

# Stanford

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## Brenda Yu

- MD Student with Scholarly Concentration in Biomedical Ethics & Medical Humanities / Surgery, expected graduation Spring 2030
- Other Tech - Graduate, EPS - Diversity, Equity & Inclusion

### Bio

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#### HONORS AND AWARDS

- Graduate Research Fellow, National Science Foundation (2020 - 2023)
- Carol Tomlinson-Keasey Spirit of Leadership, University of California, Merced (2019)

#### EDUCATION AND CERTIFICATIONS

- Doctor of Philosophy, Stanford University , BIOPH-PHD (2025)
- PhD, Stanford University , Biophysics (2025)
- Bachelor of Science, University of California Merced , Biological Sciences (2019)
- Bachelor's of Arts, University of California, Merced , Psychology (2019)

### Research & Scholarship

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#### CURRENT CLINICAL INTERESTS

- Drug Delivery Systems
- Neurological Disorders
- Psychiatric Therapeutic Processes
- Radiology, Interventional

#### LAB AFFILIATIONS

- Raag Airan, Airan Lab (9/23/2019)

### Publications

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#### PUBLICATIONS

- **Clearance of intracranial debris by ultrasound reduces inflammation and improves outcomes in hemorrhagic stroke models.** *Nature biotechnology*  
Azadian, M. M., Kiani Shabestari, S., Rajan, A., Martinez, P. J., Macedo, N., Markarian, E., Xiang, Y., Yu, B. J., George, P. M., Fame, R. M., Airan, R. D.  
2025
- **Association Between Governmental Financial Support Programs and Decreased Medical Care Affordability Delays in Pediatric Atopic Dermatitis**  
Youn, G., Yang, V., Yu, B., Marqueling, A., Siegel, D., Ko, J., Bae, G.  
MOSBY-ELSEVIER.2025: AB126

- **Acoustically activatable liposomes as a translational nanotechnology for site-targeted drug delivery and noninvasive neuromodulation.** *Nature nanotechnology*  
Purohit, M. P., Yu, B. J., Roy, K. S., Xiang, Y., Ewbank, S. N., Azadian, M. M., Hart, A. R., Muwanga, G. P., Martinez, P. J., Wang, J. B., Taoube, A. K., Markarian, E., Macedo, et al  
2025
- **SELECTIVELY ACTIVATING THE AFFECTIVE EFFICACY OF KETAMINE VIA REGIONALLY-TARGETED NONINVASIVE ULTRASONIC DRUG UNCAGING**  
Yu, B., Roy, K., Ewbank, S., Purohit, M., Azadian, M., Xiang, Y., Wang, J., Airan, R.  
SPRINGER NATURE.2024: 411-412
- **Quantitative Profiling of the Effects of Subanesthetic Ketamine on Naturalistic Behavior and Brain Microstructure**  
Ewbank, S., Hart, A., Muwanga, G., Gopal, D., Roy, K., Yu, B., Laurent, R., Tawfik, V., Rodriguez, C., Mcnab, J., Airan, R.  
SPRINGER NATURE.2024: 104
- **Ultrasonic cerebrospinal fluid clearance improves outcomes in hemorrhagic brain injury models.** *bioRxiv : the preprint server for biology*  
Azadian, M. M., Macedo, N., Yu, B. J., Fame, R. M., Airan, R. D.  
2024
- **High-throughput ultrasound neuromodulation in awake and freely behaving rats.** *Brain stimulation*  
Di Ianni, T., Morrison, K. P., Yu, B., Murphy, K. R., de Lecea, L., Airan, R. D.  
2023; 16 (6): 1743-1752
- **Pharmacokinetics-Pharmacodynamics Dissociation Indicative of Ketamine-Induced Plasticity as Revealed by Ultrasonic Ketamine Uncaging in Rat Medial Prefrontal Cortex**  
Yu, B., Roy, K., Purohit, M., Xiang, Y., Azadian, M., Taoube, A., Kwan, A., Lopez, D., Airan, R.  
SPRINGER NATURE.2023: 277-278
- **Acoustomechanically activatable liposomes for ultrasonic drug uncaging.** *bioRxiv : the preprint server for biology*  
Purohit, M. P., Roy, K. S., Xiang, Y., Yu, B. J., Azadian, M. M., Muwanga, G., Hart, A. R., Taoube, A. K., Lopez, D. G., Airan, R. D.  
2023
- **Ketogenic Diet as a Metabolic Therapy for Bipolar Disorder: Clinical Developments** *Journal of Affective Disorders Reports*  
Yu, B., Oz, R., Sethi, S.  
2022
- **Increasing Diversity in Radiology and Molecular Imaging: Current Challenges.** *Molecular imaging and biology*  
Fite, B. Z., Hinojosa, V. n., States, L. n., Hicks-Nelson, A. n., Baratto, L. n., Kallianos, K. n., Codari, M. n., Yu, B. n., Jha, P. n., Shams, M. n., Stoyanova, T. n., Chapelin, F. F., Liu, et al  
2021