

Alex J. Seibel

Boston University – Department of Biomedical Engineering
44 Cummington Mall, Boston, MA 02215
419-584-8844, aseibel@bu.edu

EDUCATION

Boston University (2018-present)
PhD Candidate in Biomedical Engineering.
GPA: 3.77, Expected Graduation: Spring 2023

The Ohio State University (2014-2018)
B.S. Chemical and Biomolecular Engineering, Minor in Neuroscience
GPA: 3.89, Graduated with Honors Research Distinction

WORK EXPERIENCE

Doctoral Researcher with Prof. Joe Tien, Boston University, Department of Biomedical Engineering (Jun 2019 – present)
- Studying breast cancer escape into lymphovasculture

Undergraduate Researcher with Prof. Jonathan Song, The Ohio State University, Department of Mechanical & Aerospace Engineering (Jan 2016 – Jul 2018)
- Studied angiogenesis, vascular permeability, cancer cell invasion

PUBLICATIONS

4. Tien, J., Dance, Y. W., Ghani, U., **Seibel, A. J.**, & Nelson, C. M. Interstitial hypertension suppresses escape of human breast tumor cells via convection of interstitial fluid. *Cell. Mol. Bioeng.*, in press.
3. Tien, J., Ghani, U., Dance, Y. W., **Seibel, A. J.**, Karakan, M. C., Ekinici, K. L., & Nelson, C. M. Matrix pore size governs escape of human breast cancer cells from a microtumor to an empty cavity. *IScience*, in press.
2. Chang, C.-W., **Seibel, A. J.**, Avendano, A., Cortes-Medina, M. G. & Song, J. W. Distinguishing specific CXCL12 Isoforms on their angiogenesis and vascular permeability promoting properties. *Adv. Healthc. Mater.* **9**, 1901399 (2020).
1. Chang, C.-W., **Seibel, A. J.** & Song, J. W. Application of microscale culture technologies for studying lymphatic vessel biology. *Microcirculation* **4**, e12547 (2019).

CONFERENCE PRESENTATIONS

3. Chang, C.-W., **Seibel, A. J.** & Song, J. W. “Hyaluronic acid alters the tumor angiogenesis phenotype of CXCL12 treated microvessel analogues,” MicroTAS (2018, Taiwan)

2. **Seibel, A. J.**, Chang, C.-W. & Song, J. W. “CXCL12 isoform-specific effects on vessel behavior and function,” The Ohio State University (2018, Columbus, OH)
1. **Seibel, A. J.**, Chang, C.-W. & Song, J. W. “CXCL12 isoform-specific effects on vessel behavior and function,” BMES Annual Meeting (2017, Phoenix, AZ)

UNDERGRADUATE THESIS PROJECT

“Hyaluronic acid alters vessel behavior in CXCL12-treated HUVECs”

HONORS

Boston University Distinguished Biomedical Engineering Fellowship (2018-2023), Ohio State Maximus Scholarship (2014-2018), Charles Nickel Endowed Engineering Scholarship (2015-2018), Lumley Engineering Fund Research Scholarship (2017-2018)