

# Stanford

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## Bauer LeSavage

Postdoctoral Scholar, Materials Science and Engineering

### CONTACT INFORMATION

- **Email**

**Email** lesavage@stanford.edu

### Bio

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### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , BIOE-PHD (2022)
- Master of Science, Stanford University , BIOE-MS (2018)

### STANFORD ADVISORS

- Sarah Heilshorn, Postdoctoral Faculty Sponsor

### Publications

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### PUBLICATIONS

- **Cancer-associated mesothelial cells promote ovarian cancer chemoresistance through paracrine osteopontin signaling.** *The Journal of clinical investigation*  
Qian, J., LeSavage, B. L., Hubka, K. M., Ma, C., Natarajan, S., Eggold, J. T., Xiao, Y., Fuh, K. C., Krishnan, V., Enejder, A., Heilshorn, S. C., Dorigo, O., Rankin, et al  
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- **Next-generation cancer organoids.** *Nature materials*  
LeSavage, B. L., Suhar, R. A., Brogiere, N., Lutolf, M. P., Heilshorn, S. C.  
2021
- **Engineered Matrices Enable the Culture of Human Patient-Derived Intestinal Organoids.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*  
Hunt, D. R., Klett, K. C., Mascharak, S., Wang, H., Gong, D., Lou, J., Li, X., Cai, P. C., Suhar, R. A., Co, J. Y., LeSavage, B. L., Foster, A. A., Guan, et al  
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- **Engineered Matrices Enable the Culture of Human Patient-Derived Intestinal Organoids** *ADVANCED SCIENCE*  
Hunt, D. R., Klett, K. C., Mascharak, S., Wang, H. Y., Gong, D., Lou, J., Li, X., Cai, P. C., Suhar, R. A., Co, J. Y., LeSavage, B. L., Foster, A. A., Guan, et al  
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- **Microrheology reveals simultaneous cell-mediated matrix stiffening and fluidization that underlie breast cancer invasion.** *Science advances*  
Krajina, B. A., LeSavage, B. L., Roth, J. G., Zhu, A. W., Cai, P. C., Spakowitz, A. J., Heilshorn, S. C.  
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- **Defined matrices bring IBD to 3D.** *Nature materials*  
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- **Neural Progenitor Cells Alter Chromatin Organization and Neurotrophin Expression in Response to 3D Matrix Degradability.** *Advanced healthcare materials*  
Madl, C. M., LeSavage, B. L., Khariton, M., Heilshorn, S. C.  
2020; e2000754
- **Bioprinting Cell- and Spheroid-Laden Protein-Engineered Hydrogels as Tissue-on-Chip Platforms.** *Frontiers in bioengineering and biotechnology*  
Duarte Campos, D. F., Lindsay, C. D., Roth, J. G., LeSavage, B. L., Seymour, A. J., Krajina, B. A., Ribeiro, R. n., Costa, P. F., Blaeser, A. n., Heilshorn, S. C.  
2020; 8: 374
- **Bioprinting of stem cell expansion lattices** *ACTA BIOMATERIALIA*  
Lindsay, C. D., Roth, J. G., LeSavage, B. L., Heilshorn, S. C.  
2019; 95: 225–35
- **Matrix Remodeling Enhances the Differentiation Capacity of Neural Progenitor Cells in 3D Hydrogels** *ADVANCED SCIENCE*  
Madl, C. M., LeSavage, B. L., Dewi, R. E., Lampe, K. J., Heilshorn, S. C.  
2019; 6 (4): 1801716
- **Production of Elastin-like Protein Hydrogels for Encapsulation and Immunostaining of Cells in 3D.** *Journal of visualized experiments : JoVE*  
LeSavage, B. L., Suhar, N. A., Madl, C. M., Heilshorn, S. C.  
2018
- **Maintenance of neural progenitor cell stemness in 3D hydrogels requires matrix remodelling.** *Nature materials*  
Madl, C. M., LeSavage, B. L., Dewi, R. E., Dinh, C. B., Stowers, R. S., Khariton, M. n., Lampe, K. J., Nguyen, D. n., Chaudhuri, O. n., Enejder, A. n., Heilshorn, S. C.  
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