



## Jason Kronenfeld

Ph.D. Student in Chemistry, admitted Autumn 2021

### Bio

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#### BIO

Jason Kronenfeld holds a Bachelors of Science in Chemistry with minors in French and Math from The University of Arizona (Graduated May 2021, Summa Cum Laude with Honors). Jason spent his time at UArizona conducting research in Benjamin J. Renquist's group and working with Honors students as a Resident Assistant.

He joined the Renquist research group in 2017 where he has worked on projects related to lactation, metabolic rate, hyperinsulinemia and insulin resistance, asthma, and more. He led work on two projects. 1) Understanding the mechanism by which heat suppresses food intake as an effect of global warming. Increasing heat-stressed food intake is proposed to increase milk production in lactating mammals, increase animal efficiency, and decrease milk production costs. 2) Creating a novel approach to address glycemic control for treatment of type two diabetes mellitus – a collaboration with Dr. Khanna's research group to conduct in silico, in vivo, and in vitro testing of the novel approach.

In Fall 2021, Jason entered the Stanford University PhD program in chemistry, to be eventually followed with a post-doctoral fellowship with the ultimate goal of acting as a principal investigator in academia. He performs research in the DeSimone Lab focused on applications of high-resolution continuous liquid interface production (CLIP) under a National Science Foundation Graduate Research Fellowship. Outside of the lab, Jason is involved in research ethics and public communication initiatives as well as a student-led waltz performance group (Stanford Committee on Research, The Civilian, and the Viennese Ball Opening Committee, respectively).

#### EDUCATION AND CERTIFICATIONS

- BS, The University of Arizona , Chemistry (2021)

#### LINKS

- LinkedIn: <https://www.linkedin.com/in/jmkronenfeld/>

### Publications

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#### PUBLICATIONS

- **Roll-to-roll, high-resolution 3D printing of shape-specific particles.** *Nature*  
Kronenfeld, J. M., Rother, L., Saccone, M. A., Dulay, M. T., DeSimone, J. M.  
2024; 627 (8003): 306-312
- **Single-digit-micrometer-resolution continuous liquid interface production.** *Science advances*  
Hsiao, K., Lee, B. J., Samuelsen, T., Lipkowitz, G., Kronenfeld, J. M., Ilyn, D., Shih, A., Dulay, M. T., Tate, L., Shafqeh, E. S., DeSimone, J. M.  
2022; 8 (46): eabq2846

- **A Leak-Free Head-Out Plethysmography System to Accurately Assess Lung Function in Mice.** *Journal of applied physiology (Bethesda, Md. : 1985)*  
Bruggink, S., Kentch, K., Kronenfeld, J., Renquist, B. J.  
2022
- **A critical role of hepatic GABA in the metabolic dysfunction and hyperphagia of obesity** *CELL REPORTS*  
Geisler, C. E., Ghimire, S., Bruggink, S. M., Miller, K. E., Weninger, S. N., Kronenfeld, J. M., Yoshino, J., Klein, S., Duca, F. A., Renquist, B. J.  
2021; 35 (13): 109301
- **Development of a GABA Transaminase Inhibitor That Does Not Penetrate the Blood-Brain Barrier**  
Kronenfeld, J. M.  
The University of Arizona Honors College. Thesis Repository.  
2021
- **Feed intake-dependent and -independent effects of heat stress on lactation and mammary gland development** *JOURNAL OF DAIRY SCIENCE*  
Xiao, Y., Kronenfeld, J. M., Renquist, B. J.  
2020; 103 (12): 12003-12014
- **Determining the Role of Obesity and Muscarinic Signaling in Asthma**  
Bruggink, S., Kentch, K., Kronenfeld, J., Renquist, B.  
WILEY.2020
- **It's Strong, It's Stable, It's Streptavidin**  
Futch, L., Pham, T., Adamson, B., Reilly, B., Kronenfeld, J., Patterson, K., Inostroza, M., Fraijo, S., Montoya, J., Chavez, R., Hazzard, J.  
FEDERATION AMER SOC EXP BIOL.2015