

# Stanford

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## Tony Wyss-Coray, PhD

D. H. Chen Professor II

Neurology & Neurological Sciences

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### 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)
- Zenith Award, Alzheimer's Association (2005)
- Editor, Journal of Neuroinflammation (2004)
- Medical and Scientific Advisory Council, Alzheimer's Association of Northern California & Northern Nevada (2004)

#### 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>

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### 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

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### 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, Robert Palovics

#### Doctoral Dissertation Advisor (AC)

John Pluvinage, Steven Shuken

#### Postdoctoral Research Mentor

Qingyun Li, Robert Palovics

### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

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

## Publications

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### 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)
- **Noiceptive 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
- **[F-18] FSPG-PET reveals increased cystine/glutamate antiporter (xc-) activity in a mouse model of multiple sclerosis** *JOURNAL OF NEUROINFLAMMATION*  
Hoehne, A., James, M. L., Alam, I. S., Ronald, J. A., Schneider, B., D'Souza, A., Witney, T. H., Andrews, L. E., Cropper, H. C., Behera, D., Gowrishankar, G., Ding, Z., Wyss-Coray, et al  
2018; 15
- **Safety, Tolerability, and Feasibility of Young Plasma Infusion in the Plasma for Alzheimer Symptom Amelioration Study: A Randomized Clinical Trial.** *JAMA neurology*

- Sha, S. J., Deutsch, G. K., Tian, L., Richardson, K., Coburn, M., Gaudioso, J. L., Marcal, T., Solomon, E., Boumis, A., Bet, A., Mennes, M., van Oort, E., Beckmann, et al  
2018
- **Developmental Heterogeneity of Microglia and Brain Myeloid Cells Revealed by Deep Single-Cell RNA Sequencing.** *Neuron*  
Li, Q., Cheng, Z., Zhou, L., Darmanis, S., Neff, N. F., Okamoto, J., Gulati, G., Bennett, M. L., Sun, L. O., Clarke, L. E., Marschallinger, J., Yu, G., Quake, et al  
2018
  - **Single-cell transcriptomics of 20 mouse organs creates a Tabula Muris.** *Nature*  
2018; 562 (7727): 367–72
  - **Activation of the STING-Dependent Type I Interferon Response Reduces Microglial Reactivity and Neuroinflammation** *NEURON*  
Mathur, V., Burai, R., Vest, R. T., Bonanno, L. N., Lehallier, B., Zardeneta, M. E., Mistry, K. N., Do, D., Marsh, S. E., Abud, E. M., Blurton-Jones, M., Li, L., Lashuel, et al  
2017; 96 (6): 1290+
  - **Identification of Interleukin-27 (IL-27)/IL-27 Receptor Subunit Alpha as a Critical Immune Axis for In Vivo HIV Control** *JOURNAL OF VIROLOGY*  
Ruiz-Riol, M., Berdnik, D., Llano, A., Mothe, B., Galvez, C., Perez-Alvarez, S., Oriol-Tordera, B., Olvera, A., Silva-Arrieta, S., Meulbroek, M., Pujol, F., Coll, J., Martinez-Picado, et al  
2017; 91 (16)
  - **Human umbilical cord plasma proteins revitalize hippocampal function in aged mice** *NATURE*  
Castellano, J. M., Mosher, K. I., Abbey, R. J., McBride, A. A., James, M. L., Berdnik, D., Shen, J. C., Zou, B., Xie, X. S., Tingle, M., Hinkson, I. V., Angst, M. S., Wyss-Coray, et al  
2017; 544 (7651): 488-?
  - **Deficiency in Neuronal TGF-beta Signaling Leads to Nigrostriatal Degeneration and Activation of TGF-beta Signaling Protects against MPTP Neurotoxicity in Mice** *JOURNAL OF NEUROSCIENCE*  
Tesseur, I., Nguyen, A., Chang, B., Li, L., Woodling, N. S., Wyss-Coray, T., Luo, J.  
2017; 37 (17): 4584-4592
  - **Deficiency of a sulfotransferase for sialic acid-modified glycans mitigates Alzheimer's pathology** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Zhang, Z., Takeda-Uchimura, Y., Foyez, T., Ohtake-Niimi, S., Narentuya, Akatsu, H., Nishitsuji, K., Michikawa, M., Wyss-Coray, T., Kadomatsu, K., Uchimura, K.  
2017; 114 (14): E2947-E2954
  - **Microglial complement receptor 3 regulates brain A beta levels through secreted proteolytic activity** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Czirr, E., Castello, N. A., Mosher, K. I., Castellano, J. M., Hinkson, I. V., Lucin, K. M., Baeza-Raja, B., Ryu, J. K., Li, L., Farina, S. N., Belichenko, N. P., Longo, F. M., Akassoglou, et al  
2017; 214 (4): 1081-1092
  - **Ageing, neurodegeneration and brain rejuvenation** *NATURE*  
Wyss-Coray, T.  
2016; 539 (7628): 180-186
  - **Preclinical Assessment of Young Blood Plasma for Alzheimer Disease** *JAMA NEUROLOGY*  
Middeldorp, J., Lehallier, B., Villeda, S. A., Miedema, S. S., Evans, E., Czirr, E., Zhang, H., Luo, J., Stan, T., Mosher, K. I., Masliah, E., Wyss-Coray, T.  
2016; 73 (11): 1325-1333
  - **Traumatic Brain Injury Imaging in the Second Near-Infrared Window with a Molecular Fluorophore.** *Advanced materials*  
Zhang, X., Wang, H., Antaris, A. L., Li, L., Diao, S., Ma, R., Nguyen, A., Hong, G., Ma, Z., Wang, J., Zhu, S., Castellano, J. M., Wyss-Coray, et al  
2016; 28 (32): 6872-6879
  - **In vivo assessment of behavioral recovery and circulatory exchange in the peritoneal parabiosis model** *SCIENTIFIC REPORTS*  
Castellano, J. M., Palner, M., Li, S., Freeman, G. M., Andy Nguyen, A., Shen, B., Stan, T., Mosher, K. I., Chin, F. T., de Lecea, L., Luo, J., Wyss-Coray, T.  
2016; 6
  - **Network-driven plasma proteomics expose molecular changes in the Alzheimer's brain** *MOLECULAR NEURODEGENERATION*  
Jaeger, P. A., Lucin, K. M., Britschgi, M., Vardarajan, B., Huang, R., Kirby, E. D., Abbey, R., Boeve, B. F., Boxer, A. L., Farrer, L. A., Finch, N., Graff-Radford, N. R., Head, et al

2016; 11

- **Combined Plasma and Cerebrospinal Fluid Signature for the Prediction of Midterm Progression From Mild Cognitive Impairment to Alzheimer Disease** *JAMA NEUROLOGY*  
Lehallier, B., Essioux, L., Gayan, J., Alexandridis, R., Nikolcheva, T., Wyss-Coray, T., Britschgi, M.  
2016; 73 (2): 203-212
- **Beclin 1 regulates neuronal transforming growth factor-beta signaling by mediating recycling of the type I receptor ALK5** *MOLECULAR NEURODEGENERATION*  
O'Brien, C. E., Bonanno, L., Zhang, H., Wyss-Coray, T.  
2015; 10
- **Combined Plasma and Cerebrospinal Fluid Signature for the Prediction of Midterm Progression From Mild Cognitive Impairment to Alzheimer Disease.** *JAMA neurology*  
Lehallier, B., Essioux, L., Gayan, J., Alexandridis, R., Nikolcheva, T., Wyss-Coray, T., Britschgi, M.  
2015: 1-10
- **The Role of the Microenvironmental Niche in Declining Stem-Cell Functions Associated with Biological Aging** *COLD SPRING HARBOR PERSPECTIVES IN MEDICINE*  
DeCarolis, N. A., Kirby, E. D., Wyss-Coray, T., Palmer, T. D.  
2015; 5 (12)
- **Impact of peripheral myeloid cells on amyloid- $\beta$  pathology in Alzheimer's disease-like mice.** *journal of experimental medicine*  
Prokop, S., Miller, K. R., Drost, N., Handrick, S., Mathur, V., Luo, J., Wegner, A., Wyss-Coray, T., Heppner, F. L.  
2015; 212 (11): 1811-1818
- **Blood-Borne Revitalization of the Aged Brain** *JAMA NEUROLOGY*  
Castellano, J. M., Kirby, E. D., Wyss-Coray, T.  
2015; 72 (10): 1191-1194
- **Nuclear pore complex remodeling by p75(NTR) cleavage controls TGF-beta signaling and astrocyte functions** *NATURE NEUROSCIENCE*  
Schachtrup, C., Ryu, J. K., Mammadzada, K., Khan, A. S., Carlton, P. M., Perez, A., Christian, F., Le Moan, N., Vagena, E., Baeza-Raja, B., Rafalski, V., Chan, J. P., Nitschke, et al  
2015; 18 (8): 1077-?
- **beta 2-microglobulin is a systemic pro-aging factor that impairs cognitive function and neurogenesis** *NATURE MEDICINE*  
Smith, L. K., He, Y., Park, J., Bieri, G., Snethlage, C. E., Lin, K., Gontier, G., Wabl, R., Plambeck, K. E., Udeochu, J., Wheatley, E. G., Bouchard, J., Eggel, et al  
2015; 21 (8): 932-937
- **Nuclear pore complex remodeling by p75(NTR) cleavage controls TGF- $\beta$  signaling and astrocyte functions.** *Nature neuroscience*  
Schachtrup, C., Ryu, J. K., Mammadzada, K., Khan, A. S., Carlton, P. M., Perez, A., Christian, F., Le Moan, N., Vagena, E., Baeza-Raja, B., Rafalski, V., Chan, J. P., Nitschke, et al  
2015; 18 (8): 1077-1080
- **Go with your gut: microbiota meet microglia.** *Nature neuroscience*  
Mosher, K. I., Wyss-Coray, T.  
2015; 18 (7): 930-931
- **CalFluors: A Universal Motif for Fluorogenic Azide Probes across the Visible Spectrum** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*  
Shieh, P., Dien, V. T., Beahm, B. J., Castellano, J. M., Wyss-Coray, T., Bertozzi, C. R.  
2015; 137 (22): 7145-7151
- **Astrocyte-Derived TGF-beta 1 Accelerates Disease Progression in ALS Mice by Interfering with the Neuroprotective Functions of Microglia and T Cells** *CELL REPORTS*  
Endo, F., Komine, O., Fujimori-Tonou, N., Katsuno, M., Jin, S., Watanabe, S., Sobue, G., Dezawa, M., Wyss-Coray, T., Yamanaka, K.  
2015; 11 (4): 592-604
- **Neuroinflammation in Alzheimer's disease** *LANCET NEUROLOGY*  
Heneka, M. T., Carson, M. J., El Khoury, J., Landreth, G. E., Brosseron, F., Feinstein, D. L., Jacobs, A. H., Wyss-Coray, T., Vitorica, J., Ransohoff, R. M., Herrup, K., Frautschy, S. A., Finsen, et al  
2015; 14 (4): 388-405

- **Neuroinflammation in Alzheimer's disease.** *The Lancet. Neurology*  
Heneka, M. T., Carson, M. J., El Khoury, J., Landreth, G. E., Brosseron, F., Feinstein, D. L., Jacobs, A. H., Wyss-Coray, T., Vitorica, J., Ransohoff, R. M., Herrup, K., Frautschy, S. A., Finsen, et al  
2015; 14 (4): 388-405
- **Adult hippocampal neural stem and progenitor cells regulate the neurogenic niche by secreting VEGF** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Kirby, E. D., Kuwahara, A. A., Messer, R. L., Wyss-Coray, T.  
2015; 112 (13): 4128-4133
- **PET Imaging of Translocator Protein (18 kDa) in a Mouse Model of Alzheimer's Disease Using N-(2,5-Dimethoxybenzyl)-2-18F-Fluoro-N-(2-Phenoxyphenyl)Acetamide.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*  
James, M. L., Belichenko, N. P., Nguyen, T. V., Andrews, L. E., Ding, Z., Liu, H., Bodapati, D., Arksey, N., Shen, B., Cheng, Z., Wyss-Coray, T., Gambhir, S. S., Longo, et al  
2015; 56 (2): 311-316
- **Beclin 1 regulates neuronal transforming growth factor- $\beta$  signaling by mediating recycling of the type I receptor ALK5.** *Molecular neurodegeneration*  
O'Brien, C. E., Bonanno, L., Zhang, H., Wyss-Coray, T.  
2015; 10 (1): 69-?
- **The Role of the Microenvironmental Niche in Declining Stem-Cell Functions Associated with Biological Aging.** *Cold Spring Harbor perspectives in medicine*  
DeCarolis, N. A., Kirby, E. D., Wyss-Coray, T., Palmer, T. D.  
2015; 5 (12)
- **Autoimmunity contributes to nociceptive sensitization in a mouse model of complex regional pain syndrome** *PAIN*  
Li, W., Guo, T., Shi, X., Czirr, E., Stan, T., Sahbaie, P., Wyss-Coray, T., Kingery, W. S., Clark, J. D.  
2014; 155 (11): 2377-2389
- **Aging-induced type I interferon response at the choroid plexus negatively affects brain function** *SCIENCE*  
Baruch, K., Deczkowska, A., David, E., Castellano, J. M., Miller, O., Kertser, A., Berkutzi, T., Barnett-Itzhaki, Z., Bezalel, D., Wyss-Coray, T., Amit, I., Schwartz, M.  
2014; 346 (6205): 89-93
- **Aging. Aging-induced type I interferon response at the choroid plexus negatively affects brain function.** *Science*  
Baruch, K., Deczkowska, A., David, E., Castellano, J. M., Miller, O., Kertser, A., Berkutzi, T., Barnett-Itzhaki, Z., Bezalel, D., Wyss-Coray, T., Amit, I., Schwartz, M.  
2014; 346 (6205): 89-93
- **Effects of the Absence of Apolipoprotein E on Lipoproteins, Neurocognitive Function, and Retinal Function** *JAMA NEUROLOGY*  
Mak, A. C., Pullinger, C. R., Tang, L. F., Wong, J. S., Deo, R. C., Schwarz, J., Gugliucci, A., Movsesyan, I., Ishida, B. Y., Chu, C., Poon, A., Kim, P., Stock, et al  
2014; 71 (10): 1228-1236
- **Effects of the absence of apolipoprotein e on lipoproteins, neurocognitive function, and retinal function.** *JAMA neurology*  
Mak, A. C., Pullinger, C. R., Tang, L. F., Wong, J. S., Deo, R. C., Schwarz, J., Gugliucci, A., Movsesyan, I., Ishida, B. Y., Chu, C., Poon, A., Kim, P., Stock, et al  
2014; 71 (10): 1228-1236
- **TREM2 mutations implicated in neurodegeneration impair cell surface transport and phagocytosis** *SCIENCE TRANSLATIONAL MEDICINE*  
Kleinberger, G., Yamanishi, Y., Suarez-Calvet, M., Czirr, E., Lohmann, E., Cuyvers, E., Struyfs, H., Pettkus, N., Wenninger-Weinzierl, A., Mazaheri, F., Tahirovic, S., Lleo, A., Alcolea, et al  
2014; 6 (243)
- **ALK5-dependent TGF-beta signaling is a major determinant of late-stage adult neurogenesis** *NATURE NEUROSCIENCE*  
He, Y., Zhang, H., Yung, A., Villeda, S. A., Jaeger, P. A., Olayiwola, O., Fainberg, N., Wyss-Coray, T.  
2014; 17 (7): 943-952
- **Stem cells as vehicles for youthful regeneration of aged tissues.** *journals of gerontology. Series A, Biological sciences and medical sciences*  
Rando, T. A., Wyss-Coray, T.  
2014; 69: S39-42
- **Stem cells as vehicles for youthful regeneration of aged tissues.** *journals of gerontology. Series A, Biological sciences and medical sciences*  
Rando, T. A., Wyss-Coray, T.

2014; 69: S39-42

- **Sorting Through the Roles of Beclin 1 in Microglia and Neurodegeneration** *JOURNAL OF NEUROIMMUNE PHARMACOLOGY*  
O'Brien, C. E., Wyss-Coray, T.  
2014; 9 (3): 285-292
- **Young blood reverses age-related impairments in cognitive function and synaptic plasticity in mice.** *Nature medicine*  
Villeda, S. A., Plambeck, K. E., Middeldorp, J., Castellano, J. M., Mosher, K. I., Luo, J., Smith, L. K., Bieri, G., Lin, K., Berdnik, D., Wabl, R., Udeochu, J., Wheatley, et al  
2014; 20 (6): 659-663
- **Noninvasive in vivo monitoring of tissue-specific global gene expression in humans.** *Proceedings of the National Academy of Sciences of the United States of America*  
Koh, W., Pan, W., Gawad, C., Fan, H. C., Kerchner, G. A., Wyss-Coray, T., Blumenfeld, Y. J., El-Sayed, Y. Y., Quake, S. R.  
2014; 111 (20): 7361-7366
- **Microglial dysfunction in brain aging and Alzheimer's disease** *BIOCHEMICAL PHARMACOLOGY*  
Mosher, K. I., Wyss-Coray, T.  
2014; 88 (4): 594-604
- **APOE {varepsilon}4 worsens hippocampal CA1 apical neuropil atrophy and episodic memory.** *Neurology*  
Kerchner, G. A., Berdnik, D., Shen, J. C., Bernstein, J. D., Fenesy, M. C., Deutsch, G. K., Wyss-Coray, T., Rutt, B. K.  
2014; 82 (8): 691-697
- **Antiviral drug ganciclovir is a potent inhibitor of microglial proliferation and neuroinflammation.** *Journal of experimental medicine*  
Ding, Z., Mathur, V., Ho, P. P., James, M. L., Lucin, K. M., Hoehne, A., Alabsi, H., Gambhir, S. S., Steinman, L., Luo, J., Wyss-Coray, T.  
2014; 211 (2): 189-198
- **The future of blood-based biomarkers for Alzheimer's disease** *ALZHEIMERS & DEMENTIA*  
Henriksen, K., O'Bryant, S. E., Hamper, H., Trojanowski, J. Q., Montine, T. J., Jeromin, A., Blennow, K., Lonneborg, A., Wyss-Coray, T., Soares, H., Bazenet, C., Sjogren, M., Hu, et al  
2014; 10 (1): 115-131
- **Long-term cognitive impairments and pathological alterations in a mouse model of repetitive mild traumatic brain injury** *FRONTIERS IN NEUROLOGY*  
Luo, J., Nguyen, A., Villeda, S., Zhang, H., Ding, Z., Lindsey, D., Bieri, G., Castellano, J. M., Beaupre, G. S., Wyss-Coray, T.  
2014; 5
- **Small molecule p75<sup>NTR</sup> ligands reduce pathological phosphorylation and misfolding of tau, inflammatory changes, cholinergic degeneration, and cognitive deficits in ABPP(L/S) transgenic mice.** *Journal of Alzheimer's disease : JAD*  
Nguyen, T. V., Shen, L., Vander Griend, L., Quach, L. N., Belichenko, N. P., Saw, N., Yang, T., Shamloo, M., Wyss-Coray, T., Massa, S. M., Longo, F. M.  
2014; 42 (2): 459-483
- **Small Molecule p75(NTR) Ligands Reduce Pathological Phosphorylation and Misfolding of Tau, Inflammatory Changes, Cholinergic Degeneration, and Cognitive Deficits in A beta PPL/S Transgenic Mice** *JOURNAL OF ALZHEIMERS DISEASE*  
Nguyen, T. V., Shen, L., Vander Griend, L., Quach, L. N., Belichenko, N. P., Saw, N., Yang, T., Shamloo, M., Wyss-Coray, T., Massa, S. M., Longo, F. M.  
2014; 42 (2): 459-483
- **Long-term cognitive impairments and pathological alterations in a mouse model of repetitive mild traumatic brain injury.** *Frontiers in neurology*  
Luo, J., Nguyen, A., Villeda, S., Zhang, H., Ding, Z., Lindsey, D., Bieri, G., Castellano, J. M., Beaupre, G. S., Wyss-Coray, T.  
2014; 5: 12-?
- **A revival of parabiosis in biomedical research.** *Swiss medical weekly*  
Eggel, A., Wyss-Coray, T.  
2014; 144: w13914-?
- **Chronic Over-Expression of TGF beta 1 Alters Hippocampal Structure and Causes Learning Deficits** *HIPPOCAMPUS*  
Martinez-Canabal, A., Wheeler, A. L., Sarkis, D., Lerch, J. P., Lu, W., Buckwalter, M. S., Wyss-Coray, T., Josselyn, S. A., Frankland, P. W.  
2013; 23 (12): 1198-1211
- **Microglial beclin 1 regulates retromer trafficking and phagocytosis and is impaired in Alzheimer's disease.** *Neuron*  
Lucin, K. M., O'Brien, C. E., Bieri, G., Czirr, E., Mosher, K. I., Abbey, R. J., Mastroeni, D. F., Rogers, J., Spencer, B., Masliah, E., Wyss-Coray, T.

2013; 79 (5): 873-886

- **Microglial beclin 1 regulates retromer trafficking and phagocytosis and is impaired in Alzheimer's disease.** *Neuron*  
Lucin, K. M., O'Brien, C. E., Bieri, G., Czirr, E., Mosher, K. I., Abbey, R. J., Mastroeni, D. F., Rogers, J., Spencer, B., Masliah, E., Wyss-Coray, T.  
2013; 79 (5): 873-886
- **TDP-43 frontotemporal lobar degeneration and autoimmune disease** *JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY*  
Miller, Z. A., Rankin, K. P., Graff-Radford, N. R., Takada, L. T., Sturm, V. E., Cleveland, C. M., Criswell, L. A., Jaeger, P. A., Stan, T., Heggeli, K. A., Hsu, S. C., Karydas, A., Khan, et al  
2013; 84 (9): 956-962
- **A small molecule p75(NTR) ligand prevents cognitive deficits and neurite degeneration in an Alzheimer's mouse model.** *Neurobiology of aging*  
Knowles, J. K., Simmons, D. A., Nguyen, T. V., Vander Griend, L., Xie, Y., Zhang, H., Yang, T., Pollak, J., Chang, T., Arancio, O., Buckwalter, M. S., Wyss-Coray, T., Massa, et al  
2013; 34 (8): 2052-2063
- **Targeting autophagy for disease therapy.** *Nature biotechnology*  
Lucin, K. M., Wyss-Coray, T.  
2013; 31 (4): 322-323
- **The circulatory systemic environment as a modulator of neurogenesis and brain aging.** *Autoimmunity reviews*  
Villeda, S. A., Wyss-Coray, T.  
2013; 12 (6): 674-677
- **Colony-stimulating factor 1 receptor (CSF1R) signaling in injured neurons facilitates protection and survival** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Luo, J., Elwood, F., Britschgi, M., Villeda, S., Zhang, H., Ding, Z., Zhu, L., Alabsi, H., Getachew, R., Narasimhan, R., Wabl, R., Fainberg, N., James, et al  
2013; 210 (1): 157-172
- **Changes of the Enteric Nervous System in Amyloid-beta Protein Precursor Transgenic Mice Correlate with Disease Progression** *JOURNAL OF ALZHEIMERS DISEASE*  
Semar, S., Klotz, M., Letiembre, M., Van Ginneken, C., Braun, A., Jost, V., Bischof, M., Lammers, W. J., Liu, Y., Fassbender, K., Wyss-Coray, T., Kirchhoff, F., Schaefer, et al  
2013; 36 (1): 7-20
- **The role of inflammation in age-related disease** *AGING-US*  
Howcroft, T. K., Campisi, J., Louis, G. B., Smith, M. T., Wise, B., Wyss-Coray, T., Augustine, A. D., McElhaney, J. E., Kohanski, R., Sierra, F.  
2013; 5 (1): 84-93
- **beta 2-microglobulin regulates the age-related decline in adult neurogenesis and cognitive function** *11th International Congress of Neuroimmunology (ISNI)*  
Villeda, S., Park, J., He, Y., Wabl, R., Bieri, G., Luo, J., Grant, J., Wyss-Coray, T.  
ELSEVIER SCIENCE BV.2012: 159-60
- **Changes in beclin 1 associated with Alzheimer's disease negatively regulate retromer and impair phagocytosis of amyloid-beta** *11th International Congress of Neuroimmunology (ISNI)*  
Lucin, K., O'Brien, C., Bieri, G., Czirr, E., Mosher, K., Mastroeni, D., Rogers, J., Spencer, B., Masliah, E., Wyss-Coray, T.  
ELSEVIER SCIENCE BV.2012: 104-
- **Neural progenitor cells regulate microglia functions and activity** *NATURE NEUROSCIENCE*  
Mosher, K. I., Andres, R. H., Fukuhara, T., Bieri, G., Hasegawa-Moriyama, M., He, Y., Guzman, R., Wyss-Coray, T.  
2012; 15 (11): 1485-1487
- **Deficiency of terminal complement pathway inhibitor promotes neuronal tau pathology and degeneration in mice** *JOURNAL OF NEUROINFLAMMATION*  
Britschgi, M., Takeda-Uchimura, Y., Rockenstein, E., Johns, H., Masliah, E., Wyss-Coray, T.  
2012; 9
- **The 1st International standard for transforming growth factor-beta 3 (TGF-beta 3)** *JOURNAL OF IMMUNOLOGICAL METHODS*  
Wadhwa, M., Dilger, P., Hamill, M., Bending, D., Gibbs, S., Wu, G., Read, J., Wyss-Coray, T., Zhang, H., Little, J., Getliffe, K. M., Kai, G., Wang, et al  
2012; 380 (1-2): 1-9
- **Heparan Sulfate Subdomains that are Degraded by Sulf Accumulate in Cerebral Amyloid beta Plaques of Alzheimer's Disease Evidence from Mouse Models and Patients** *AMERICAN JOURNAL OF PATHOLOGY*

- Hosono-Fukao, T., Ohtake-Niimi, S., Hoshino, H., Britschgi, M., Akatsu, H., Hossain, M. M., Nishitsuji, K., van Kuppevelt, T. H., Kimata, K., Michikawa, M., Wyss-Coray, T., Uchimura, K.  
2012; 180 (5): 2056-2067
- **The immunology of neurodegeneration** *JOURNAL OF CLINICAL INVESTIGATION*  
Czirr, E., Wyss-Coray, T.  
2012; 122 (4): 1156-1163
  - **Thy1-hAPP(Lond/Swe+) mouse model of Alzheimer's disease displays broad behavioral deficits in sensorimotor, cognitive and social function.** *Brain and behavior*  
Faizi, M., Bader, P. L., Saw, N., Nguyen, T. V., Beraki, S., Wyss-Coray, T., Longo, F. M., Shamloo, M.  
2012; 2 (2): 142-154
  - **Thy1-hAPP(Lond/Swe+) mouse model of Alzheimer's disease displays broad behavioral deficits in sensorimotor, cognitive and social function** *BRAIN AND BEHAVIOR*  
Faizi, M., Bader, P. L., Saw, N., Nguyen, T. V., Beraki, S., Wyss-Coray, T., Longo, F. M., Shamloo, M.  
2012; 2 (2): 142-154
  - **Immunotherapy of cerebrovascular amyloidosis in a transgenic mouse model** *NEUROBIOLOGY OF AGING*  
Lifshitz, V., Weiss, R., Benromano, T., Kfir, E., Blumenfeld-Katzir, T., Tempel-Brami, C., Assaf, Y., Xia, W., Wyss-Coray, T., Weiner, H. L., Frenkel, D.  
2012; 33 (2)
  - **Inflammation in Alzheimer Disease-A Brief Review of the Basic Science and Clinical Literature** *COLD SPRING HARBOR PERSPECTIVES IN MEDICINE*  
Wyss-Coray, T., Rogers, J.  
2012; 2 (1)
  - **Identification of a central role for complement in osteoarthritis** *NATURE MEDICINE*  
Wang, Q., Rozelle, A. L., Lepus, C. M., Scanzello, C. R., Song, J. J., Larsen, D. M., Crish, J. F., Bebek, G., Ritter, S. Y., Lindstrom, T. M., Hwang, I., Wong, H. H., Punzi, et al  
2011; 17 (12): 1674-U196
  - **Modeling of Pathological Traits in Alzheimer's Disease Based on Systemic Extracellular Signaling Proteome** *MOLECULAR & CELLULAR PROTEOMICS*  
Britschgi, M., Rufibach, K., Huang, S. L., Clark, C. M., Kaye, J. A., Li, G., Peskind, E. R., Quinn, J. F., Galasko, D. R., Wyss-Coray, T.  
2011; 10 (10)
  - **The ageing systemic milieu negatively regulates neurogenesis and cognitive function** *NATURE*  
Villeda, S. A., Luo, J., Mosher, K. I., Zou, B., Britschgi, M., Bieri, G., Stan, T. M., Fainberg, N., Ding, Z., Eggel, A., Lucin, K. M., Czirr, E., Park, et al  
2011; 477 (7362): 90-U157
  - **Complement Receptor 2 Is Expressed in Neural Progenitor Cells and Regulates Adult Hippocampal Neurogenesis** *JOURNAL OF NEUROSCIENCE*  
Moriyama, M., Fukuhara, T., Britschgi, M., He, Y., Narasimhan, R., Villeda, S., Molina, H., Huber, B. T., Holers, M., Wyss-Coray, T.  
2011; 31 (11): 3981-3989
  - **Workshop Summary: Roles of the TNF Family in Neuronal Development, Function and Pathology** *12th Biennial International Tumor Necrosis Factor Conference*  
Tansey, M. G., Wyss-Coray, T.  
SPRINGER-VERLAG BERLIN.2011: 537-538
  - **Beclin 1 Complex in Autophagy and Alzheimer Disease** *ARCHIVES OF NEUROLOGY*  
Jaeger, P. A., Wyss-Coray, T.  
2010; 67 (10): 1181-1184
  - **Cellular Source of Apolipoprotein E4 Determines Neuronal Susceptibility to Excitotoxic Injury in Transgenic Mice** *AMERICAN JOURNAL OF PATHOLOGY*  
Buttini, M., Masliah, E., Yu, G., Palop, J. J., Chang, S., Bernardo, A., Lin, C., Wyss-Coray, T., Huang, Y., Mucke, L.  
2010; 177 (2): 563-569
  - **Angiotensin II sustains brain inflammation in mice via TGF-beta** *JOURNAL OF CLINICAL INVESTIGATION*  
Lanz, T. V., Ding, Z., Ho, P. P., Luo, J., Agrawal, A. N., Srinagesh, H., Axtell, R., Zhang, H., Platten, M., Wyss-Coray, T., Steinman, L.  
2010; 120 (8): 2782-2794



- **Regulation of Amyloid Precursor Protein Processing by the Beclin 1 Complex** *PLOS ONE*  
Jaeger, P. A., Pickford, F., Sun, C., Lucin, K. M., Masliah, E., Wyss-Coray, T.  
2010; 5 (6)
- **Beclin 1 Gene Transfer Activates Autophagy and Ameliorates the Neurodegenerative Pathology in alpha-Synuclein Models of Parkinson's and Lewy Body Diseases** *JOURNAL OF NEUROSCIENCE*  
Spencer, B., Potkar, R., Trejo, M., Rockenstein, E., Patrick, C., Gindi, R., Adame, A., Wyss-Coray, T., Masliah, E.  
2009; 29 (43): 13578-13588
- **Immune Activation in Brain Aging and Neurodegeneration: Too Much or Too Little?** *NEURON*  
Lucin, K. M., Wyss-Coray, T.  
2009; 64 (1): 110-122
- **The p75 Neurotrophin Receptor Promotes Amyloid-beta(1-42)-Induced Neuritic Dystrophy In Vitro and In Vivo** *JOURNAL OF NEUROSCIENCE*  
Knowles, J. K., Rajadas, J., Nguyen, T. V., Yang, T., LeMieux, M. C., Griend, L. V., Ishikawa, C., Massa, S. M., Wyss-Coray, T., Longo, F. M.  
2009; 29 (34): 10627-10637
- **Bioactive TGF-beta can associate with lipoproteins and is enriched in those containing apolipoprotein E3** *JOURNAL OF NEUROCHEMISTRY*  
Tesseur, I., Zhang, H., Brecht, W., Corn, J., Gong, J., Yanagisawa, K., Michikawa, M., Weisgraber, K., Huang, Y., Wyss-Coray, T.  
2009; 110 (4): 1254-1262
- **Neuroprotective natural antibodies to assemblies of amyloidogenic peptides decrease with normal aging and advancing Alzheimer's disease** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Britschgi, M., Olin, C. E., Johns, H. T., Takeda-Uchimura, Y., LeMieux, M. C., Rufibach, K., Rajadas, J., Zhang, H., Tomooka, B., Robinson, W. H., Clark, C. M., Fagan, A. M., Galasko, et al  
2009; 106 (29): 12145-12150
- **Blood Protein Signature for the Early Diagnosis of Alzheimer Disease** *ARCHIVES OF NEUROLOGY*  
Britschgi, M., Wyss-Coray, T.  
2009; 66 (2): 161-165
- **Bioluminescence analysis of Smad-dependent TGF-beta signaling in live mice.** *Methods in molecular biology (Clifton, N.J.)*  
Luo, J., Wyss-Coray, T.  
2009; 574: 193-202
- **TGF beta signaling in immune mediated CNS disease**  
Wyss-Coray, T., Ding, Z., Luo, J.  
ELSEVIER SCIENCE BV.2008: 205-
- **Microglia - A wrench in the running wheel?** *NEURON*  
Villeda, S., Wyss-Coray, T.  
2008; 59 (4): 527-529
- **Genes contributing to prion pathogenesis** *JOURNAL OF GENERAL VIROLOGY*  
Tamguney, G., Giles, K., Glidden, D. V., Lessard, P., Wille, H., Tremblay, P., Groth, D. F., Yehiely, F., Korth, C., Moore, R. C., Tatzelt, J., Rubinstein, E., Boucheix, et al  
2008; 89: 1777-1788
- **The autophagy-related protein beclin 1 shows reduced expression in early Alzheimer disease and regulates amyloid beta accumulation in mice** *JOURNAL OF CLINICAL INVESTIGATION*  
Pickford, F., Masliah, E., Britschgi, M., Lucin, K., Narasimhan, R., Jaeger, P. A., Small, S., Spencer, B., Rockenstein, E., Levine, B., Wyss-Coray, T.  
2008; 118 (6): 2190-2199
- **Bioluminescence in vivo imaging of autoimmune encephalomyelitis predicts disease** *JOURNAL OF NEUROINFLAMMATION*  
Luo, J., Ho, P., Steinman, L., Wyss-Coray, T.  
2008; 5
- **Real-time Imaging of molecular signaling after stroke - Novel reporter mice for dissection of in vivo responses to TGF-beta** *33rd International Stroke Conference*  
Buckwalter, M. S., Luo, J., Debsi, B., Wyss-Coray, T.

LIPPINCOTT WILLIAMS & WILKINS.2008: 659–59

- **Bioluminescent imaging of excitotoxic and endotoxic brain injury in living mice** *7th International Conference on Progress in Alzheimers and Parkinsons Disease*  
Luo, J., Lin, A. H., Wyss-Coray, T.  
SPRINGER.2008: 175–182
- **Glia-dependent TGF-beta signaling, acting independently of the TH17 pathway, is critical for initiation of murine autoimmune encephalomyelitis** *JOURNAL OF CLINICAL INVESTIGATION*  
Luo, J., Ho, P. P., Buckwalter, M. S., Hsu, T., Lee, L. Y., Zhang, H., Kim, D., Kim, S., Gambhir, S. S., Steinman, L., Wyss-Coray, T.  
2007; 117 (11): 3306-3315
- **Classification and prediction of clinical Alzheimer's diagnosis based on plasma signaling proteins** *NATURE MEDICINE*  
Ray, S., Britschgi, M., Herbert, C., Takeda-Uchimura, Y., Boxer, A., Blennow, K., Friedman, L. F., Galasko, D. R., Jutel, M., Karydas, A., Kaye, J. A., Leszek, J., Miller, et al  
2007; 13 (11): 1359-1362
- **Orally administered TGF-beta is biologically active in the intestinal mucosa and enhances oral tolerance** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*  
Ando, T., Hatsushika, K., Wako, M., Ohba, T., Koyama, K., Ohnuma, Y., Katoh, R., Ogawa, H., Okumura, K., Luo, J., Wyss-Coray, T., Nakao, A.  
2007; 120 (4): 916-923
- **Live imaging of Smad2/3 signaling in mouse skin wound healing** *WOUND REPAIR AND REGENERATION*  
Chong, A. K., Satterwhite, T., Pham, H. M., Costa, M. A., Luo, J., Longaker, M. T., Wyss-Coray, T., Chang, J.  
2007; 15 (5): 762-766
- **Selective expansion of Foxp3-positive regulatory T cells and immunosuppression by suppressors of cytokine signaling 3-deficient dendritic cells** *JOURNAL OF IMMUNOLOGY*  
Matsumura, Y., Kobayashi, T., Ichiyama, K., Yoshida, R., Hashimoto, M., Takimoto, T., Tanaka, K., Chinen, T., Shichita, T., Wyss-Coray, T., Sato, K., Yoshimura, A.  
2007; 179 (4): 2170-2179
- **In vitro analysis of transforming growth factor-beta 1 inhibition in novel Transgenic SBE-luciferase mice** *ANNALS OF PLASTIC SURGERY*  
Satterwhite, T. S., Chong, A. K., Luo, J., Pham, H., Costa, M., Longaker, M. T., Wyss-Coray, T., Chang, J.  
2007; 59 (2): 207-213
- **Immune cells may fend off Alzheimer disease** *NATURE MEDICINE*  
Britschgi, M., Wyss-Coray, T.  
2007; 13 (4): 408-409
- **Systemic and acquired immune responses in alzheimer's disease** *9th Workshop on Apoptosis in Biology and Medicine on Neuroinflammation in Neuronal Death and Repair*  
Britschgi, M., Wyss-Coray, T.  
ELSEVIER ACADEMIC PRESS INC.2007: 205–233
- **A role for TGF-beta signaling in neurodegeneration: evidence from genetically engineered models.** *Current Alzheimer research*  
Tesseur, I., Wyss-Coray, T.  
2006; 3 (5): 505-513
- **Bioluminescence imaging of Smad signaling in living mice shows correlation with excitotoxic neurodegeneration** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Luo, J., Lin, A. H., Masliah, E., Wyss-Coray, T.  
2006; 103 (48): 18326-18331
- **Increased T cell recruitment to the CNS after amyloid beta(1-42) immunization in Alzheimer's mice overproducing transforming growth factor-beta 1** *JOURNAL OF NEUROSCIENCE*  
Buckwalter, M. S., Coleman, B. S., Buttini, M., Barbour, R., Schenk, D., Games, D., Seubert, P., Wyss-Coray, T.  
2006; 26 (44): 11437-11441
- **Deficiency in neuronal TGF-beta signaling promotes neurodegeneratbn and Alzheimer's pathology** *JOURNAL OF CLINICAL INVESTIGATION*  
Tesseur, I., Zou, K., Esposito, L., Bard, F., Berber, E., Van Can, J., Lin, A. H., Crews, L., Tremblay, P., Mathews, P., Mucke, L., Masliah, E., Wyss-Coray, et al

2006; 116 (11): 3060-3069

- **Inflammation in Alzheimer disease: driving force, bystander or beneficial response?** *NATURE MEDICINE*  
Wyss-Coray, T.  
2006; 12 (9): 1005-1015
- **Tgf-Beta pathway as a potential target in neurodegeneration and Alzheimer's.** *Current Alzheimer research*  
Wyss-Coray, T.  
2006; 3 (3): 191-195
- **Neurodegeneration and neuroprotection in multiple sclerosis and other neurodegenerative diseases** *Symposium on Neuroprotective Strategies in Multiple Sclerosis*  
Dhib-Jalbut, S., Arnold, D. L., Cleveland, D. W., Fisher, M., Friedlander, R. M., Mouradian, M. M., Przedborski, S., Trapp, B. D., Wyss-Coray, T., Yong, V. W.  
ELSEVIER SCIENCE BV.2006: 198-215
- **Chronically increased transforming growth factor-beta 1 strongly inhibits hippocampal neurogenesis in aged mice** *AMERICAN JOURNAL OF PATHOLOGY*  
Buckwalter, M. S., Yamane, M., Coleman, B. S., Ormerod, B. K., Chin, J. T., Palmer, T., Wyss-Coray, T.  
2006; 169 (1): 154-164
- **Highly sensitive and specific bioassay for measuring bioactive TGF-beta** *BMC CELL BIOLOGY*  
Tesseur, I., Zou, K., Berber, E., Zhang, H., Wyss-Coray, T.  
2006; 7
- **Noninvasive bioluminescence imaging of neural injury and inflammation in mouse models** *37th Annual Meeting of the American-Society-for-Neurochemistry*  
Wyss-Coray, T., Luo, J.  
WILEY-BLACKWELL.2006: 93-93
- **Global analysis of Smad2/3-dependent TGF-beta signaling in living mice reveals prominent tissue-specific responses to injury** *JOURNAL OF IMMUNOLOGY*  
Lin, A. H., Luo, J., Mondschein, L. H., ten Dijke, P., Vivien, D., Contag, C. H., Wyss-Coray, T.  
2005; 175 (1): 547-554
- **Reduced brain tissue perfusion in TGF-beta 1 transgenic mice showing Alzheimer's disease-like cerebrovascular abnormalities** *NEUROBIOLOGY OF DISEASE*  
Gaertner, R. F., Wyss-Coray, T., Von Eeuw, D., Lesne, S., Vivien, D., Lacombe, P.  
2005; 19 (1-2): 38-46
- **Killing pain, killing neurons?** *NATURE MEDICINE*  
Wyss-Coray, T.  
2005; 11 (5): 472-473
- **Small molecule tgf-beta mimetics as potential neuroprotective factors.** *Current Alzheimer research*  
Zhang, H., Zou, K., Tesseur, I., Wyss-Coray, T.  
2005; 2 (2): 183-186
- **Insights into the pathogenesis of hydrocephalus from transgenic and experimental animal models** *BRAIN PATHOLOGY*  
Crews, L., Wyss-Coray, T., Masliah, E.  
2004; 14 (3): 312-316
- **Inhibition of the TGF-beta signaling pathway results in increased neurodegeneration and amyloid deposition in human APP transgenic mice** *9th International Conference on Alzheimers Disease and Related Disorders*  
Tesseur, I. C., Zou, K., Masliah, E., Corn, J., Brionne, T., Bard, F., Wyss-Coray, T.  
ELSEVIER SCIENCE INC.2004: S154-S154
- **Neuron-specific apolipoprotein E4 proteolysis is associated with increased tau phosphorylation in brains of transgenic mice** *JOURNAL OF NEUROSCIENCE*  
Brecht, W. J., Harris, F. M., Chang, S. J., Tesseur, I., Yu, G. Q., Xu, Q., Fish, J. D., Wyss-Coray, T., Buttini, M., Mucke, L., MAHLEY, R. W., Huang, Y. D.  
2004; 24 (10): 2527-2534
- **Astroglial regulation of apolipoprotein E expression in neuronal cells - Implications for Alzheimer's disease** *JOURNAL OF BIOLOGICAL CHEMISTRY*

- Harris, F. M., Tesseur, I., Brecht, W. J., Xu, Q., Mullendorff, K., Chang, S. J., Wyss-Coray, T., MAHLEY, R. W., Huang, Y. D.  
2004; 279 (5): 3862-3868
- **Modelling neuroinflammatory phenotypes in vivo.** *Journal of neuroinflammation*  
Buckwalter, M. S., Wyss-Coray, T.  
2004; 1 (1): 10
  - **Modelling neuroinflammatory phenotypes in vivo** *JOURNAL OF NEUROINFLAMMATION*  
Buckwalter, M. S., Wyss-Coray, T.  
2004; 1
  - **Transforming growth factor-beta signaling pathway as a therapeutic target in neurodegeneration** *JOURNAL OF MOLECULAR NEUROSCIENCE*  
Wyss-Coray, T.  
2004; 24 (1): 149-153
  - **Loss of TGF-beta 1 leads to increased neuronal cell death and microgliosis in mouse brain** *NEURON*  
Brionne, T. C., Tesseur, I., Masliah, E., Wyss-Coray, T.  
2003; 40 (6): 1133-1145
  - **Carboxyl-terminal-truncated apolipoprotein E4 causes Alzheimer's disease-like neurodegeneration and behavioral deficits in transgenic mice** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Harris, F. M., Brecht, W. J., Xu, Q., Tesseur, I., Kekoni, L., Wyss-Coray, T., Fish, J. D., Masliah, E., Hopkins, P. C., Scarce-Levie, K., Weisgraber, K. H., Mucke, L., MAHLEY, et al  
2003; 100 (19): 10966-10971
  - **Adult mouse astrocytes degrade amyloid-beta in vitro and in situ** *NATURE MEDICINE*  
Wyss-Coray, T., Loike, J. D., Brionne, T. C., Lu, E., Anankov, R., Yan, F. R., Silverstein, S. C., Husemann, J.  
2003; 9 (4): 453-457
  - **Prominent neurodegeneration and increased plaque formation in complement-inhibited Alzheimer's mice** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Wyss-Coray, T., Yan, F. R., Lin, A. H., Lambris, J. D., Alexander, J. J., Quigg, R. J., Masliah, E.  
2002; 99 (16): 10837-10842
  - **Inflammation in neurodegenerative disease - A double-edged sword** *NEURON*  
Wyss-Coray, T., Mucke, L.  
2002; 35 (3): 419-432
  - **Molecular and functional dissection of TGF-beta 1-induced cerebrovascular abnormalities in transgenic mice** *3rd World Congress on Vascular Factors in Alzheimers Disease*  
Buckwalter, M., Pepper, J. P., Gaertner, R. F., Von Eeuw, D., Lacombe, P., Wyss-Coray, T.  
NEW YORK ACAD SCIENCES.2002: 87-95
  - **Functional role of TGF beta in Alzheimer's disease microvascular injury: lessons from transgenic mice** *NEUROCHEMISTRY INTERNATIONAL*  
Masliah, E., Ho, G., Wyss-Coray, T.  
2001; 39 (5-6): 393-400
  - **Key signaling pathways regulate the biological activities and accumulation of amyloid-beta** *NEUROBIOLOGY OF AGING*  
Wyss-Coray, T., MCCONLOGUE, L., Kindy, M., Schmidt, A. M., Yan, S. D., Stern, D. M.  
2001; 22 (6): 967-973
  - **Apolipoprotein E fragments present in Alzheimer's disease brains induce neurofibrillary tangle-like intracellular inclusions in neurons** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Huang, Y. D., Liu, X. Q., Wyss-Coray, T., Brecht, W. J., Sanan, D. A., MAHLEY, R. W.  
2001; 98 (15): 8838-8843
  - **TGF-beta 1 promotes microglial amyloid-beta clearance and reduces plaque burden in transgenic mice** *NATURE MEDICINE*  
Wyss-Coray, T., Lin, C., Yan, F. R., Yu, G. Q., Rohde, M., MCCONLOGUE, L., Masliah, E., Mucke, L.  
2001; 7 (5): 612-618
  - **Ibuprofen, inflammation and Alzheimer disease** *NATURE MEDICINE*

- Wyss-Coray, T., Mucke, L.  
2000; 6 (9): 973-974
- **Inflammation and Alzheimer's disease** *NEUROBIOLOGY OF AGING*  
Akiyama, H., Barger, S., Barnum, S., Bradt, B., Bauer, J., Cole, G. M., Cooper, N. R., Eikelenboom, P., Emmerling, M., Fiebich, B. L., Finch, C. E., Frautschy, S., Griffin, et al  
2000; 21 (3): 383-421
  - **Chronic overproduction of transforming growth factor-beta 1 by astrocytes promotes Alzheimer's disease-like microvascular degeneration in transgenic mice** *AMERICAN JOURNAL OF PATHOLOGY*  
Wyss-Coray, T., Lin, C., Sanan, D. A., Mucke, L., Masliah, E.  
2000; 156 (1): 139-150
  - **Alzheimer's disease-like cerebrovascular pathology in transforming growth factor-beta 1 transgenic mice and functional metabolic correlates** *Conference on Vascular Factors in Alzheimers Disease*  
Wyss-Coray, T., Lin, C., Von Euw, D., Masliah, E., Mucke, L., Lacombe, P.  
NEW YORK ACAD SCIENCES.2000: 317-323
  - **Dominant negative effects of apolipoprotein E4 revealed in transgenic models of neurodegenerative disease** *NEUROSCIENCE*  
Buttini, M., Akeefe, H., Lin, C., MAHLEY, R. W., Pitas, R. E., Wyss-Coray, T., Mucke, L.  
2000; 97 (2): 207-210
  - **Elimination of the class a scavenger receptor does not affect amyloid plaque formation or neurodegeneration in transgenic mice expressing human amyloid protein precursors** *AMERICAN JOURNAL OF PATHOLOGY*  
Huang, F., Buttini, M., Wyss-Coray, T., MCCONLOGUE, L., Kodama, T., Pitas, R. E., Mucke, L.  
1999; 155 (5): 1741-1747
  - **Wild-type but not Alzheimer-mutant amyloid precursor protein confers resistance against p53-mediated apoptosis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Xu, X., Yang, D. S., Wyss-Coray, T., Yan, J., Gan, L., Sun, Y., Mucke, L.  
1999; 96 (13): 7547-7552
  - **Expression of human apolipoprotein E3 or E4 in the brains of Apoe(-/-) mice: Isoform-specific effects on neurodegeneration** *JOURNAL OF NEUROSCIENCE*  
Buttini, M., Orth, M., Bellosta, S., Akeefe, H., Pitas, R. E., Wyss-Coray, T., Mucke, L., MAHLEY, R. W.  
1999; 19 (12): 4867-4880
  - **Induction of matrix metalloproteinase-2 in human immunodeficiency virus-1 glycoprotein 120 transgenic mouse brains** *NEUROSCIENCE LETTERS*  
Marshall, D. C., Wyss-Coray, T., Abraham, C. R.  
1998; 254 (2): 97-100
  - **Novel role of human CD4 molecule identified in neurodegeneration** *NATURE MEDICINE*  
Buttini, M., Westland, C. E., Masliah, E., Yafeh, A. M., Wyss-Coray, T., Mucke, L.  
1998; 4 (4): 441-446
  - **Amyloidogenic role of cytokine TGF-beta 1 in transgenic mice and in Alzheimer's disease** *NATURE*  
WYSSCORAY, T., Masliah, E., Mallory, M., MCCONLOGUE, L., JOHNSONWOOD, K., Lin, C., Mucke, L.  
1997; 389 (6651): 603-606
  - **Astroglial overproduction of TGF-beta 1 enhances inflammatory central nervous system disease in transgenic mice** *JOURNAL OF NEUROIMMUNOLOGY*  
WYSSCORAY, T., Borrow, P., Brooker, M. J., Mucke, L.  
1997; 77 (1): 45-50
  - **Cellular signaling roles of TGF beta, TNF alpha and beta APP in brain injury responses and Alzheimer's disease** *BRAIN RESEARCH REVIEWS*  
Mattson, M. P., Barger, S. W., Furukawa, K., Bruce, A. J., WYSSCORAY, T., Mark, R. J., Mucke, L.  
1997; 23 (1-2): 47-61
  - **Dysregulation of signal transduction pathways as a potential mechanism of nervous system alterations in HIV-1 gp 120 transgenic mice and humans with HIV-1 encephalitis** *JOURNAL OF CLINICAL INVESTIGATION*  
WYSSCORAY, T., Masliah, E., Toggas, S. M., Rockenstein, E. M., Brooker, M. J., Lee, H. S., Mucke, L.  
1996; 97 (3): 789-798

- **SELECTIVE RESTIMULATION OF ANTIGEN OR ALLERGEN PREACTIVATED T-CELLS USING OKT3 F(AB)(2) RESULTS IN THE SECRETION OF TH-1 OR TH-2-LIKE CYTOKINE PATTERNS** *CLINICAL AND EXPERIMENTAL ALLERGY*  
Jutel, M., WYSSCORAY, T., Carballido, J. M., Blaser, K., Muller, U. R., Pichler, W. J.  
1995; 25 (11): 1108-1117
- **ANTIGEN-PRESENTING T-CELLS INDUCE THE DEVELOPMENT OF CYTOTOXIC CD4(+) T-CELLS .1. INVOLVEMENT OF THE CD80-CD28 ADHESION MOLECULES** *JOURNAL OF IMMUNOLOGY*  
Mauri, D., WYSSCORAY, T., Gallati, H., Pichler, W. J.  
1995; 155 (1): 118-127
- **INCREASED CENTRAL-NERVOUS-SYSTEM PRODUCTION OF EXTRACELLULAR-MATRIX COMPONENTS AND DEVELOPMENT OF HYDROCEPHALUS IN TRANSGENIC MICE OVEREXPRESSING TRANSFORMING GROWTH-FACTOR-BETA-1** *AMERICAN JOURNAL OF PATHOLOGY*  
WYSSCORAY, T., Feng, L. L., Masliah, E., Ruppe, M. D., Lee, H. S., Toggas, S. M., Rockenstein, E. M., Mucke, L.  
1995; 147 (1): 53-67
- **NONCYTOTOXIC HUMAN CD4(+) T-CELL CLONES PRESENTING AND SIMULTANEOUSLY RESPONDING TO AN ANTIGEN DIE OF APOPTOSIS** *CELLULAR IMMUNOLOGY*  
Bettens, F., Frei, E., Frutig, K., Mauri, D., Pichler, W. J., WYSSCORAY, T.  
1995; 161 (1): 72-78
- **IMPROVED SENSITIZATION OF ANTIGEN-PRESENTING CELLS WITH TRANSFERRIN-BOUND PEPTIDES - ADVANTAGES IN COMPETITION FOR ANTIGEN PRESENTATION** *CELLULAR IMMUNOLOGY*  
Mauri, D., WYSSCORAY, T., Brander, C., Pichler, W. J.  
1994; 158 (1): 59-70
- **COMPARATIVE-ANALYSIS OF SURFACE-ANTIGENS IN CULTURED HUMAN OUTER ROOT SHEATH-CELLS AND EPIDERMAL-KERATINOCYTES - PERSISTENCE OF LOW EXPRESSION OF CLASS-I MHC ANTIGENS IN OUTER ROOT SHEATH-CELLS IN-VITRO** *BRITISH JOURNAL OF DERMATOLOGY*  
Limat, A., WYSSCORAY, T., Hunziker, T., Braathen, L. R.  
1994; 131 (2): 184-190
- **T-CELLS AS ANTIGEN-PRESENTING CELLS** *IMMUNOLOGY TODAY*  
Pichler, W. J., WYSSCORAY, T.  
1994; 15 (7): 312-315
- **A CELL-SURFACE ELISA FOR THE SCREENING OF MONOCLONAL-ANTIBODIES TO ANTIGENS ON VIABLE CELLS IN SUSPENSION** *JOURNAL OF IMMUNOLOGICAL METHODS*  
Grunow, R., DAPUZZO, M., WYSSCORAY, T., Frutig, K., Pichler, W. J.  
1994; 171 (1): 93-102
- **Peptide-induced T cell clones: Specificity, MHC restriction, proliferation and cytokine pattern as a function of different stimulations** *7th International Paul Ehrlich Seminar*  
Pichler, W. J., Brander, C., Mauri, D., Frutig, K., WYSSCORAY, T.  
GUSTAV FISCHER VERLAG.1994: 141-154
- **ANTIGEN-PRESENTING HUMAN T-CELLS AND ANTIGEN-PRESENTING B-CELLS INDUCE A SIMILAR CYTOKINE PROFILE IN SPECIFIC T-CELL CLONES** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
WYSSCORAY, T., Gallati, H., PRACHT, I., Limat, A., Mauri, D., Frutig, K., Pichler, W. J.  
1993; 23 (12): 3350-3357
- **CARRIER-MEDIATED UPTAKE AND PRESENTATION OF A MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I-RESTRICTED PEPTIDE** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Brander, C., WYSSCORAY, T., Mauri, D., Bettens, F., Pichler, W. J.  
1993; 23 (12): 3217-3223
- **THE B7 ADHESION MOLECULE IS EXPRESSED ON ACTIVATED HUMAN T-CELLS - FUNCTIONAL INVOLVEMENT IN T-T CELL-INTERACTIONS** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
WYSSCORAY, T., MAURIHELLWEG, D., Baumann, K., Bettens, F., Grunow, R., Pichler, W. J.  
1993; 23 (9): 2175-2180

- **DISCRIMINATION OF HUMAN CD4-T CELL CLONES BASED ON THEIR REACTIVITY WITH ANTIGEN-PRESENTING T-CELLS** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
WYSSCORAY, T., Brander, C., Frutig, K., Pichler, W. J.  
1992; 22 (9): 2295-2302
- **USE OF ANTIBODY PEPTIDE CONSTRUCTS TO DIRECT ANTIGENIC PEPTIDES TO T-CELLS - EVIDENCE FOR T-CELL PROCESSING AND PRESENTATION** *CELLULAR IMMUNOLOGY*  
WYSSCORAY, T., Brander, C., Bettens, F., MIJIC, D., Pichler, W. J.  
1992; 139 (1): 268-273