

# Stanford

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## 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](mailto:inavarrete@stanfordchildrens.org)

**Tel** 6507236439

## Bio

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### CLINICAL FOCUS

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

### ACADEMIC APPOINTMENTS

- Professor - University Medical 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)

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## Research & Scholarship

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### 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

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### STANFORD ADVISEES

#### Postdoctoral Research Mentor

Yijie Li

## Publications

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### 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., Balakrishnan, 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., Contrepolis, 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 H<sub>2</sub>O<sub>2</sub>-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*  
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 : 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
- **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., Contrepolis, 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 profiling of placental tissue and maternal plasma to identify biomarkers of placenta accreta spectrum**  
Miller, S. E., Contrepois, K., Michael, B., Cruz, G., Simms, I., Datoc, I., Sylvester, K., Silver, R. M., Einerson, B. D., Bianco, K., Lyell, D. J.  
MOSBY-ELSEVIER.2022: S14-S15
- **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., Contrepolis, 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.  
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