

Stanford

Jennifer Lin

Research Engineer

Bioengineering

Bio

ACADEMIC APPOINTMENTS

- Research Engineer, Bioengineering

PROFESSIONAL EDUCATION

- BS, Cornell University , Chemical Engineering
- PhD, Northwestern University , Chemical Engineering

Publications

PUBLICATIONS

- **Self-Assembly of Antimicrobial Peptoids Impacts Their Biological Effects on ESKAPE Bacterial Pathogens.** *ACS infectious diseases*
Nielsen, J. E., Alford, M. A., Yung, D. B., Molchanova, N., Fortkort, J. A., Lin, J. S., Diamond, G., Hancock, R. E., Jenssen, H., Pletzer, D., Lund, R., Barron, A. E.
2022
- **Upregulating Human Cathelicidin Antimicrobial Peptide LL-37 Expression May Prevent Severe COVID-19 Inflammatory Responses and Reduce Microthrombosis** *Frontiers in Immunology*
Aloul, K. M., Nielsen, J. E., Defensor, E. B., Lin, J. S., Fortkort, J. A., Shamloo, M., Cirillo, J. D., Gombart, A. F., Barron, A. E.
2022; 13: 1-16
- **Potent Antiviral Activity against HSV-1 and SARS-CoV-2 by Antimicrobial Peptoids** *Pharmaceuticals*
Diamond, G., Molchanova, N., Herlan, C., Fortkort, J. A., Lin, J. S., Figgins, E., Bopp, N., Ryan, L. K., Chung, D., Adcock, R. S., Sherman, M., Barron, A. E.
2021; 14 (4): 304
- **The human cathelicidin LL-37 is a nanomolar inhibitor of amyloid self-assembly of islet amyloid polypeptide (IAPP).** *Angewandte Chemie (International ed. in English)*
Armiento, V., Hille, K., Naltsas, D., Lin, J. S., Barron, A. E., Kapurniotu, A.
2020
- **The human cathelicidin LL-37 is a nanomolar inhibitor of amyloid self-assembly of islet amyloid polypeptide (IAPP)** *Angewandte Chemie International Edition*, <https://onlinelibrary.wiley.com/doi/abs/10.1002/anie.202000148>
Armiento, V., Hille, K., Naltsas, D., Lin, J. S., Barron, A. E., Kapurniotu, A.
2020; In Press: 6
- **Optimizing Exogenous Surfactant as a Pulmonary Delivery Vehicle for Chicken Cathelicidin-2.** *Scientific reports*
Baer, B. n., Veldhuizen, E. J., Molchanova, N. n., Jekhmane, S. n., Weingarh, M. n., Jenssen, H. n., Lin, J. S., Barron, A. E., Yamashita, C. n., Veldhuizen, R. n.
2020; 10 (1): 9392
- **Helical side chain chemistry of a peptoid-based SP-C analogue: Balancing structural rigidity and biomimicry** *BIOPOLYMERS*
Brown, N. J., Lin, J. S., Barron, A. E.
2019; 110 (6)
- **Helical side chain chemistry of a peptoid-based SP-C analogue: Balancing structural rigidity and biomimicry.** *Biopolymers*
Brown, N. J., Lin, J. S., Barron, A. E.

2019: e23277

- **Effective in vivo treatment of acute lung injury with helical, amphipathic peptoid mimics of pulmonary surfactant proteins** *SCIENTIFIC REPORTS*
Czyzewski, A. M., McCaig, L. M., Dohm, M. T., Broering, L. A., Yao, L., Brown, N. J., Didwania, M. K., Lin, J. S., Lewis, J. F., Veldhuizen, R., Barron, A. E.
2018; 8: 6795
- **Evidence that the Human Innate Immune Peptide LL-37 May Be a Binding Partner of Abeta and Inhibitor of Fibril Assembly**
De Lorenzi, E., Chiari, M., Colombo, R., Cretich, M., Sola, L., Vanna, R., Gagni, P., Bisceglia, F., Morasso, C., Lin, J. S., Lee, M., McGeer, P. L., Barron, et al
CELL PRESS.2018: 393A
- **Evidence that the Human Innate Immune Peptide LL-37 may be a Binding Partner of Amyloid-# and Inhibitor of Fibril Assembly.** *Journal of Alzheimer's disease : JAD*
De Lorenzi, E., Chiari, M., Colombo, R., Cretich, M., Sola, L., Vanna, R., Gagni, P., Bisceglia, F., Morasso, C., Lin, J. S., Lee, M., McGeer, P. L., Barron, et al
2017; 59 (4): 1213-1226
- **Intracellular biomass flocculation as a key mechanism of rapid bacterial killing by cationic, amphipathic antimicrobial peptides and peptoids.** *Scientific reports*
Chongsirawatana, N. P., Lin, J. S., Kapoor, R. n., Wetzler, M. n., Rea, J. A., Didwania, M. K., Contag, C. H., Barron, A. E.
2017; 7 (1): 16718
- **Evidence that the Human Innate Immune Peptide LL-37 may be a Binding Partner of Amyloid-# and Inhibitor of Fibril Assembly** *Journal of Alzheimer's Disease*
De Lorenzi, E., Chiari, M., Colombo, R., Cretich, M., Sola, L., Vanna, R., Gagni, P., Bisceglia, F., Morasso, C., Lin, J. S., Lee, M., McGeer, P. L., Barron, et al
2017; 59 (4): 1213-1226
- **Simultaneous detection of 19 K-ras mutations by free-solution conjugate electrophoresis of ligase detection reaction products on glass microchips** *ELECTROPHORESIS*
Albrecht, J. C., Kotani, A., Lin, J. S., Soper, S. A., Barron, A. E.
2013; 34 (4): 590-597
- **Divergent dispersion behavior of ssDNA fragments during microchip electrophoresis in pDMA and LPA entangled polymer networks** *ELECTROPHORESIS*
Fredlake, C. P., Hert, D. G., Niedringhaus, T. P., Lin, J. S., Barron, A. E.
2012; 33 (9-10): 1411-1420
- **Peptoid transporters: effects of cationic, amphipathic structure on their cellular uptake** *MOLECULAR BIOSYSTEMS*
Huang, W., Seo, J., Lin, J. S., Barron, A. E.
2012; 8 (10): 2626-2628
- **Monodisperse, "Highly" Positively Charged Protein Polymer Drag-Tags Generated in an Intein-Mediated Purification System Used in Free-Solution Electrophoretic Separations of DNA** *BIOMACROMOLECULES*
Wang, X., Albrecht, J. C., Lin, J. S., Barron, A. E.
2012; 13 (1): 117-123
- **Ultrafast, efficient separations of large-sized dsDNA in a blended polymer matrix by microfluidic chip electrophoresis: A design of experiments approach** *ELECTROPHORESIS*
Sun, M., Lin, J. S., Barron, A. E.
2011; 32 (22): 3233-3240
- **Blinded study determination of high sensitivity and specificity microchip electrophoresis-SSCP/HA to detect mutations in the p53 gene** *ELECTROPHORESIS*
Hestekin, C. N., Lin, J. S., Senderowicz, L., Jakupciak, J. P., O'Connell, C., Rademaker, A., Barron, A. E.
2011; 32 (21): 2921-2929
- **Completely Monodisperse, Highly Repetitive Proteins for Bioconjugate Capillary Electrophoresis: Development and Characterization** *BIOMACROMOLECULES*
Lin, J. S., Albrecht, J. C., Meagher, R. J., Wang, X., Barron, A. E.
2011; 12 (6): 2275-2284
- **Free-solution electrophoretic separations of DNA-drag-tag conjugates on glass microchips with no polymer network and no loss of resolution at increased electric field strength** *ELECTROPHORESIS*
Albrecht, J. C., Kerby, M. B., Niedringhaus, T. P., Lin, J. S., Wang, X., Barron, A. E.

2011; 32 (10): 1201-1208

- **A 265-Base DNA Sequencing Read by Capillary Electrophoresis with No Separation Matrix** *ANALYTICAL CHEMISTRY*

Albrecht, J. C., Lin, J. S., Barron, A. E.

2011; 83 (2): 509-515

- **Sequencing of DNA by free-solution capillary electrophoresis using a genetically engineered protein polymer drag-tag** *ANALYTICAL CHEMISTRY*

Meagher, R. J., Won, J., Coyne, J. A., Lin, J., Barron, A. E.

2008; 80 (8): 2842-2848