Stanford

Antonia Drinnenberg

Basic Life Research Scientist

Bioengineering

Bio

ACADEMIC APPOINTMENTS

- Basic Life Research Scientist, Bioengineering

HONORS AND AWARDS

- Long-Term Fellowship, Human Frontier Science Program (2019-2022)
- Best Publication Award, Category Systems and Behavioural Neuroscience, Swiss Society for Neuroscience (2019)
- Fellowship, Early Postdoc Mobility, Swiss National Science Foundation (SNSF) (2018-2019)
- Summa Cum Laude, PhD thesis, Friedrich-Miescher-Institute for Biomedical Research (FMI) Basel (2017)
- Swiss OphtAWARD, Category "Best Experimental Work", Swiss Society of Ophthalmology (2016)
- PhD Fellowship, Boehringer Ingelheim Fonds (BIF) (2011-2013)

Publications

PUBLICATIONS

- **Cholinergic neuronal activity promotes diffuse midline glioma growth through muscarinic signaling.** *Cell*
  Drexler, R., Drinnenberg, A., Gavish, A., Yalçin, B., Shamardani, K., Rogers, A. E., Mancusi, R., Trivedi, V., Taylor, K. R., Kim, Y. S., Woo, P. J., Soni, N., Su, et al
  2025

- **How Diverse Retinal Functions Arise from Feedback at the First Visual Synapse.** *Neuron*
  Drinnenberg, A., Franke, F., Morikawa, R. K., Jüttner, J., Hillier, D., Hantz, P., Hierlemann, A., Azeredo da Silveira, R., Roska, B.
  2018

- **Congenital Nystagmus Gene FRMD7 Is Necessary for Establishing a Neuronal Circuit Asymmetry for Direction Selectivity** *NEURON*
  Yonehara, K., Fiscella, M., Drinnenberg, A., Esposti, F., Trenholm, S., Krol, J., Franke, F., Scherf, B., Kusnyerik, A., Mueller, J., Szabo, A., Juettner, J., Cordoba, et al
  2016; 89 (1): 177–93

- **Environmental Novelty Modulates Rapid Cortical Plasticity During Navigation.** *bioRxiv : the preprint server for biology*
  Attinger, A., Drinnenberg, A., Dong, C., Ramakrishnan, C., Siverts, L., Daigle, T. L., Tasic, B., Zeng, H., Quirin, S., Deisseroth, K., Giocomo, L. M.
  2025

- **Enhancer AAVs for targeting spinal motor neurons and descending motor pathways in rodents and macaque.** *Cell reports*
  Kussick, E., Johansen, N., Taskin, N., Chowdhury, A., Quinlan, M. A., Fraser, A., Clark, A. G., Wynalda, B., Martinez, R., Groce, E. L., Reding, M., Liang, E., Shulga, et al
  2025: 115730

- **BRAINSTEM NEUROMODULATORY NEURONS PROMOTE GLIOMA GROWTH LOCALLY AND VIA LONG-RANGE PROJECTIONS TO MIDLINE AND CORTICAL STRUCTURES**
  Drexler, R., Drinnenberg, A., Gavish, A., Yalcin, B., Shamardani, K., Rogers, A., Mancusi, R., Taylor, K., Kim, Y., Woo, P., Ravel, A., Tatlock, E., Jokhai, et al
  OXFORD UNIV PRESS INC.2024

- **Cholinergic Neuronal Activity Promotes Diffuse Midline Glioma Growth through Muscarinic Signaling.** *bioRxiv : the preprint server for biology*
  Drexler, R., Drinnenberg, A., Gavish, A., Yalcin, B., Shamardani, K., Rogers, A., Mancusi, R., Taylor, K. R., Kim, Y. S., Woo, P. J., Ravel, A., Tatlock, E., Ramakrishnan, et al
  2024

- **Causal evidence for retina-dependent and -independent visual motion computations in mouse cortex** *NATURE NEUROSCIENCE*
  Hillier, D., Fiscella, M., Drinnenberg, A., Trenholm, S., Rompani, S. B., Raics, Z., Katona, G., Juettner, J., Hierlemann, A., Rozsa, B., Roska, B.
  2017; 20 (7): 960-+

- **Rods in daylight act as relay cells for cone-driven horizontal cell mediated surround inhibition** *NATURE NEUROSCIENCE*
  Szikra, T., Trenholm, S., Drinnenberg, A., Juettner, J., Raics, Z., Farrow, K., Biel, M., Awatramani, G., Clark, D. A., Sahel, J., da Silveira, R., Roska, B.
  2014; 17 (12): 1728–35