

# Stanford

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## Amalia Perna

Postdoctoral Scholar, Pathology

### Bio

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#### BIO

Dr. Perna received her education at the University of Urbino (BSc in Biological Science) and at the University of Trieste (MSc in Functional Genomics).

She obtained her Ph.D. in Neuroscience/Medical Sciences in 2021, from the University of Fribourg (Switzerland) in collaboration with the Swiss Integrative Center for Human Health (SICHH). During her doctoral studies, she investigated the molecular players involved in the neurodegenerative process, with special attention to Notch signaling modulation in the neuronal demise after kainic acid (KA)-induced excitotoxicity

With funding from the Swiss National Science Foundation (SNSF), Dr. Perna joined Prof. Thomas Montine's lab at Stanford University and extended her doctoral research work to single-cell technologies such as single-nucleus RNA-seq. In February 2022 she was appointed as a postdoctoral fellow in Montine Lab.

Dr. Perna's research aims to elucidate the modulation of signaling pathways in the different cell types of the brain after the perturbation of its homeostasis. She is also interested in understanding the molecular mechanisms underlying neuronal regeneration/recovery after damage and in neurodegenerative diseases.

#### HONORS AND AWARDS

- SNF Mobility, Swiss National Science Foundation (2019)

#### PROFESSIONAL EDUCATION

- PhD, University of Fribourg , Medical Sciences/Neuroscience (2021)
- MSc, University of Trieste , Functional Genomics (2017)
- BSc, University of Urbino , Biological Sciences (2014)

### Publications

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#### PUBLICATIONS

- **Prediction of neuropathologic lesions from clinical data.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*  
Phongpreecha, T., Cholerton, B., Bhukari, S., Chang, A. L., De Francesco, D., Thuraiappah, M., Godrich, D., Perna, A., Becker, M. G., Ravindra, N. G., Espinosa, C., Kim, Y., Berson, et al  
2023
- **Histone H3 Lysine 4 and 27 Trimethylation Landscape of Human Alzheimer's Disease.** *Cells*  
Persico, G., Casciaro, F., Amatori, S., Rusin, M., Cantatore, F., Perna, A., Auber, L. A., Fanelli, M., Giorgio, M.  
2022; 11 (4)
- **Revealing NOTCH-dependencies in synaptic targets associated with Alzheimer's disease** *MOLECULAR AND CELLULAR NEUROSCIENCE*  
Perna, A., Marathe, S., Dreos, R., Falquet, L., Egger, H., Auber, L.

2021; 115: 103657

- **Classifying dementia progression using microbial profiling of saliva** *ALZHEIMER'S & DEMENTIA: DIAGNOSIS, ASSESSMENT & DISEASE MONITORING*  
Bathini, P., Foucras, S., Dupanloup, I., Imeri, H., Perna, A., Berruex, J., Doucey, M., Annoni, J., Alberi, L.  
2020; 12 (1): e12000
- **TF-ChIP Method for Tissue-Specific Gene Targets** *FRONTIERS IN CELLULAR NEUROSCIENCE*  
Perna, A., Alberi, L.  
2019; 13: 95