tsai, E. S., Ganio, E. A., Gaudilliere, D. K., Tsai, A. S., Choisy, et al
  2021; 13 (592)

- **Understanding how biologic and social determinants affect disparities in preterm birth and outcomes of preterm infants in the NICU.** *Seminars in perinatology*
  Stevenson, D. K., Aghaeepour, N., Maric, I., Angst, M. S., Darmstadt, G. L., Druzin, M. L., Gaudilliere, B., Ling, X. B., Moufarrej, M. N., Peterson, L. S., Quake, S. R., Relman, D. A., Snyder, et al
  2021: 151408

- **Electronic Health Record-Based Prediction of 1-Year Risk of Incident Cardiac Dysrhythmia: Prospective Case-Finding Algorithm Development and Validation Study.** *JMIR medical informatics*
  Zhang, Y., Han, Y., Gao, P., Mo, Y., Hao, S., Huang, J., Ye, F., Li, Z., Zheng, L., Yao, X., Li, Z., Li, X., Wang, et al
  2021; 9 (2): e23606

- **Metagenomic insights of the infant microbiome community structure and function across multiple sites in the United States.** *Scientific reports*
  Casaburi, G. n., Duar, R. M., Brown, H. n., Mitchell, R. D., Kazi, S. n., Chew, S. n., Cagney, O. n., Flannery, R. L., Sylvester, K. G., Frese, S. A., Henrick, B. M., Freeman, S. L.
  2021; 11 (1): 1472

- **Identification of patients at risk of new onset heart failure: Utilizing a large statewide health information exchange to train and validate a risk prediction model.** *PloS one*
  Duong, S. Q., Zheng, L., Xia, M., Jin, B., Liu, M., Li, Z., Hao, S., Alfreds, S. T., Sylvester, K. G., Widen, E., Teuteberg, J. J., McElhinney, D. B., Ling, et al
  2021; 16 (12): e0260885

- **Maternal metabolic profiling to assess fetal gestational age and predict preterm delivery: a two-centre retrospective cohort study in the US.** *BMJ open*
  Sylvester, K. G., Hao, S., You, J., Zheng, L., Tian, L., Yao, X., Mo, L., Ladella, S., Wong, R. J., Shaw, G. M., Stevenson, D. K., Cohen, H. J., Whitin, et al
  2020; 10 (12): e040647

- **Towards personalized medicine in maternal and child health: integrating biologic and social determinants.** *Pediatric research*
  Stevenson, D. K., Wong, R. J., Aghaeepour, N., Maric, I., Angst, M. S., Contrepois, K., Darmstadt, G. L., Druzin, M. L., Eisenberg, M. L., Gaudilliere, B., Gibbs, R. S., Gotlib, I. H., Gould, et al
  2020

- **Proteomic profiling to identify therapeutics targets in glioblastoma (GBM).**
  Thyparambil, S. P., Liao, W., An, E., Bhalkikar, A., Heaton, R., Sylvester, K. G., Ling, X. B.
  AMER SOC CLINICAL ONCOLOGY.2020

- **Deviation from the precisely timed phenomic ageotypes can assist in early CRC screening and reveal underlying pathophysiology.**
  Thyparambil, S. P., You, J., Liu, K., Sun, H., Peng, J., Cai, S., Li, Y., Fu, C., Bao, P., Li, Q., Hao, S., Zhang, Y., Li, et al
  LIPPINCOTT WILLIAMS & WILKINS.2020

- **Treating Center Volume and Congenital Diaphragmatic Hernia Outcomes in California.** *The Journal of pediatrics*
  Apfeld, J. C., Kastenberg, Z. J., Gibbons, A. T., Carmichael, S. L., Lee, H. C., Sylvester, K. G.
  2020

- **Progressive Metabolic Dysfunction and Nutritional Variability Precedes Necrotizing Enterocolitis.** *Nutrients*
  Sinclair, T. J., Ye, C., Chen, Y., Zhang, D., Li, T., Ling, X. B., Cohen, H. J., Shaw, G. M., Stevenson, D. K., Chace, D., Clark, R. H., Sylvester, K. G.
  2020; 12 (5)

- **Expression of antibody-drug conjugates (ADC) biomarkers in colorectal cancer.**
  Thyparambil, S. P., Liao, W., An, E., Tian, Y., Heaton, R., Sylvester, K. G., Ling, X. B.
  AMER SOC CLINICAL ONCOLOGY.2020

- **Survival of infants with congenital diaphragmatic hernia in California: impact of hospital, clinical, and sociodemographic factors.** *Journal of perinatology : official journal of the California Perinatal Association*
  Carmichael, S. L., Ma, C. n., Lee, H. C., Shaw, G. M., Sylvester, K. G., Hintz, S. R.
  2020

- **Racial/ethnic disparities and human milk use in necrotizing enterocolitis.** *Pediatric research*
  Goldstein, G. P., Pai, V. V., Liu, J. n., Sigurdson, K. n., Vernon, L. B., Lee, H. C., Sylvester, K. G., Shaw, G. M., Profit, J. n.

2020; 88 (Suppl 1): 3–9

- **Changes in pregnancy-related serum biomarkers early in gestation are associated with later development of preeclampsia.** *PloS one*
  Hao, S. n., You, J. n., Chen, L. n., Zhao, H. n., Huang, Y. n., Zheng, L. n., Tian, L. n., Maric, I. n., Liu, X. n., Li, T. n., Bianco, Y. K., Winn, V. D., Aghaeepour, et al
  2020; 15 (3): e0230000

- **Kinetics of SARS-CoV-2 positivity of infected and recovered patients from a single center.** *Scientific reports*
  Huang, J. n., Zheng, L. n., Li, Z. n., Hao, S. n., Ye, F. n., Chen, J. n., Gans, H. A., Yao, X. n., Liao, J. n., Wang, S. n., Zeng, M. n., Qiu, L. n., Li, et al
  2020; 10 (1): 18629

- **Identification of elders at higher risk for fall with statewide electronic health records and a machine learning algorithm.** *International journal of medical informatics*
  Ye, C. n., Li, J. n., Hao, S. n., Liu, M. n., Jin, H. n., Zheng, L. n., Xia, M. n., Jin, B. n., Zhu, C. n., Alfreds, S. T., Stearns, F. n., Kanov, L. n., Sylvester, et al
  2020; 137: 104105

- **High-throughput quantitation of serological ceramides/dihydroceramides by LC/MS/MS: Pregnancy baseline biomarkers and potential metabolic messengers.** *Journal of pharmaceutical and biomedical analysis*
  Huang, Q. n., Hao, S. n., Yao, X. n., You, J. n., Li, X. n., Lai, D. n., Han, C. n., Schilling, J. n., Hwa, K. Y., Thyparambil, S. n., Whitin, J. n., Cohen, H. J., Chubb, et al
  2020; 192: 113639

- **Development of an early-warning system for high-risk patients for suicide attempt using deep learning and electronic health records.** *Translational psychiatry*
  Zheng, L. n., Wang, O. n., Hao, S. n., Ye, C. n., Liu, M. n., Xia, M. n., Sabo, A. N., Markovic, L. n., Stearns, F. n., Kanov, L. n., Sylvester, K. G., Widen, E. n., McElhinney, et al
  2020; 10 (1): 72

- **In fetuses with congenital lung masses, decreased ventricular and atrioventricular valve dimensions are associated with lesion size and clinical outcome.** *Prenatal diagnosis*
  Mardy, C., Blumenfeld, Y. J., Arunamata, A. A., Girsen, A. I., Sylvester, K. G., Halabi, S., Rubesova, E., Hintz, S. R., Tacy, T. A., Maskatia, S. A.
  2019

- **Recent Advances in Prevention and Therapies for Clinical or Experimental Necrotizing Enterocolitis** *DIGESTIVE DISEASES AND SCIENCES*
  Wang, K., Tao, G., Sylvester, K. G.
  2019; 64 (11): 3078–85

- **A proteomic clock for malignant gliomas: The role of the environment in tumorigenesis at the presymptomatic stage** *PLOS One*
  Zheng, L.
  2019: e0223558

- **Effects of gestational age at delivery and type of labor on neonatal outcomes among infants with gastroschisis.** *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*
  Girsen, A. I., Davis, A. S., Hintz, S. R., Fluharty, E., Sherwin, K., Trepman, P., Desai, A., Mansour, T., Sylvester, K. G., Oshiro, B., Blumenfeld, Y. J.
  2019: 1–191

- **A Real-Time Early Warning System for Monitoring Inpatient Mortality Risk: Prospective Study Using Electronic Medical Record Data.** *Journal of medical Internet research*
  Ye, C., Wang, O., Liu, M., Zheng, L., Xia, M., Hao, S., Jin, B., Jin, H., Zhu, C., Huang, C. J., Gao, P., Ellrodt, G., Brennan, et al
  2019; 21 (7): e13719

- **Prenatally diagnosed omphalocele: characteristics associated with adverse neonatal outcomes.** *Journal of perinatology : official journal of the California Perinatal Association*
  Chock, V. Y., Davis, A. S., Cho, S., Bax, C., Fluharty, E., Weigel, N., Homeyer, M., Hudgins, L., Jones, R., Rubesova, E., Sylvester, K. G., Blumenfeld, Y. J., Hintz, et al
  2019

- **The disproportionate cost of operation and congenital anomalies in infancy**
  Apfeld, J. C., Kastenberg, Z. J., Gibbons, A. T., Phibbs, C. S., Lee, H. C., Sylvester, K. G.

MOSBY-ELSEVIER.2019: 1234–42

- **Prediction of the 1-Year Risk of Incident Lung Cancer: Prospective Study Using Electronic Health Records from the State of Maine** *JOURNAL OF MEDICAL INTERNET RESEARCH*
  Wang, X., Zhang, Y., Hao, S., Zheng, L., Liao, J., Ye, C., Xia, M., Wang, O., Liu, M., Weng, C., Duong, S. Q., Jin, B., Alfreds, et al
  2019; 21 (5)

- **The disproportionate cost of operation and congenital anomalies ininfancy.** *Surgery*
  Apfeld, J. C., Kastenberg, Z. J., Gibbons, A. T., Phibbs, C. S., Lee, H. C., Sylvester, K. G.
  2019

- **Recent Potential Noninvasive Biomarkers in Necrotizing Enterocolitis.** *Gastroenterology research and practice*
  Wang, K., Tao, G., Sun, Z., Sylvester, K. G.
  2019; 2019: 8413698

- **Recent Advances in Prevention and Therapies for Clinical or Experimental Necrotizing Enterocolitis.** *Digestive diseases and sciences*
  Wang, K., Tao, G., Sylvester, K. G.
  2019

- **Predicting Pathology From Imaging in Children Undergoing Resection of Congenital Lung Lesions**
  Narayan, R. R., Abadilla, N., Greenberg, D. R., Sylvester, K. G., Hintz, S. R., Barth, R. A., Bruzoni, M.
  ACADEMIC PRESS INC ELSEVIER SCIENCE.2019: 68–73

- **Biomarker Discovery and Utility in Necrotizing Enterocolitis** *CLINICS IN PERINATOLOGY*
  Goldstein, G. P., Sylvester, K. G.
  2019; 46 (1): 1-+

- **Biomarker Discovery and Utility in Necrotizing Enterocolitis.** *Clinics in perinatology*
  Goldstein, G. P., Sylvester, K. G.
  2019; 46 (1): 1–17

- **A proteomic clock for malignant gliomas: The role of the environment in tumorigenesis at the presymptomatic stage.** *PloS one*
  Zheng, L. n., Zhang, Y. n., Hao, S. n., Chen, L. n., Sun, Z. n., Yan, C. n., Whitin, J. C., Jang, T. n., Merchant, M. n., McElhinney, D. B., Sylvester, K. G., Cohen, H. J., Recht, et al
  2019; 14 (10): e0223558

- **Obstetric and neonatal outcomes in pregnancies complicated by fetal lung masses: does final histology matter?** *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*
  Anderson, J. N., Girsen, A. I., Hintz, S. R., El-Sayed, Y. Y., Davis, A. S., Barth, R. A., Halabi, S. n., Hazard, F. K., Sylvester, K. G., Bruzoni, M. n., Blumenfeld, Y. J.
  2019: 1–7

- **Congenital diaphragmatic hernia-associated neonatal morbidity and mortality based on TOTAL trial severity designation**
  Boissiere, J. C., Anderson, J. N., Girsen, A. I., Hintz, S. R., El-Sayed, Y. Y., Van Meurs, K. P., Sylvester, K. G., Blumenfeld, Y. J.
  MOSBY-ELSEVIER.2019: S667–S668

- **Obstetric and neonatal outcomes in pregnancies complicated by fetal lung masses: does final histology matter?**
  Anderson, J. N., Girsen, A. I., Hintz, S. R., El-Sayed, Y. Y., Davis, A. S., Barth, R. A., Halabi, S., Sylvester, K. G., Bruzoni, M., Blumenfeld, Y. J.
  MOSBY-ELSEVIER.2019: S151

- **Recent Potential Noninvasive Biomarkers in Necrotizing Enterocolitis** *GASTROENTEROLOGY RESEARCH AND PRACTICE*
  Wang, K., Tao, G., Sun, Z., Sylvester, K. G.
  2019

- **Prediction of the 1-Year Risk of Incident Lung Cancer: Prospective Study Using Electronic Health Records from the State of Maine.** *Journal of medical Internet research*
  Wang, X. n., Zhang, Y. n., Hao, S. n., Zheng, L. n., Liao, J. n., Ye, C. n., Xia, M. n., Wang, O. n., Liu, M. n., Weng, C. H., Duong, S. Q., Jin, B. n., Alfreds, et al
  2019; 21 (5): e13260

- **Predicting Pathology From Imaging in Children Undergoing Resection of Congenital Lung Lesions.** *The Journal of surgical research*
  Narayan, R. R., Abadilla, N., Greenberg, D. R., Sylvester, K. G., Hintz, S. R., Barth, R. A., Bruzoni, M.
  2018; 236: 68–73
- **Donor-derived circulating cell-free DNA (ccfDNA) reference materials for concordance studies**
  Konigshofer, Y., Butler, M. G., Dickens, J., Bianco, K., Sylvester, K. G., Anekella, B., Garlick, R. K.
  AMER ASSOC CANCER RESEARCH.2018
- **Point-of-Care Fecal Calprotectin Monitoring in Preterm Infants at Risk for Necrotizing Enterocolitis** *JOURNAL OF PEDIATRICS*
  Nakayuenyongsuk, W., Christofferson, M., Stevenson, D. K., Sylvester, K., Lee, H. C., Park, K. T.
  2018; 196: 98-+
- **Development of the necrotizing enterocolitis society registry and biorepository** *SEMINARS IN PEDIATRIC SURGERY*
  Ralls, M. W., Gadepalli, S. K., Sylvester, K. G., Good, M.
  2018; 27 (1): 25–28
- **Changing the paradigm of defining, detecting, and diagnosing NEC: Perspectives on Bell's stages and biomarkers for NEC** *SEMINARS IN PEDIATRIC SURGERY*
  Gephart, S. M., Gordon, P. V., Penn, A. H., Gregory, K. E., Swanson, J. R., Maheshwari, A., Sylvester, K.
  2018; 27 (1): 3–10
- **Prediction of Incident Hypertension Within the Next Year: Prospective Study Using Statewide Electronic Health Records and Machine Learning.** *Journal of medical Internet research*
  Ye, C. n., Fu, T. n., Hao, S. n., Zhang, Y. n., Wang, O. n., Jin, B. n., Xia, M. n., Liu, M. n., Zhou, X. n., Wu, Q. n., Guo, Y. n., Zhu, C. n., Li, et al
  2018; 20 (1): e22
- **Assessing Statewide All-Cause Future One-Year Mortality: Prospective Study With Implications for Quality of Life, Resource Utilization, and Medical Futility.** *Journal of medical Internet research*
  Guo, Y. n., Zheng, G. n., Fu, T. n., Hao, S. n., Ye, C. n., Zheng, L. n., Liu, M. n., Xia, M. n., Jin, B. n., Zhu, C. n., Wang, O. n., Wu, Q. n., Culver, et al
  2018; 20 (6): e10311
- **Gene expression network analysis in aneuploid human trophoblast progenitor cells (TBPC) reveals modular structures**
  Leon-Martinez, D., Ling, X., Hao, S., Sylvester, K., Bianco, K.
  MOSBY-ELSEVIER.2018: S163–S164
- **Point-of-Care Fecal Calprotectin Monitoring in Preterm Infants at Risk for Necrotizing Enterocolitis.** *The Journal of pediatrics*
  Nakayuenyongsuk, W. n., Christofferson, M. n., Stevenson, D. K., Sylvester, K. n., Lee, H. C., Park, K. T.
  2018
- **FAM83H is involved in the progression of hepatocellular carcinoma and is regulated by MYC** *SCIENTIFIC REPORTS*
  Kim, K., Park, S., Bae, J., Noh, S., Tao, G., Kim, J., Kwon, K., Park, H., Park, B., Lee, H., Chung, M., Moon, W., Sylvester, et al
  2017; 7
- **FAM83H is involved in the progression of hepatocellular carcinoma and is regulated by MYC.** *Scientific reports*
  Kim, K. M., Park, S. H., Bae, J. S., Noh, S. J., Tao, G. Z., Kim, J. R., Kwon, K. S., Park, H. S., Park, B. H., Lee, H., Chung, M. J., Moon, W. S., Sylvester, et al
  2017; 7 (1): 3274
- **Advanced minimal access surgery in infants weighing less than 3kg: A single center experience.** *Journal of pediatric surgery*
  Wall, J. K., Sinclair, T. J., Kethman, W., Williams, C., Albanese, C., Sylvester, K. G., Bruzoni, M.
  2017
- **Advanced minimal access surgery in infants weighing less than 3kg: A single center experience.** *Journal of pediatric surgery*
  Wall, J. K., Sinclair, T. J., Kethman, W., Williams, C., Albanese, C., Sylvester, K. G., Bruzoni, M.
  2017
- **Acylcarnitine Profiles Reflect Metabolic Vulnerability for Necrotizing Enterocolitis in Newborns Born Premature.** *journal of pediatrics*
  Sylvester, K. G., Kastenberg, Z. J., Moss, R. L., Enns, G. M., Cowan, T. M., Shaw, G. M., Stevenson, D. K., Sinclair, T. J., Scharfe, C., Ryckman, K. K., Jelliffe-Pawlowski, L. L.
  2017; 181: 80-85 e1

- **Prediction of neonatal respiratory distress in pregnancies complicated by fetal lung masses.** *Prenatal diagnosis*
  Girsen, A. I., Hintz, S. R., Sammour, R., Naqvi, A., El-Sayed, Y. Y., Sherwin, K., Davis, A. S., Chock, V. Y., Barth, R. A., Rubesova, E., Sylvester, K. G., Chitkara, R., Blumenfeld, et al
  2017
- **Involvement of prolyl isomerase PIN1 in the cell cycle progression and proliferation of hepatic oval cells** *PATHOLOGY RESEARCH AND PRACTICE*
  Risal, P., Shrestha, N., Chand, L., Sylvester, K. G., Jeong, Y. J.
  2017; 213 (4): 373-380
- **Defining and characterizing the critical transition state prior to the type 2 diabetes disease.** *PloS one*
  Jin, B. n., Liu, R. n., Hao, S. n., Li, Z. n., Zhu, C. n., Zhou, X. n., Chen, P. n., Fu, T. n., Hu, Z. n., Wu, Q. n., Liu, W. n., Liu, D. n., Yu, et al
  2017; 12 (7): e0180937
- **Estimating One-Year Risk of Incident Chronic Kidney Disease: Retrospective Development and Validation Study Using Electronic Medical Record Data From the State of Maine.** *JMIR medical informatics*
  Hao, S. n., Fu, T. n., Wu, Q. n., Jin, B. n., Zhu, C. n., Hu, Z. n., Guo, Y. n., Zhang, Y. n., Yu, Y. n., Fouts, T. n., Ng, P. n., Culver, D. S., Alfreds, et al
  2017; 5 (3): e21
- **Role of the Wnt/beta-Catenin Pathway in the Pathogenesis of Alcoholic Liver Disease** *CURRENT MOLECULAR PHARMACOLOGY*
  Behari, J., Sylvester, K. G.
  2017; 10 (3): 186–94
- **Identification of independent metabolic risk groups for necrotizing enterocolitis through machine learning**
  Oltman, S. P., Rogers, E. E., Pantell, M., Baer, R. J., Rand, L., Ryckman, K. K., Kastenberg, Z., Sylvester, K., Jeliffe-Pawlowski, L.
  MOSBY-ELSEVIER.2017: S372
- **The Effect of Level of Care on Gastroschisis Outcomes.** *The Journal of pediatrics*
  Apfeld, J. C., Kastenberg, Z. J., Sylvester, K. G., Lee, H. C.
  2017; 190: 79–84.e1
- **Heme Oxygenase Activity and Heme Binding in a Neonatal Mouse Model** *NEONATOLOGY*
  Kourula, S., Ang, J., Zhao, H., Kalish, F., Vandenabeele, P., Sylvester, K. G., Wong, R. J., Stevenson, D. K.
  2017; 112 (4): 376–83
- **Unique Molecular Patterns Uncovered in Kawasaki Disease Patients with Elevated Serum Gamma Glutamyl Transferase Levels: Implications for Intravenous Immunoglobulin Responsiveness** *PLOS ONE*
  Wang, Y., Li, Z., Hu, G., Hao, S., Deng, X., Huang, M., Ren, M., Jiang, X., Kanegaye, J. T., Ha, K., Lee, J., Li, X., Jiang, et al
  2016; 11 (12)
- **CK2 alpha/CSNK2A1 Phosphorylates SIRT6 and Is Involved in the Progression of Breast Carcinoma and Predicts Shorter Survival of Diagnosed Patients** *AMERICAN JOURNAL OF PATHOLOGY*
  Bae, J. S., Park, S., Jamiyandorj, U., Kim, K. M., Noh, S. J., Kim, J. R., Park, H. J., Kwon, K. S., Jung, S. H., Park, H. S., Park, B., Lee, H., Moon, et al
  2016; 186 (12): 3297-3315
- **Web-based Real-Time Case Finding for the Population Health Management of Patients With Diabetes Mellitus: A Prospective Validation of the Natural Language Processing-Based Algorithm With Statewide Electronic Medical Records.** *JMIR medical informatics*
  Zheng, L., Wang, Y., Hao, S., Shin, A. Y., Jin, B., Ngo, A. D., Jackson-Browne, M. S., Feller, D. J., Fu, T., Zhang, K., Zhou, X., Zhu, C., Dai, et al
  2016; 4 (4)
- **Mapping the Fetomaternal Peripheral Immune System at Term Pregnancy.** *Journal of immunology*
  Fragiadakis, G. K., Baca, Q. J., Gherardini, P. F., Ganio, E. A., Gaudilliere, D. K., Tingle, M., Lancero, H. L., McNeil, L. S., Spitzer, M. H., Wong, R. J., Shaw, G. M., Darmstadt, G. L., Sylvester, et al
  2016
- **Necroptosis is Associated with Development Dependent Enterocyte Death in a Mouse Model of Intestinal Injury and Human Necrotizing Enterocolitis**
  Sinclair, T., Tao, G., Liu, B., Zhang, R., Lu, C., Sylvester, K. G.
  ELSEVIER SCIENCE INC.2016: E157–E158

- **Advanced Minimal Access Surgery in Infants Weighing Less Than 3 Kilograms: A Single Center Experience**
  Sinclair, T., Wall, J. K., Albanese, C., Sylvester, K. G., Bruzoni, M.
  ELSEVIER SCIENCE INC.2016: E153

- **A Multi-Omics Analysis of Human Nucleus-Coded Mitochondrial Genes with Mouse Extraembryonic Tissue/Placenta Phenotypes: Implications in Mitochondria-Mediated Maternal and Fetal Complications.**
  Hu, G., Chen, R., Deng, X., Li, Z., Mo, L., Hao, S., Shaw, G. M., Stevenson, D. K., Cohen, H. J., Jiang, X., Sylvester, K. G., Ling, X. B.
  SAGE PUBLICATIONS INC.2016: 320A

- **Prospective stratification of patients at risk for emergency department revisit: resource utilization and population management strategy implications.** *BMC emergency medicine*
  Jin, B., Zhao, Y., Hao, S., Shin, A. Y., Wang, Y., Zhu, C., Hu, Z., Fu, C., Ji, J., Wang, Y., Zhao, Y., Jiang, Y., Dai, et al
  2016; 16 (1): 10-?

- **NLP based congestive heart failure case finding: A prospective analysis on statewide electronic medical records.** *International journal of medical informatics*
  Wang, Y., Luo, J., Hao, S., Xu, H., Shin, A. Y., Jin, B., Liu, R., Deng, X., Wang, L., Zheng, L., Zhao, Y., Zhu, C., Hu, et al
  2015; 84 (12): 1039-1047

- **Augmented Wnt signaling as a therapeutic tool to prevent ischemia/reperfusion injury in liver: Preclinical studies in a mouse model.** *Liver transplantation*
  Liu, B., Zhang, R., Tao, G., Lehwald, N. C., Liu, B., Koh, Y., Sylvester, K. G.
  2015; 21 (12): 1533-1542

- **Infant, maternal, and geographic factors influencing gastroschisis related mortality in Zimbabwe** *SURGERY*
  Apfeld, J. C., Wren, S. M., Macheka, N., Mbuwayesango, B. A., Bruzoni, M., Sylvester, K. G., Kastenberg, Z. J.
  2015; 158 (6): 1476-1481

- **Infant, maternal, and geographic factors influencing gastroschisis related mortality in Zimbabwe.** *Surgery*
  Apfeld, J. C., Wren, S. M., Macheka, N., Mbuwayesango, B. A., Bruzoni, M., Sylvester, K. G., Kastenberg, Z. J.
  2015; 158 (6): 1475-1480

- **Augmented Wnt Signaling as a Therapeutic Tool to Prevent Ischemia/Reperfusion Injury in Liver: Preclinical Studies in a Mouse Model** *LIVER TRANSPLANTATION*
  Liu, B., Zhang, R., Tao, G., Lehwald, N. C., Liu, B., Koh, Y., Sylvester, K. G.
  2015; 21 (12): 1533-1542

- **Development, Validation and Deployment of a Real Time 30 Day Hospital Readmission Risk Assessment Tool in the Maine Healthcare Information Exchange** *PLOS ONE*
  Hao, S., Wang, Y., Jin, B., Shin, A. Y., Zhu, C., Huang, M., Zheng, L., Luo, J., Hu, Z., Fu, C., Dai, D., Wang, Y., Culver, et al
  2015; 10 (10)

- **Serological Targeted Analysis of an ITIH4 Peptide Isoform: A Preterm Birth Biomarker and Its Associated SNP Implications** *JOURNAL OF GENETICS AND GENOMICS*
  Tan, Z., Hu, Z., Cai, E. Y., Alev, C., Yang, T., Li, Z., Sung, J., El-Sayed, Y. Y., Shaw, G. M., Stevenson, D. K., Butte, A. J., Sheng, G., Sylvester, et al
  2015; 42 (9): 507-510

- **A robust estimation model for surgery durations with temporal, operational, and surgery team effects** *HEALTH CARE MANAGEMENT SCIENCE*
  Kayis, E., Khaniyev, T. T., Suermondt, J., Sylvester, K.
  2015; 18 (3): 222-233

- **Online Prediction of Health Care Utilization in the Next Six Months Based on Electronic Health Record Information: A Cohort and Validation Study** *JOURNAL OF MEDICAL INTERNET RESEARCH*
  Hu, Z., Hao, S., Jin, B., Shin, A. Y., Zhu, C., Huang, M., Wang, Y., Zheng, L., Dai, D., Culver, D. S., Alfreds, S. T., Rogow, T., Stearns, et al
  2015; 17 (9)

- **Impaired Activity of Blood Coagulant Factor XIII in Patients with Necrotizing Enterocolitis** *SCIENTIFIC REPORTS*
  Tao, G., Liu, B., Zhang, R., Liu, G., Abdullah, F., Harris, M. C., Brandt, M. L., Ehrenkranz, R. A., Bowers, C., Martin, C. R., Moss, R. L., Sylvester, K. G.
  2015; 5

- **Urine biomarkers for necrotizing enterocolitis** *PEDIATRIC SURGERY INTERNATIONAL*
  Sylvester, K. G., Moss, R. L.
  2015; 31 (5): 421-429

- **CK2 alpha phosphorylates DBC1 and is involved in the progression of gastric carcinoma and predicts poor survival of gastric carcinoma patients** *INTERNATIONAL JOURNAL OF CANCER*
  Bae, J. S., Park, S., Kim, K. M., Kwon, K. S., Kim, C. Y., Lee, H. K., Park, B., Park, H. S., Lee, H., Moon, W. S., Chung, M. J., Sylvester, K. G., Jang, et al
  2015; 136 (4): 797-809

- **Effect of deregionalized care on mortality in very low-birth-weight infants with necrotizing enterocolitis.** *JAMA pediatrics*
  Kastenberg, Z. J., Lee, H. C., Profit, J., Gould, J. B., Sylvester, K. G.
  2015; 169 (1): 26-32

- **CVR at the time of mid-trimester diagnosis of congenital lung lesions as a predictor of adverse neonatal outcomes**
  Sammour, R., Hintz, S., Davis, A., Riley, K., Barth, R., Rubesova, E., Sylvester, K., Girsen, A., Blumenfeld, Y.
  MOSBY-ELSEVIER.2015: S197

- **Risk Prediction of Stroke: A Prospective Statewide Study on Patients in Maine**
  Zheng, L., Wang, V., Hao, S., Sylvester, K. G., Ling, X. B., Jin, B., Zhu, C., Jin, H., Dai, D., Xu, H., Steams, F., Widen, E., Shin, et al
  edited by Huan, J., Miyano, S., Shehu, A., Hu, Ma, B., Rajasekaran, S., Gombar, V. K., Schapranow, I. M., Yoo, I. H., Zhou, J. Y., Chen, B., Pai, Pierce, B.
  IEEE.2015: 853–55

- **Real-time web-based assessment of total population risk of future emergency department utilization: statewide prospective active case finding study.** *Interactive journal of medical research*
  Hu, Z., Jin, B., Shin, A. Y., Zhu, C., Zhao, Y., Hao, S., Zheng, L., Fu, C., Wen, Q., Ji, J., Li, Z., Wang, Y., Zheng, et al
  2015; 4 (1)

- **Pilot Application of Magnetic Nanoparticle-Based Biosensor for Necrotizing Enterocolitis.** *Journal of proteomics & bioinformatics*
  Kim, D., Fu, C., Ling, X. B., Hu, Z., Tao, G., Zhao, Y., Kastenberg, Z. J., Sylvester, K. G., Wang, S. X.
  2015

- **Development, Validation and Deployment of a Real Time 30 Day Hospital Readmission Risk Assessment Tool in the Maine Healthcare Information Exchange.** *PloS one*
  Hao, S., Wang, Y., Jin, B., Shin, A. Y., Zhu, C., Huang, M., Zheng, L., Luo, J., Hu, Z., Fu, C., Dai, D., Wang, Y., Culver, et al
  2015; 10 (10)

- **Impaired Activity of Blood Coagulant Factor XIII in Patients with Necrotizing Enterocolitis.** *Scientific reports*
  Tao, G., Liu, B., Zhang, R., Liu, G., Abdullah, F., Harris, M. C., Brandt, M. L., Ehrenkranz, R. A., Bowers, C., Martin, C. R., Moss, R. L., Sylvester, K. G.
  2015; 5: 13119-?

- **Hippo/YAP, ß-catenin, and the cancer cell: a "ménage à trois" in hepatoblastoma.** *Gastroenterology*
  Sylvester, K. G., Colnot, S.
  2014; 147 (3): 562-565

- **A novel urine peptide biomarker-based algorithm for the prognosis of necrotising enterocolitis in human infants.** *Gut*
  Sylvester, K. G., Ling, X. B., Liu, G. Y., Kastenberg, Z. J., Ji, J., Hu, Z., Peng, S., Lau, K., Abdullah, F., Brandt, M. L., Ehrenkranz, R. A., Harris, M. C., Lee, et al
  2014; 63 (8): 1284-1292

- **Heterotaxy syndromes and abnormal bowel rotation.** *Pediatric radiology*
  Newman, B., Koppolu, R., Murphy, D., Sylvester, K.
  2014; 44 (5): 542-551

- **Urine protein biomarkers for the diagnosis and prognosis of necrotizing enterocolitis in infants.** *journal of pediatrics*
  Sylvester, K. G., Ling, X. B., Liu, G. Y., Kastenberg, Z. J., Ji, J., Hu, Z., Wu, S., Peng, S., Abdullah, F., Brandt, M. L., Ehrenkranz, R. A., Harris, M. C., Lee, et al
  2014; 164 (3): 607-12 e1 7

- **Urine protein biomarkers for the diagnosis and prognosis of necrotizing enterocolitis in infants.** *journal of pediatrics*
  Sylvester, K. G., Ling, X. B., Liu, G. Y., Kastenberg, Z. J., Ji, J., Hu, Z., Wu, S., Peng, S., Abdullah, F., Brandt, M. L., Ehrenkranz, R. A., Harris, M. C., Lee, et al
  2014; 164 (3): 607-612 e7

- **A data-driven algorithm integrating clinical and laboratory features for the diagnosis and prognosis of necrotizing enterocolitis.** *PloS one*
  Ji, J., Ling, X. B., Zhao, Y., Hu, Z., Zheng, X., Xu, Z., Wen, Q., Kastenberg, Z. J., Li, P., Abdullah, F., Brandt, M. L., Ehrenkranz, R. A., Harris, et al
  2014; 9 (2)

- **Pilot Application of Magnetic Nanoparticle-Based Biosensor for Necrotizing Enterocolitis** *Journal of Proteomics and Bioinformatics*
  Kim, D., Fu, C., Ling, X. B., Hu, Z., Tao, G., Zhao, Y., Kastenberg, Z. J., Sylvester, K. G., Wang, S. X.
  2014

- **Risk prediction of emergency department revisit 30 days post discharge: a prospective study.** *PloS one*
  Hao, S., Jin, B., Shin, A. Y., Zhao, Y., Zhu, C., Li, Z., Hu, Z., Fu, C., Ji, J., Wang, Y., Zhao, Y., Dai, D., Culver, et al
  2014; 9 (11): e112944

- **Risk prediction of emergency department revisit 30 days post discharge: a prospective study.** *PloS one*
  Hao, S., Jin, B., Shin, A. Y., Zhao, Y., Zhu, C., Li, Z., Hu, Z., Fu, C., Ji, J., Wang, Y., Zhao, Y., Dai, D., Culver, et al
  2014; 9 (11)

- **A data-driven algorithm integrating clinical and laboratory features for the diagnosis and prognosis of necrotizing enterocolitis.** *PloS one*
  Ji, J., Ling, X. B., Zhao, Y., Hu, Z., Zheng, X., Xu, Z., Wen, Q., Kastenberg, Z. J., Li, P., Abdullah, F., Brandt, M. L., Ehrenkranz, R. A., Harris, et al
  2014; 9 (2)

- **Wnt/ß-Catenin Signaling Protects Mouse Liver against Oxidative Stress-induced Apoptosis through the Inhibition of Forkhead Transcription Factor FoxO3.** *journal of biological chemistry*
  Tao, G., Lehwald, N., Jang, K. Y., Baek, J., Xu, B., Omary, M. B., Sylvester, K. G.
  2013; 288 (24): 17214-17224

- **Heme oxygenase-1 deficiency promotes the development of necrotizing enterocolitis-like intestinal injury in a newborn mouse model.** *American journal of physiology. Gastrointestinal and liver physiology*
  Schulz, S., Wong, R. J., Jang, K. Y., Kalish, F., Chisholm, K. M., Zhao, H., Vreman, H. J., Sylvester, K. G., Stevenson, D. K.
  2013; 304 (11): G991-G1001

- **WNT/B-CATENIN AND MITOCHONDRIAL FUNCTION IN RESPONSE TO METABOLIC STRESS AND ALD** *36th Annual Scientific Meeting of the Research-Society-on-Alcoholism*
  Liu, B., Zhang, R., Tao, G., Lehwald, N. C., Liu, B., Sylvester, K. G.
  WILEY-BLACKWELL.2013: 297A–297A

- **The surgical management of necrotizing enterocolitis.** *Clinics in perinatology*
  Kastenberg, Z. J., Sylvester, K. G.
  2013; 40 (1): 135-148

- **SIRT1 and c-Myc Promote Liver Tumor Cell Survival and Predict Poor Survival of Human Hepatocellular Carcinomas** *PLOS ONE*
  Jang, K. Y., Noh, S. J., Lehwald, N., Tao, G., Bellovin, D. I., Park, H. S., Moon, W. S., Felsher, D. W., Sylvester, K. G.
  2012; 7 (9)

- **beta-Catenin Regulates Hepatic Mitochondrial Function and Energy Balance in Mice** *GASTROENTEROLOGY*
  Lehwald, N., Tao, G., Jang, K. Y., Papandreou, I., Liu, B., Liu, B., Pysz, M. A., Willmann, J. K., Knoefel, W. T., Denko, N. C., Sylvester, K. G.
  2012; 143 (3): 754-764

- **Improving prediction of surgery duration using operational and temporal factors.** *AMIA ... Annual Symposium proceedings / AMIA Symposium. AMIA Symposium*
  Kayis, E., Wang, H., Patel, M., Gonzalez, T., Jain, S., Ramamurthi, R. J., Santos, C., Singhal, S., Suermondt, J., Sylvester, K.
  2012; 2012: 456-462

- **HEME OXYGENASE-1 DEFICIENCY PROMOTES NECROTIZING ENTEROCOLITIS DEVELOPMENT IN A MURINE MOUSE MODEL** *Western Regional Meeting of the American-Federation-for-Medical-Research*
  Schulz, S., Jang, K., Kalish, F. S., Zhao, H., Vreman, H. J., Sylvester, K. S., Wong, R. J., Stevenson, D. K.

LIPPINCOTT WILLIAMS & WILKINS.2012: 158–58

- **Notch signaling inhibits hepatocellular carcinoma following inactivation of the RB pathway** *JOURNAL OF EXPERIMENTAL MEDICINE*
  Viatour, P., Ehmer, U., Saddic, L. A., Dorrell, C., Andersen, J. B., Lin, C., Zmoos, A., Mazur, P. K., Schaffer, B. E., Ostermeier, A., Vogel, H., Sylvester, K. G., Thorgeirsson, et al
  2011; 208 (10): 1963-1976

- **Wnt-beta-catenin Signaling Protects Against Hepatic Ischemia and Reperfusion Injury in Mice** *GASTROENTEROLOGY*
  Lehwald, N., Tao, G., Jang, K. Y., Sorkin, M., Knoefel, W. T., Sylvester, K. G.
  2011; 141 (2): 707-U417

- **Intestinal involvement during 3,5-diethoxycarbonyl-1,4-dihydrocollidine-induced chronic liver injury in a mouse model** *JOURNAL OF PEDIATRIC SURGERY*
  Sukhotnik, I., Kuscuoglu, U., Altindag, B., Tao, G., Lehwald, N., Sylvester, K. G.
  2011; 46 (8): 1495-1502

- **Risk Factors for Parenteral Nutrition-associated Liver Disease Following Surgical Therapy for Necrotizing Enterocolitis** *JOURNAL OF PEDIATRIC GASTROENTEROLOGY AND NUTRITION*
  Duro, D., Mitchell, P. D., Kalish, L. A., Martin, C., Mccarthy, M., Jaksic, T., Dunn, J., Brandt, M. L., Nobuhara, K. K., Sylvester, K. G., Moss, R. L., Duggan, C.
  2011; 52 (5): 595-600

- **ROLE OF IIEME OXYGENASE IN A MURINE MODEL OF EARLY NECROTIZING ENTEROCOLITIS** *Western Regional Meeting of the American-Federation-for-Medical-Research*
  Schulz-Geske, S., Kalish, F. S., Jang, K. Y., Zhao, H., Huey, M., Vreman, H. J., Sylvester, K. S., Wong, R. J., Stevenson, D. K.
  LIPPINCOTT WILLIAMS & WILKINS.2011: 126–27

- **Risk Factors for Intestinal Failure in Infants with Necrotizing Enterocolitis: A Glaser Pediatric Research Network Study** *JOURNAL OF PEDIATRICS*
  Duro, D., Kalish, L. A., Johnston, P., Jaksic, T., Mccarthy, M., Martin, C., Dunn, J. C., Brandt, M., Nobuhara, K. K., Sylvester, K. G., Moss, R. L., Duggan, C.
  2010; 157 (2): 203-U50

- **URINE PEPTIDOMICS FOR CLINICAL BIOMARKER DISCOVERY** *ADVANCES IN CLINICAL CHEMISTRY, VOL 51*
  Ling, X. B., Mellins, E. D., Sylvester, K. G., Cohen, H. J.
  2010; 51: 181-213

- **Clinical parameters do not adequately predict outcome in necrotizing enterocolitis: a multi-institutional study** *JOURNAL OF PERINATOLOGY*
  Moss, R. L., Kalish, L. A., Duggan, C., Johnston, P., Brandt, M. L., Dunn, J. C., Ehrenkranz, R. A., Jaksic, T., Nobuhara, K., Simpson, B. J., McCarthy, M. C., Sylvester, K. G.
  2008; 28 (10): 665-674

- **The role of Wnt signaling in maintaining the neuroblast phenotype in neuroblastomas**
  Ghole, S. A., Kuscuoglu, U., Sylvester, K.
  ELSEVIER SCIENCE INC.2008: S53

- **Hepatotoxin-Induced Changes in the Adult Murine Liver Promote MYC-Induced Tumorigenesis** *PLOS ONE*
  Beer, S., Komatsubara, K., Bellovin, D. I., Kurobe, M., Sylvester, K., Felsher, D. W.
  2008; 3 (6)

- **Doxycycline sclerotherapy as primary treatment of head and neck lymphatic malformations in children** *JOURNAL OF PEDIATRIC SURGERY*
  Nehra, D., Jacobson, L., Barnes, P., Mallory, B., Albanese, C. T., Sylvester, K. G.
  2008; 43 (3): 451-460

- **Hepatic parenchymal replacement in mice by transplanted allogeneic hepatocytes is facilitated by bone marrow transplantation and mediated by CD4 cells** *HEPATOLOGY*
  Streetz, K. L., Doyonnas, R., Grimm, D., Jenkins, D. D., Fuess, S., Perryman, S., Lin, J., Trautwein, C., Shizuru, J., Blau, H., Sylvester, K. G., Kay, M. A.
  2008; 47 (2): 706-718

- **Wnt/beta-catenin signaling in murine hepatic transit amplifying progenitor cells** *GASTROENTEROLOGY*
  Hu, M., Kurobe, M., Jeong, Y. J., Fuerer, C., Ghole, S., Nusse, R., Sylvester, K. G.
  2007; 133 (5): 1579-1591

- **Evidence for canonical beta-catenin signaling in neuroblastomas** *93rd Annual Clinical Congress of the American-College-of-Surgeons*
  Ghole, S. A., Kuscuoglu, U., Hu, M., Jeong, Y. J., Sylvester, K. G.
  ELSEVIER SCIENCE INC.2007: S66–S66

- **Risk factors for the development of abdominal abscess following operation for perforated appendicitis in children - A multicenter case-control study** *86th Annual Meeting of the New-England-Surgical-Society*
  Henry, M. C., Walker, A., Silverman, B. L., Gollin, G., Islam, S., Sylvester, K., Moss, R. L.
  AMER MEDICAL ASSOC.2007: 236–41

- **Matched analysis of nonoperative management vs immediate appendectomy for perforated appendicitis** *37th Annual Meeting of the American-Pediatric-Surgical-Association*
  Henry, M. C., Gollin, G., Islam, S., Sylvester, K., Walker, A., Silverman, B. L., Moss, R. L.
  W B SAUNDERS CO-ELSEVIER INC.2007: 19–24

- **Stem cells: tissue regeneration and cancer.** *Seminars in pediatric surgery*
  Tataria, M., Perryman, S. V., Sylvester, K. G.
  2006; 15 (4): 284-292

- **Laparotomy versus peritoneal drainage for necrotizing enterocolitis and perforation** *NEW ENGLAND JOURNAL OF MEDICINE*
  Moss, R. L., Dimmitt, R. A., Barnhart, D. C., Sylvester, K. G., Brown, R. L., Powell, D. M., Islam, S., Langer, J. C., Sato, T. T., Brandt, M. L., Lee, H., Blakely, M. L., Lazar, et al
  2006; 354 (21): 2225-2234

- **Absence of the p53 tumor suppressor gene promotes osteogenesis in mesenchymal stem cells** *57th Annual Meeting of the American-Academy-of-Pediatrics*
  Tataria, M., Quarto, N., Longaker, M. T., Sylvester, K. G.
  W B SAUNDERS CO-ELSEVIER INC.2006: 624–32

- **Repair and regeneration: opportunities for carcinogenesis from tissue stem cells** *JOURNAL OF CELLULAR AND MOLECULAR MEDICINE*
  Perryman, S. V., Sylvester, K. G.
  2006; 10 (2): 292-308

- **In vivo selection of primary and bone-marrow-derived hepatocytes after allogeneic transplantation in mice** *41st Annual Meeting of the European-Association-for-the-Study-of-the-Liver*
  Streetz, K. L., Doyonnas, R., Jenkins, D., Perryman, S., Fuess, S., Lin, S., Shizuru, J., Blau, H., Trautwein, C., Sylvester, K., Kay, M. A.
  ELSEVIER SCIENCE BV.2006: S33–S33

- **Cell therapy for hepatocyte replacement through bone marrow derived myelomonocytic progenitors** *91st Annual Clinical Congress of the American-College-of-Surgeons*
  Sylvester, K. G., Jenkins, D., Streetz, K., Doyannis, R., Perryman, S., Kay, M., Blau, H.
  ELSEVIER SCIENCE INC.2005: S47–S48

- **The role of injury on the long-term expression of a hepatocyte transgene from bone marrow** *91st Annual Clinical Congress of the American-College-of-Surgeons*
  Perryman, S. V., Jenkins, D., Streetz, K., Doyonnas, R., Sylvester, K.
  ELSEVIER SCIENCE INC.2005: S89–S89

- **Multipotent progenitors from MSCs are regulated by Wnt/beta-catenin signaling** *91st Annual Clinical Congress of the American-College-of-Surgeons*
  Tataria, M., Ailles, L., Jenkins, D., Longaker, M. T., Weissman, I., Sylvester, K.
  ELSEVIER SCIENCE INC.2005: S45–S45

- **Donor-derived, liver-specific protein expression after bone marrow transplantation** *TRANSPLANTATION*
  Jenkins, D. D., Streetz, K., Tataria, M., Sahar, D., Kurobe, M., Longaker, M. T., Kay, M. A., Sylvester, K. G.
  2004; 78 (4): 530-536

- **Functional measurement of fusion in the liver after bone-marrow transplantation over time** *39th Annual Meeting of the European-Association-for-the-Study-of-the-Liver*
  Streetz, K. L., Jenkins, D., Longaker, G., Sylvester, K., Kay, M. A.
  ELSEVIER SCIENCE BV.2004: 109–109

- **Hepatocyte targeting for quantifiable and functional cellular transplantation** *89th Annual Clinical Congress of the American-College-of-Surgeons*
  Jenkins, D. D., Streetz, K., Kay, M., Longaker, M., Sylvester, K.
  ELSEVIER SCIENCE INC.2003: S15–S15

- **Bilateral cystic lung disease in a monoamnionic twin of an anencephalic: A case of glial heterotopia in the lungs.** *Western Regional Meeting of the American-Federation-for-Medical-Research*
  Anderson, J. M., Adams, M. L., Morgan, T., Robinson, T., Enns, G. M., Keller, K. A., Sylvester, K. G., Hintz, S. R.
  LIPPINCOTT WILLIAMS & WILKINS.2003: S119–S120