Stanford

Kelsea Hubka

Postdoctoral Scholar, Materials Science and Engineering

Bio

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- Ruth L. Kirschstein National Research Service Award Individual Predoctoral Fellowship (Parent F31), NIH NIDCR (2015-2018)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Rice University , Bioengineering (2019)
- Master of Bioengineering, Rice University , Bioengineering (2012)
- Bachelor of Science, Loyola Marymount University , Mechanical Engineering (2009)

STANFORD ADVISORS

- Sarah Heilshorn, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Twist1 interacts with beta/delta-Catenins during neural tube development and regulates fate transition in cranial neural crest cells.** *Development (Cambridge, England)*
  Bertol, J. W., Johnston, S., Ahmed, R., Xie, V. K., Hubka, K. M., Cruz, L., Nitschke, L., Stetsiv, M., Goering, J. P., Nistor, P., Lowell, S., Hoskens, H., Claes, et al
  2022

- **Tuning Polymer Hydrophilicity to Regulate Gel Mechanics and Encapsulated Cell Morphology.** *Advanced healthcare materials*
  Navarro, R. S., Huang, M. S., Roth, J. G., Hubka, K. M., Long, C. M., Enejder, A., Heilshorn, S. C.
  2022: e2200011

- **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
  2021; 131 (16)

- **Cabozantinib Reverses Renal Cell Carcinoma-Mediated Osteoblast Inhibition in Three-Dimensional Co-culture In Vitro and Reduces Bone Osteolysis In Vivo.** *Molecular cancer therapeutics*
  Pan, T., Martinez, M., Hubka, K. M., Song, J. H., Lin, S., Yu, G., Lee, Y., Gallick, G. E., Tu, S., Harrington, D. A., Farach-Carson, M. C., Lin, S., Satcher, et al
  2020

- **Perlecan domain I gradients establish stable biomimetic heparin binding growth factor gradients for cell migration in hydrogels** *ACTA BIOMATERIALIA*
  Hubka, K. M., Carson, D. D., Harrington, D. A., Farach-Carson, M. C.

2019; 97: 385–98

- **Perlecan/HSPG2: Signaling role of domain IV in chondrocyte clustering with implications for Schwartz-Jampel Syndrome** *JOURNAL OF CELLULAR BIOCHEMISTRY*
  Martinez, J. R., Grindel, B. J., Hubka, K. M., Dodge, G. R., Farach-Carson, M. C.
  2019; 120 (2): 2138–50

- **Dissociative and Nondissociative Models for Culture of Human Eccrine Glands for Toxicology Testing and Tissue Engineering Applications** *Applied In Vitro Toxicology*
  Hubka, K. M., Wu, D., Harrington, D. A., Langer, J. C., Pocard, T., Jammayrac, O., Farach-Carson, M. C., Pradhan-Bhatt, S.
  2015; 1 (3): 187-197

- **Enhancing Chondrogenic Phenotype for Cartilage Tissue Engineering: Monoculture and Coculture of Articular Chondrocytes and Mesenchymal Stem Cells** *TISSUE ENGINEERING PART B-REVIEWS*
  Hubka, K. M., Dahlin, R. L., Meretoja, V. V., Kasper, F., Mikos, A. G.
  2014; 20 (6): 641–54

- **Human cell-conditioned media produced under embryonic-like conditions result in improved healing time after laser resurfacing.** *Aesthetic plastic surgery*
  Zimber, M. P., Mansbridge, J. N., Taylor, M., Stockton, T., Hubka, M., Baumgartner, M., Rheins, L., Hubka, K., Brandt, E. N., Kellar, R., Naughton, G. K.
  2012; 36 (2): 431-7

- **Hair regrowth following a Wnt- and follistatin containing treatment: safety and efficacy in a first-in-man phase 1 clinical trial.** *Journal of drugs in dermatology : JDD*
  Zimber, M. P., Ziering, C. n., Zeigler, F. n., Hubka, M. n., Mansbridge, J. N., Baumgartner, M. n., Hubka, K. n., Kellar, R. n., Perez-Meza, D. n., Sadick, N. n., Naughton, G. K.
  2011; 10 (11): 1308–12