

Stanford



Tony Wyss-Coray, PhD

D. H. Chen Professor II

Neurology & Neurological Sciences

Bio

ACADEMIC APPOINTMENTS

- Professor, Neurology & Neurological Sciences
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Faculty Fellow, Stanford ChEM-H
- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- Glenn Award, Glenn Foundation for Medical Research (2015)
- NIH Pioneer Award, NIH Director's Office/NIA (2015)
- Transformative R01, NIH Director's Office/NIA (2013)
- Senior Research Career Scientist, Veterans Administration (2012)
- Distinguished Scholar Award, The John Douglas French Alzheimer's Foundation (2005)

5 OF 8

PROFESSIONAL EDUCATION

- M.S., University of Bern, Switzerland , Microbiology (1989)
- Ph.D., University of Bern, Switzerland , Immunology (1992)

LINKS

- Lab Website: <http://web.stanford.edu/group/twclab/cgi-bin/>
- Alzheimer Disease Research Center: <http://med.stanford.edu/adrc.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our laboratory studies the role of immune and injury responses in neurodegeneration and Alzheimer's disease. We seek to understand how immune responses and injury pathways may modulate neurodegeneration and age-related changes in the brain. We study these pathways in vivo and in cell culture using a number of genetic and proteomic tools. We have been particularly interested in the TGF-beta signaling pathway as a major regulator of biological processes and we are developing genetic and pharmacological agents to manipulate this pathway.

Teaching

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Michelle Drews, Grant Lin, Robin Yeo

Postdoctoral Faculty Sponsor

Kyle Brewer, David Gate, Oliver Hahn, Michael Haney, Tal Iram, Nathalie Khoury, Song Eun Lee, Patricia Moran Losada

Doctoral Dissertation Advisor (AC)

John Pluvinage, Steven Shuken

Postdoctoral Research Mentor

Qingyun Li

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)
- Neurosciences (Phd Program)

Publications

PUBLICATIONS

- **Multimomics modeling of the immunome, transcriptome, microbiome, proteome and metabolome adaptations during human pregnancy.** *Bioinformatics (Oxford, England)*
Ghaemi, M. S., DiGiulio, D. B., Contrepois, K., Callahan, B., Ngo, T. T., Lee-McMullen, B., Lehallier, B., Robaczewska, A., Mcilwain, D., Rosenberg-Hasson, Y., Wong, R. J., Quaintance, C., Culos, et al
2019; 35 (1): 95–103
- **Proteolytic cleavage of Beclin 1 exacerbates neurodegeneration.** *Molecular neurodegeneration*
Bieri, G., Lucin, K. M., O'Brien, C. E., Zhang, H., Villeda, S. A., Wyss-Coray, T.
2018; 13 (1): 68
- **Collagenase-based Single Cell Isolation of Primary Murine Brain Endothelial Cells Using Flow Cytometry.** *Bio-protocol*
Czupalla, C. J., Yousef, H., Wyss-Coray, T., Butcher, E. C.
2018; 8 (22)
- **Nociceptive and Cognitive Changes in a Murine Model of Polytrauma.** *The journal of pain : official journal of the American Pain Society*
Sahbaie, P., Tajerian, M., Yang, P., Irvine, K. A., Huang, T., Luo, J., Wyss-Coray, T., Clark, J. D.
2018
- **Multiple Click-Selective tRNA Synthetases Expand Mammalian Cell-Specific Proteomics** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Yang, A. C., Du Bois, H., Olsson, N., Gate, D., Lehallier, B., Berdnik, D., Brewer, K. D., Bertozzi, C. R., Elias, J. E., Wyss-Coray, T.
2018; 140 (23): 7046–51

5 OF 170