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Bio

LINKS

- Tissue Regeneration Lab website: <https://pediatricsurgery.stanford.edu/research/JDRResearch.html>

Publications

PUBLICATIONS

- **Repeated lengthening using distraction enterogenesis: A porcine model.** *Surgery*
Emengo, P., Fell, G. L., Nepomuceno, H., Thomas, A. L., Dunn, J. C.
2026; 194: 110159
- **Epithelial Ion Transport in Spring-Lengthened Jejunum in a Porcine Model.** *Journal of pediatric surgery*
Joo, N. S., Thomas, A. L., Salimi-Jazi, F., Rafeeqi, T. A., Fell, G., Emengo, P., Nguyen, J. A., Diyaolu, M., Abazari, S., Sellers, Z. M., Dunn, J. C.
2025: 162880
- **Submucosal Hydrogel for Spring-Mediated Intestinal Lengthening.** *Journal of biomedical materials research. Part A*
Salimi-Jazi, F., de Paiva Narciso, N., Fell, G., Thomas, A., Navarro, R. S., Rafeeqi, T., Baugh, N. J., Suhar, R. A., Nguyen, J., Lopez, N., Heilshorn, S. C., Dunn, J. C.
2025; 113 (10): e37986
- **High-density soft bioelectronic fibres for multimodal sensing and stimulation.** *Nature*
Khatib, M., Zhao, E. T., Wei, S., Park, J., Abramson, A., Bishop, E. S., Thomas, A. L., Chen, C. H., Emengo, P., Xu, C., Hamnett, R., Root, S. E., Yuan, et al
2025; 645 (8081): 656-664
- **Mechanical distraction enterogenesis utilizing springs has equal effectiveness in adult and juvenile pigs.** *Pediatric surgery international*
Rafeeqi, T. A., Thomas, A. L., Salimi-Jazi, F., Diyaolu, M., Lopez, N., Dunn, J. C.
2024; 41 (1): 18
- **Perioperative Gastrointestinal Myoelectric Activity Measurement Using Wireless External Patches.** *The Journal of surgical research*
Salimi-Jazi, F., Thomas, A. L., Wood, L. S., Rafeeqi, T., Axelrod, S., Navalgund, A., Axelrod, L., Dunn, J. C.
2024; 302: 186-199
- **Spiral NeuroString: High-Density Soft Bioelectronic Fibers for Multimodal Sensing and Stimulation.** *bioRxiv : the preprint server for biology*
Khatib, M., Zhao, E. T., Wei, S., Abramson, A., Bishop, E. S., Chen, C., Thomas, A., Xu, C., Park, J., Lee, Y., Hamnett, R., Yu, W., Root, et al
2023
- **Stem cell activation during distraction enterogenesis in the murine colon.** *Pediatric surgery international*
Salimi-Jazi, F., Thomas, A. L., Rafeeqi, T. A., Wood, L. S., Portelli, K., Dunn, J. C.

2023; 39 (1): 172

- **The effect of spring diameter on porcine ileal distraction enterogenesis.** *Pediatric surgery international*
Salimi-Jazi, F., Thomas, A. L., Rafeeqi, T., Diyaolu, M., Wood, L. S., Dunn, J. C.
2022; 39 (1): 19
- **Long-term safety of intraluminal spring-mediated bowel lengthening.** *Journal of pediatric surgery*
Rafeeqi, T., Sullins, V. F., Thomas, A., Wagner, J. P., Wood, L. S., Salimi-Jazi, F., Bessette, A., Dunn, J. C.
2022
- **Generation of Porcine Ileum Through Spring-Mediated Mechanical Distraction.** *The Journal of surgical research*
Rafeeqi, T. A., Diyaolu, M., Thomas, A., Salimi-Jazi, F., Wood, L. S., Dunn, J. C.
2022; 280: 371-378
- **Gastrointestinal Myoelectric Measurements via Simultaneous External and Internal Electrodes in Pigs.** *The Journal of surgical research*
Salimi-Jazi, F., Thomas, A. L., Rafeeqi, T., Diyaolu, M., Wood, L. S., Axelrod, S., Navalgund, A., Axelrod, L., Dunn, J. C.
2022; 279: 119-126
- **A tissue-like neurotransmitter sensor for the brain and gut.** *Nature*
Li, J., Liu, Y., Yuan, L., Zhang, B., Bishop, E. S., Wang, K., Tang, J., Zheng, Y., Xu, W., Niu, S., Beker, L., Li, T. L., Chen, et al
2022; 606 (7912): 94-101
- **Internal plication for spring confinement to lengthen intestine in a porcine model.** *PloS one*
Rafeeqi, T. A., Thomas, A., Salimi-Jazi, F., Diyaolu, M., Dunn, J. C.
2022; 17 (9): e0274612
- **Distraction enterogenesis in the murine colon.** *Journal of pediatric surgery*
Portelli, K. I., Thomas, A., Wood, L. S., Diyaolu, M., Taylor, J. S., Dunn, J. C.
2021
- **Intestinal adaptation following spring insertion into a roux limb in mice.** *Journal of pediatric surgery*
Portelli, K. I., Park, J., Taylor, J. S., Thomas, A., Stelzner, M., Martin, M. G., Dunn, J. C.
2020
- **Electroacupuncture to Increase Neuronal Stem Cell Growth** *MEDICAL ACUPUNCTURE*
Dubrovsky, G., Ha, D., Thomas, A., Zhu, M., Hubacher, J., Itoh, T., Dunn, J. C. Y.
2020; 32 (1): 16-23
- **Human skin-derived precursor cells xenografted in aganglionic bowel.** *Journal of pediatric surgery*
Thomas, A. L., Taylor, J. S., Dunn, J. C.
2020
- **Mesenteric neovascularization during spring-mediated intestinal lengthening.** *Journal of pediatric surgery*
Diyaolu, M. n., Thomas, A. L., Wood, L. S., Taylor, J. n., Dunn, J. C.
2020
- **Optimization of In-Continuity Spring-Mediated Intestinal Lengthening.** *Journal of pediatric surgery*
Dubrovsky, G., Taylor, J. S., Thomas, A., Shekherdimian, S., Dunn, J. C.
2019
- **Autologous Transplantation of Skin-Derived Precursor Cells in a Porcine Model.** *Journal of pediatric surgery*
Thomas, A., Taylor, J. S., Huynh, N., Dubrovsky, G., Chadarevian, J., Chen, A., Baker, S., Dunn, J. C.
2019
- **Growth of Small Intestinal Layers Proximal and Distal to the Intestine Undergoing Distraction Enterogenesis**
Wood, L. S. Y., Taylor, J. S., Hosseini, H. S., Dubrovsky, G., Thomas, A., Dunn, J. C. Y.
ELSEVIER SCIENCE INC.2019: S204
- **Biomechanical signaling and collagen fiber reorientation during distraction enterogenesis.** *Journal of the mechanical behavior of biomedical materials*
Hosseini, H. S., Wood, L. S., Taylor, J. S., Dubrovsky, G., Portelli, K. I., Thomas, A., Dunn, J. C.

2019; 101: 103425

- **Double plication for spring-mediated in-continuity intestinal lengthening in a porcine model**
Dubrovsky, G., Nhan Huynh, Thomas, A., Shekherdimian, S., Dunn, J. C. Y.
MOSBY-ELSEVIER.2019: 389–92
- **Intestinal lengthening via multiple in-continuity springs.** *Journal of pediatric surgery*
Dubrovsky, G., Huynh, N., Thomas, A., Shekherdimian, S., Dunn, J. C.
2018
- **Double plication for spring-mediated intestinal lengthening of a defunctionalized Roux limb** *JOURNAL OF PEDIATRIC SURGERY*
Dubrovsky, G., Nhan Huynh, Thomas, A., Shekherdimian, S., Dunn, J. C. Y.
2018; 53 (9): 1806–10
- **Bioengineered intestinal muscularis complexes with long-term spontaneous and periodic contractions** *PLOS ONE*
Wang, Q., Wang, K., Solorzano-Vargas, R., Lin, P., Walthers, C. M., Thomas, A., Martin, M. G., Dunn, J. C. Y.
2018; 13 (5): e0195315