

Stanford

Jeong S. Hyun

Assistant Professor of Surgery (Pediatric Surgery)

Surgery - Pediatric Surgery

CLINICAL OFFICE (PRIMARY)

- **Pediatric General Surgery**

300 Pasteur Dr Rm M116

Alway Bldg MC 5733

Stanford, CA 94305

Tel (650) 723-6439 Fax (650) 725-5577

Bio

CLINICAL FOCUS

- Pediatric Surgery

ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Surgery - Pediatric Surgery
- Member, Stanford Medicine Children's Health Center for IBD and Celiac Disease

PROFESSIONAL EDUCATION

- Medical Education: University of Minnesota School of Medicine (2008) MN
- Board Certification: Surgical Critical Care, American Board of Surgery (2021)
- Residency: Stanford University Dept of General Surgery (2017) CA
- Board Certification: Pediatric Surgery, American Board of Surgery (2021)
- Fellowship: Children's Mercy Hospital Surgical Critical Care Fellowship (2020) MO
- Fellowship: Children's Mercy Hospital Pediatric Surgery Fellowship (2019) MO
- Board Certification: General Surgery, American Board of Surgery (2017)
- Internship: Saint Joseph Mercy Ann Arbor General Surgery Residency (2010) MI

Teaching

STANFORD ADVISEES

Med Scholar Project Advisor

Rayyan Darji

Publications

PUBLICATIONS

- **A national database study of adjuvant steroids following Kasai portoenterostomy for biliary atresia.** *Pediatric surgery international*
Liang, N. E., Thobani, H., Moturu, A., Suh, E., Islam, S., Fell, G. L., Hyun, J. S., Sylvester, K. G., Chao, S. D., Dunn, J. C., Khan, F. A.

2026; 42 (1)

- **A Translational Surgical Porcine Model for Postoperative Intra-Abdominal Adhesion Formation.** *Journal of visualized experiments : JoVE*
Reveron-Thornton, R. F., Hsu, C. H., Bobst, W., Guo, J. L., Meany, E. L., M Williams, C., Berry, C., Fallah, M., Korah, M., P Agolia, J., Guo, C., Fell, G. L., Hyun, et al
2026
- **Wound Healing and Management Considerations in the Pediatric Surgical Patient.** *Advances in wound care*
Liang, N. E., Jing, S. L., Suh, E. J., Wang, H. H., Pham, B. P., Chiu, B., Hyun, J. S., Griffin, M. F., Longaker, M. T., Fell, G. L.
2025
- **Single Cell RNA-Seq and Xenium Spatial Transcriptomics Analysis Reveals Potential Mechanism for Migration of Creeping Fat-Derived Mechanosensitive Fibroblast in Crohn's Disease Strictures**
Pham, B., Bauer-Rowe, K. E., Liang, N., Suh, E. J., Longaker, M., Hyun, J.
LIPPINCOTT WILLIAMS & WILKINS.2025: S88
- **Creeping fat-derived mechanosensitive fibroblasts drive intestinal fibrosis in Crohn's disease strictures.** *Cell*
Bauer-Rowe, K. E., Pham, B., Griffin, M., Liang, N. E., Kim, A., Lu, J. M., Januszyk, M., Guo, J. L., De Santis, S., Xing, Y., Prystupa, A., Sidhu, I., Suh, et al
2025
- **Adjuvant steroids following Kasai portoenterostomy for biliary atresia: a single-center 18-year experience comparing different steroid dose regimens.** *Pediatric surgery international*
Liang, N. E., Danzer, E., Hyun, J. S., Chao, S. D., Bruzoni, M., Dunn, J. C.
2025; 41 (1): 258
- **BA-ECM Score: Automated Quantification of Liver Fibrosis Architecture in Biliary Atresia with Potential for Prognostic Value - A Pilot Study.** *Annals of surgery*
Liang, N. E., Guo, J. L., Griffin, M. F., Bauer-Rowe, K. E., Narang, A., Januszyk, M., Fell, G. L., Dunn, J. C., Chao, S. D., Tan, S. Y., Longaker, M. T., Hyun, J. S.
2025
- **Postoperative adhesions are abrogated by a sustained-release anti-JUN therapeutic in preclinical models.** *Science translational medicine*
Foster, D. S., Guo, J. L., Meany, E., Berry, C. E., Fallah, M., Korah, M., Januszyk, M., Bauer-Rowe, K. E., Lopez, D. M., Williams, C. M., Song, R., Griffin, M., Kim, et al
2025; 17 (789): eadp9957
- **Investigation of Creeping Fat Associated Fibroblasts in Smooth Muscle Cell Hypertrophy in Crohn's Disease Stricture Formation**
Pham, B., Bauer-Rowe, K. E., Liang, N., Griffin, M., Guo, J. L., Foster, D., Norton, J. A., Hyun, J. S., Longaker, M. T.
LIPPINCOTT WILLIAMS & WILKINS.2024: S93
- **Creeping Fat-Derived Fibroblasts Promote Intestinal Fibrosis in Crohn's Disease**
Bauer-Rowe, K. E., Pham, B., Korah, M., Guo, J. L., Liang, N., Griffin, M., Delitto, D., Longaker, M. T., Hyun, J. S.
LIPPINCOTT WILLIAMS & WILKINS.2024: S346
- **Dipeptidylpeptidase 4 Is Overexpressed in the Extracellular Matrix of Biliary Atresia-Associated Liver Fibrosis**
Liang, N., Griffin, M., Parker, J. B. L., Guo, J. L., Bauer-Rowe, K. E., Fell, G. L., Dunn, J. C. Y., Tan, S. Y. S., Hyun, J. S., Longaker, M. T.
LIPPINCOTT WILLIAMS & WILKINS.2024: S347-S348
- **Where There Is Fat, There Is Fibrosis: Elucidating the Mechanisms of Creeping Fat-Driven Stricture Formation**
Bauer-Rowe, K. E., Kim, A., Griffin, M., Liang, N., Foster, D., Guo, J. L., Norton, J. A., Longaker, M. T., Hyun, J. S.
LIPPINCOTT WILLIAMS & WILKINS.2023: S365-S366
- **Investigating Dysmotility and the Expansion of Glial Cells and Interstitial Cells of Cajal in Crohn's Disease Strictures Using a Novel Surgical Mouse Model**
Kim, A., Bauer-rowe, K. E., Griffin, M., Foster, D., Longaker, M. T., Hyun, J. S.
LIPPINCOTT WILLIAMS & WILKINS.2023: S355
- **Where There Is Fat There Is Fibrosis: Elucidating the Mechanisms of Creeping Fat-Driven Stricture Formation**
Bauer-Rowe, K. E., Kim, A., Griffin, M., Foster, D., Guardino, N., Guo, J. L., Talbott, H. E., Norton, J. A., Hyun, J. S., Longaker, M. T.
LIPPINCOTT WILLIAMS & WILKINS.2022: S59-S60

- **Where There Is Fat There Is Fibrosis: Elucidating the Mechanisms of Creeping Fat-Driven Stricture Formation**
Bauer-Rowe, K. E., Griffin, M., Foster, D., desJardins-Park, H. E., Mascharak, S., Norton, J. A., Hyun, J. S., Longaker, M. T.
ELSEVIER SCIENCE INC.2021: S65
- **Cerebral Fat Embolism in a Trauma Patient with Captured Imaging of Echogenic Emboli in the Inferior Vena Cava** *JOURNAL OF MEDICAL ULTRASOUND*
Wang, N. N., Panda, N., Hyun, J. S., Barounis, D., Weiser, T. G.
2016; 24 (4): 162–65
- **Salvage of a failed open gastrocutaneous fistula repair with an endoscopic over-the-scope clip** *JOURNAL OF PEDIATRIC SURGERY CASE REPORTS*
Jaramillo, J., Hyun, J., Abrajano, C., Koppolu, R., Chao, S., Hartman, G., Wall, J.
2016; 8: 40–41
- **Studies in fat grafting: Part I. Effects of injection technique on in vitro fat viability and in vivo volume retention.** *Plastic and reconstructive surgery*
Chung, M. T., Paik, K. J., Atashroo, D. A., Hyun, J. S., McArdle, A., Senarath-Yapa, K., Zielins, E. R., Tevlin, R., Duldulao, C., Hu, M. S., Walmsley, G. G., Parisi-Amon, A., Momeni, et al
2014; 134 (1): 29-38
- **Studies in Fat Grafting: Part I. Effects of Injection Technique on In Vitro Fat Viability and In Vivo Volume Retention** *PLASTIC AND RECONSTRUCTIVE SURGERY*
Chung, M. T., Paik, K. J., Atashroo, D. A., Hyun, J. S., McArdle, A., Senarath-Yapa, K., Zielins, E. R., Tevlin, R., Duldulao, C., Hu, M. S., Walmsley, G. G., Parisi-Amon, A., Momeni, et al
2014; 134 (1): 29-38
- **Induced pluripotent stem cells in regenerative medicine and disease modeling.** *Current stem cell research & therapy*
Walmsley, G. G., Hyun, J., McArdle, A., Senarath-Yapa, K., Hu, M. S., Chung, M. T., Wong, V. W., Longaker, M. T., Wan, D. C.
2014; 9 (2): 73-81
- **Isolation of human adipose-derived stromal cells using laser-assisted liposuction and their therapeutic potential in regenerative medicine.** *Stem cells translational medicine*
Chung, M. T., Zimmermann, A. S., Paik, K. J., Morrison, S. D., Hyun, J. S., Lo, D. D., McArdle, A., Montoro, D. T., Walmsley, G. G., Senarath-Yapa, K., Sorkin, M., Rennert, R., Chen, et al
2013; 2 (10): 808-817
- **Enhancing stem cell survival in vivo for tissue repair** *BIOTECHNOLOGY ADVANCES*
Hyun, J. S., Tran, M. C., Wong, V. W., Chung, M. T., Lo, D. D., Montoro, D. T., Wan, D. C., Longaker, M. T.
2013; 31 (5): 736-743
- **Molecular analysis and differentiation capacity of adipose-derived stem cells from lymphedema tissue.** *Plastic and reconstructive surgery*
Levi, B., Glotzbach, J. P., Sorkin, M., Hyun, J., Januszyk, M., Wan, D. C., Li, S., Nelson, E. R., Longaker, M. T., Gurtner, G. C.
2013; 132 (3): 580-589
- **Enhancing in vivo survival of adipose-derived stromal cells through bcl-2 overexpression using a minicircle vector.** *Stem cells translational medicine*
Hyun, J., Grova, M., Nejadnik, H., Lo, D., Morrison, S., Montoro, D., Chung, M., Zimmermann, A., Walmsley, G. G., Lee, M., Daldrup-Link, H., Wan, D. C., Longaker, et al
2013; 2 (9): 690-702
- **CD90 (Thy-1)-Positive Selection Enhances Osteogenic Capacity of Human Adipose-Derived Stromal Cells** *TISSUE ENGINEERING PART A*
Chung, M. T., Liu, C., Hyun, J. S., Lo, D. D., Montoro, D. T., Hasegawa, M., Li, S., Sorkin, M., Rennert, R., Keeney, M., Yang, F., Quarto, N., Longaker, et al
2013; 19 (7-8): 989-997
- **Micro-Computed Tomography Evaluation of Human Fat Grafts in Nude Mice** *TISSUE ENGINEERING PART C-METHODS*
Chung, M. T., Hyun, J. S., Lo, D. D., Montoro, D. T., Hasegawa, M., Levi, B., Januszyk, M., Longaker, M. T., Wan, D. C.
2013; 19 (3): 227-232
- **Adipose-derived Stromal Cells Overexpressing Vascular Endothelial Growth Factor Accelerate Mouse Excisional Wound Healing** *MOLECULAR THERAPY*

- Nauta, A., Seidel, C., Deveza, L., Montoro, D., Grova, M., Ko, S. H., Hyun, J., Gurtner, G. C., Longaker, M. T., Yang, F.
2013; 21 (2): 445-455
- **The Seed and the Soil Optimizing Stem Cells and Their Environment for Tissue Regeneration** *ANNALS OF PLASTIC SURGERY*
Hyun, J. S., Montoro, D. T., Lo, D. D., Flynn, R. A., Wong, V., Chung, M. T., Longaker, M. T., Wan, D. C.
2013; 70 (2): 235-239
 - **STEM CELL-BASED BIOENGINEERING OF CRANIOFACIAL BONE** *STEM CELLS IN CRANIOFACIAL DEVELOPMENT AND REGENERATION*
Lo, D. D., Montoro, D. T., Grova, M., Hyun, J. S., Chung, M. T., Wan, D. C., Longaker, M. T.
edited by Huang, G. T., Thesleff
2013: 379-94
 - **In vivo directed differentiation of pluripotent stem cells for skeletal regeneration** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Levi, B., Hyun, J. S., Montoro, D. T., Lo, D. D., Chan, C. K., Hu, S., Sun, N., Lee, M., Grova, M., Connolly, A. J., Wu, J. C., Gurtner, G. C., Weissman, et al
2012; 109 (50): 20379-20384
 - **Femtosecond plasma mediated laser ablation has advantages over mechanical osteotomy of cranial bone** *LASERS IN SURGERY AND MEDICINE*
Lo, D. D., Mackanos, M. A., Chung, M. T., Hyun, J. S., Montoro, D. T., Grova, M., Liu, C., Wang, J., Palanker, D., Connolly, A. J., Longaker, M. T., Contag, C. H., Wan, et al
2012; 44 (10): 805-814
 - **Models of cranial suture biology.** *journal of craniofacial surgery*
Grova, M., Lo, D. D., Montoro, D., Hyun, J. S., Chung, M. T., Wan, D. C., Longaker, M. T.
2012; 23 (7): 1954-1958
 - **Models of Cranial Suture Biology** *JOURNAL OF CRANIOFACIAL SURGERY*
Grova, M., Lo, D. D., Montoro, D., Hyun, J. S., Chung, M. T., Wan, D. C., Longaker, M. T.
2012; 23: 1954-1958
 - **Pierre Robin Sequence and Treacher Collins Hypoplastic Mandible Comparison Using Three-Dimensional Morphometric Analysis** *JOURNAL OF CRANIOFACIAL SURGERY*
Chung, M. T., Levi, B., Hyun, J. S., Lo, D. D., Montoro, D. T., Lisiecki, J., Bradley, J. P., Buchman, S. R., Longaker, M. T., Wan, D. C.
2012; 23: 1959-1963
 - **Pierre Robin sequence and Treacher Collins hypoplastic mandible comparison using three-dimensional morphometric analysis.** *journal of craniofacial surgery*
Chung, M. T., Levi, B., Hyun, J. S., Lo, D. D., Montoro, D. T., Lisiecki, J., Bradley, J. P., Buchman, S. R., Longaker, M. T., Wan, D. C.
2012; 23 (7): 1959-1963
 - **Repair of a Critical-sized Calvarial Defect Model Using Adipose-derived Stromal Cells Harvested from Lipoaspirate** *JOVE-JOURNAL OF VISUALIZED EXPERIMENTS*
Lo, D. D., Hyun, J. S., Chung, M. T., Montoro, D. T., Zimmermann, A., Grova, M. M., Lee, M., Wan, D. C., Longaker, M. T.
2012
 - **Rethinking the Blastema** *PLASTIC AND RECONSTRUCTIVE SURGERY*
Hyun, J. S., Chung, M. T., Wong, V. W., Montoro, D., Longaker, M. T., Wan, D. C.
2012; 129 (5): 1097-1103
 - **Enhancement of Human Adipose-Derived Stromal Cell Angiogenesis through Knockdown of a BMP-2 Inhibitor** *PLASTIC AND RECONSTRUCTIVE SURGERY*
Levi, B., Nelson, E. R., Hyun, J. S., Glotzbach, J. P., Li, S., Nauta, A., Montoro, D. T., Lee, M., Commons, G. C., Hu, S., Wu, J. C., Gurtner, G. C., Longaker, et al
2012; 129 (1): 53-66
 - **Stem Cells: Update and Impact on Craniofacial Surgery** *JOURNAL OF CRANIOFACIAL SURGERY*
Levi, B., Glotzbach, J. P., Wong, V. W., Nelson, E. R., Hyun, J., Wan, D. C., Gurtner, G. C., Longaker, M. T.
2012; 23 (1): 319-322

- **Cranial Suture Biology: From Pathways to Patient Care** *JOURNAL OF CRANIOFACIAL SURGERY*
Levi, B., Wan, D. C., Wong, V. W., Nelson, E., Hyun, J., Longaker, M. T.
2012; 23 (1): 13-19
- **Nonintegrating Knockdown and Customized Scaffold Design Enhances Human Adipose-Derived Stem Cells in Skeletal Repair** *STEM CELLS*
Levi, B., Hyun, J. S., Nelson, E. R., Li, S., Montoro, D. T., Wan, D. C., Jia, F. J., Glotzbach, J. C., James, A. W., Lee, M., Huang, M., Quarto, N., Gurtner, et al
2011; 29 (12): 2018-2029
- **CD105 Protein Depletion Enhances Human Adipose-derived Stromal Cell Osteogenesis through Reduction of Transforming Growth Factor beta 1 (TGF-beta 1) Signaling** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Levi, B., Wan, D. C., Glotzbach, J. P., Hyun, J., Januszyk, M., Montoro, D., Sorkin, M., James, A. W., Nelson, E. R., Li, S., Quarto, N., Lee, M., Gurtner, et al
2011; 286 (45): 39497-39509
- **Dura Mater Stimulates Human Adipose-Derived Stromal Cells to Undergo Bone Formation in Mouse Calvarial Defects** *STEM CELLS*
Levi, B., Nelson, E. R., Li, S., James, A. W., Hyun, J. S., Montoro, D. T., Lee, M., Glotzbach, J. P., Commons, G. W., Longaker, M. T.
2011; 29 (8): 1241-1255