

Heather Talbott

Temp - Non-Exempt, Surgery - Plastic and Reconstructive Surgery

Publications

PUBLICATIONS

- **Inhibiting mechanotransduction prevents scarring and yields regeneration in a large animal model.** *Science translational medicine*
Mascharak, S., Griffin, M., Talbott, H. E., Guo, J. L., Parker, J., Morgan, A. G., Valencia, C., Kuhnert, M. M., Li, D. J., Liang, N. E., Kratochvil, R. M., Daccache, J. A., Sidhu, et al
2025; 17 (786): eadt6387
- **A tension offloading patch mitigates dermal fibrosis induced by pro-fibrotic skin injections.** *Research square*
Talbott, H. E., Griffin, M. F., Mascharak, S., Parker, J. B., Kuhnert, M. M., Guo, J. L., Diaz DeLeon, N. M., Lavin, C., Abbas, D., Guardino, N., Morgan, A., Valencia, C., Cotterell, et al
2024
- **Allele-specific expression reveals genetic drivers of tissue regeneration in mice.** *Cell stem cell*
Mack, K. L., Talbott, H. E., Griffin, M. F., Parker, J. B., Guardino, N. J., Spielman, A. F., Davitt, M. F., Mascharak, S., Downer, M., Morgan, A., Valencia, C., Akras, D., Berger, et al
2023
- **Multiplexed evaluation of mouse wound tissue using oligonucleotide barcoding with single-cell RNA sequencing.** *STAR protocols*
Januszyk, M., Griffin, M., Mascharak, S., Talbott, H. E., Chen, K., Henn, D., Spielman, A. F., Parker, J. B., Liang, N. E., Cotterell, A., Guardino, N., Foster, D. S., Wagh, et al
2022; 4 (1): 101946
- **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
- **Inhibition of Yes-Associated Protein Promotes Skin Wound Regeneration in Large Animals**
Januszyk, M., Talbott, H. E., Griffin, M., Guardino, N., Spielman, A., Guo, J. L., Mascharak, S., Wan, D. C., Longaker, M. T.
LIPPINCOTT WILLIAMS & WILKINS.2022: S196
- **Multomic analysis reveals conservation of cancer-associated fibroblast phenotypes across species and tissue of origin.** *Cancer cell*
Foster, D. S., Januszyk, M., Delitto, D., Yost, K. E., Griffin, M., Guo, J., Guardino, N., Delitto, A. E., Chinta, M., Burcham, A. R., Nguyen, A. T., Bauer-Rowe, K. E., Titan, et al
2022
- **Wound healing, fibroblast heterogeneity, and fibrosis.** *Cell stem cell*
Talbott, H. E., Mascharak, S., Griffin, M., Wan, D. C., Longaker, M. T.
2022; 29 (8): 1161-1180
- **Musculoskeletal tissue engineering: Adipose derived stromal cell implementation for the treatment of osteoarthritis.** *Biomaterials*
Tevlin, R., desJardins-Park, H., Huber, J., Dilorio, S. E., Longaker, M. T., Wan, D. C.
2022; 286: 121544
- **Adipocytes Transition To Pro-Fibrotic Fibroblasts And Contribute To Muscle Fibrosis Following Nerve Injury**
Spielman, A. F., Griffin, M., Guardino, N., desJardins-Park, H. E., Bauer-Rowe, K. E., Guo, J. L., Parker, J., Abbas, D. B., Wan, D., Longaker, M. T.
WILEY.2022: A3-A4
- **Multi-omic analysis reveals divergent molecular events in scarring and regenerative wound healing.** *Cell stem cell*

- Mascharak, S., Talbott, H. E., Januszyk, M., Griffin, M., Chen, K., Davitt, M. F., Demeter, J., Henn, D., Bonham, C. A., Foster, D. S., Mooney, N., Cheng, R., Jackson, et al
1800
- **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
 - **From Chronic Wounds to Scarring: The Growing Healthcare Burden of Under- and Over-healing Wounds.** *Advances in wound care*
desJardins-Park, H. E., Gurtner, G. C., Wan, D. C., Longaker, M. T.
2021
 - **JUN promotes hypertrophic skin scarring via CD36 in preclinical in vitro and in vivo models.** *Science translational medicine*
Griffin, M. F., Borrelli, M. R., Garcia, J. T., Januszyk, M., King, M., Lerbs, T., Cui, L., Moore, A. L., Shen, A. H., Mascharak, S., Diaz Deleon, N. M., Adem, S., Taylor, et al
2021; 13 (609): eabb3312
 - **Modulating cellular responses to mechanical forces to promote wound regeneration.** *Advances in wound care*
Mascharak, S., desJardins-Park, H. E., Davitt, M. F., Guardino, N. J., Gurtner, G. C., Wan, D. C., Longaker, M. T.
2021
 - **Leveraging Mechanical Forces to Target Insulin Injection-Induced Lipohypertrophy and Fibrosis.** *Diabetes spectrum : a publication of the American Diabetes Association*
desJardins-Park, H. E., Wan, D. C.
2021; 34 (3): 308-312
 - **Optimizing Treatment of Hand Infections: Is MRSA Coverage Always Necessary?** *Plastic and reconstructive surgery. Global open*
Oliver, J. D., Pridgen, B. C., desJardins-Park, H. E., Curtin, C., Fox, P. M.
2021; 9 (6): e3619
 - **Wnt-active Engrailed-1 Lineage-negative Fibroblasts Mediate Postnatal Skin Regeneration**
Mascharak, S., desJardins-Park, H. E., Januszyk, M., Chen, K., Davitt, M. F., Demeter, J., Henn, D., Griffin, M., Bonham, C. A., Mooney, N., Cheng, R., Jackson, P. K., Wan, et al
WILEY.2021: A30
 - **Single Cell RNA Sequencing Reveals Fibroblast Heterogeneity Across Embryonic Origins Of Skin**
Griffin, M., King, M., Chen, K., desJardins-Park, H., Mascharak, S., Fahy, E., Guardino, N., Lavin, C., Abbas, D., Januszyk, M., Wan, D., Longaker, M.
WILEY.2021: A11-A12
 - **Novel Genetic Analysis Of MRL Mice Reveals That Complement Inhibition By Factor H Reduces Scarring**
desJardins-Park, H. E., Mack, K. L., Guardino, N., Griffin, M., Davitt, M. F., Mascharak, S., Wan, D. C., Fraser, H. B., Longaker, M. T.
WILEY.2021: A13
 - **Adipocytes In Dermal Wounds Undergo Conversion To Pro-fibrotic Fibroblasts That Contribute To Scar Formation**
Guardino, N., desJardins-Park, H. E., Griffin, M., Bauer-Rowe, K. E., King, M. E., King, M. E., Mascharak, S., Longaker, M. T.
WILEY.2021: A31
 - **Transgenic Inhibition Of Engrailed-1 Results In Endogenous Postnatal Skin Regeneration**
Mascharak, S., desJardins-Park, H. E., Davitt, M. F., Chen, K., Griffin, M., Guardino, N., Lorenz, H., Wan, D. C., Gurtner, G. C., Longaker, M. T.
WILEY.2021: A14-A15
 - **Preventing Engrailed-1 activation in fibroblasts yields wound regeneration without scarring.** *Science (New York, N.Y.)*
Mascharak, S., desJardins-Park, H. E., Davitt, M. F., Griffin, M., Borrelli, M. R., Moore, A. L., Chen, K., Duoto, B., Chinta, M., Foster, D. S., Shen, A. H., Januszyk, M., Kwon, et al
2021; 372 (6540)
 - **Discussion: Overcoming the Patent Gap: A Guide to Patenting for Plastic Surgeons.** *Plastic and reconstructive surgery*
Januszyk, M., desJardins-Park, H. E., Gurtner, G. C., Longaker, M. T.
2021; 148 (4): 918-919

- **Endogenous Mechanisms of Craniomaxillofacial Repair: Toward Novel Regenerative Therapies.** *Frontiers in oral health*
desJardins-Park, H. E., Mascharak, S., Longaker, M. T., Wan, D. C.
1800; 2: 676258
- **Prrx1 Fibroblasts Represent a Pro-fibrotic Lineage in the Mouse Ventral Dermis.** *Cell reports*
Leavitt, T., Hu, M. S., Borrelli, M. R., Januszyk, M., Garcia, J. T., Ransom, R. C., Mascharak, S., desJardins-Park, H. E., Litzemberger, U. M., Walmsley, G. G., Marshall, C. D., Moore, A. L., Duoto, et al
2020; 33 (6): 108356
- **Peripheral Motor Neuron Activity Influences over Local Sarcoma Progression**
Davitt, M., Foster, D., Mascharak, S., desJardins-Park, H., Norton, J., Longaker, M. T.
ELSEVIER SCIENCE INC.2020: S230–S231
- **Detection, Scoring, and Classification of Solid Organ Fibroses with Machine Learning Analysis**
Mascharak, S., desJardins-Park, H. E., Davitt, M., Foster, D. S., Chinta, M., Wan, D. C., Wernig, G., Longaker, M. T.
ELSEVIER SCIENCE INC.2020: S222
- **A Surgical Model for Investigating the Role of Creeping Fat in Intestinal Fibrosis**
Bauer-Rowe, K. E., Foster, D., Titan, A., Chinta, M., desJardins-Park, H., Griffin, M., Longaker, M. T.
ELSEVIER SCIENCE INC.2020: S50–S51
- **Elucidating Molecular Drivers of Wound Regeneration in MRL Mice Via Novel Transcriptomic Analyses**
desJardins-Park, H. E., Mack, K. L., Davitt, M. F., Griffin, M., Mascharak, S., Fraser, H. B., Longaker, M. T.
ELSEVIER SCIENCE INC.2020: S225
- **Fibroblast Heterogeneity in Wound Healing: Hurdles to Clinical Translation.** *Trends in molecular medicine*
Mascharak, S., desJardins-Park, H. E., Longaker, M. T.
2020
- **Rewriting the Future: Promises and Limits of Germline Gene Editing in Craniofacial Surgery.** *The Journal of craniofacial surgery*
Davitt, M., Mascharak, S., desJardins-Park, H., Chinta, M., Wan, D. C., Longaker, M. T.
2020
- **Doxycycline Reduces Scar Thickness and Improves Collagen Architecture** *ANNALS OF SURGERY*
Moore, A. L., desJardins-Park, H. E., Duoto, B. A., Mascharak, S., Murphy, M. P., Irizarry, D. M., Foster, D. S., Jones, R. E., Barnes, L. A., Marshall, C. D., Ransom, R. C., Wernig, G., Longaker, et al
2020; 272 (1): 183–93
- **Harnessing novel gene expression analyses to identify drivers of regenerative ear wound healing in MRL mice**
desJardins-Park, H. E., Mack, K. L., Davitt, M. F., Griffin, M., Fraser, H. B., Longaker, M. T.
WILEY.2020: S25
- **Fibroblast Heterogeneity in and Its Implications for Plastic and Reconstructive Surgery: A Basic Science Review** *PLASTIC AND RECONSTRUCTIVE SURGERY-GLOBAL OPEN*
desJardins-Park, H. E., Chinta, M. S., Foster, D. S., Borrelli, M. R., Shen, A. H., Wan, D. C., Longaker, M. T.
2020; 8 (6)
- **Fibroblast Heterogeneity in and Its Implications for Plastic and Reconstructive Surgery: A Basic Science Review.** *Plastic and reconstructive surgery. Global open*
desJardins-Park, H. E., Chinta, M. S., Foster, D. S., Borrelli, M. R., Shen, A. H., Wan, D. C., Longaker, M. T.
2020; 8 (6): e2927
- **"Tissues in a Dish": A Review of Organoids in Plastic Surgery.** *Plastic and reconstructive surgery. Global open*
Chinta, M. S., desJardins-Park, H. E., Wan, D. C., Longaker, M. T.
2020; 8 (4): e2787
- **Understanding the impact of fibroblast heterogeneity on skin fibrosis.** *Disease models & mechanisms*
Griffin, M. F., desJardins-Park, H. E., Mascharak, S. n., Borrelli, M. R., Longaker, M. T.
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- **Intrinsic Chromatin State and Extrinsic Wound-Related Cues Can Coordinate to Activate Fibroblasts for Scarring**
desJardins-Park, H. E., Moore, A. L., Litzemberger, U., Mascharak, S., Chinta, M., Ransom, R. C., Hu, M. S., Lorenz, H. P., Chang, H. Y., Longaker, M. T.
ELSEVIER SCIENCE INC.2019: S223–S224
- **Regenerative Skin Healing Through Targeted Modulation of Engrailed1-Negative Fibroblasts**
Mascharak, S., desJardins-Park, H. E., Moore, A. L., Borrelli, M. R., Chinta, M., Foster, D., Lorenz, H., Longaker, M. T.
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- **The Spectrum of Scarring in Craniofacial Wound Repair.** *Frontiers in physiology*
desJardins-Park, H. E., Mascharak, S., Chinta, M. S., Wan, D. C., Longaker, M. T.
2019; 10: 322
- **Quality of Randomized Controlled Trials for Surgical Treatment of Carpal Tunnel Syndrome: A Systematic Review.** *Plastic and reconstructive surgery*
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2019; 143 (3): 791–99
- **Quality of Randomized Controlled Trials for Surgical Treatment of Carpal Tunnel Syndrome: A Systematic Review** *PLASTIC AND RECONSTRUCTIVE SURGERY*
Long, C., Azad, A. D., desJardins-Park, H. E., Fox, P. M.
2019; 143 (3): 791-799
- **Doxycycline Reduces Scar Thickness and Improves Collagen Architecture.** *Annals of surgery*
Moore, A. L., desJardins-Park, H. E., Duoto, B. A., Mascharak, S., Murphy, M. P., Irizarry, D. M., Foster, D. S., Jones, R. E., Barnes, L. A., Marshall, C. D., Ransom, R. C., Wernig, G., Longaker, et al
2018
- **Quality of surgical randomized controlled trials in hand surgery: a systematic review** *JOURNAL OF HAND SURGERY-EUROPEAN VOLUME*
Long, C., desJardins-Park, H. E., Popat, R., Fox, P. M.
2018; 43 (8): 801-807
- **Fibroblasts and wound healing: an update.** *Regenerative medicine*
des Jardins-Park, H. E., Foster, D. S., Longaker, M. T.
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- **Fibroblasts and wound healing: an update** *REGENERATIVE MEDICINE*
desJardins-Park, H. E., Foster, D. S., Longaker, M. T.
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- **Quality of surgical randomized controlled trials in hand surgery: a systematic review.** *The Journal of hand surgery, European volume*
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