



PROGRESS IN NEUROSCIENCE PINS

Seminar Series of the
Brain & Mind Research Institute
Weill Cornell Medical College (WCMC)
&

The Graduate Program in Neuroscience of
WCMC and Sloan Kettering Institute



Thursday, 12/4/14, 4 PM, coffee at 3:45 PM
Weill Auditorium
Followed by BMRI Faculty Meeting

“Young Blood for Old Brains”

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Abstract:



Growing evidence links neurodegeneration with altered immune responses not only in the brain but in the periphery as well. In addition, age is the main risk factor for sporadic forms of neurodegenerative diseases, and aging of peripheral organs may affect brain function. How the systemic environment affects brain health is largely unknown and while some of these interactions may involve cells entering the nervous tissue it is likely that others are mediated by soluble factors. We use a combination of physiological methods to manipulate systemic aging and proteomic methods to try to identify factors that accelerate or slow aging of the brain. Our findings point to systemic changes in immune responses and cellular signaling factors with aging and may be relevant for our understanding of age-related neurodegeneration.

Recent relevant publications:

1. Ray S, Britschgi M, Herbert C, Takeda-Uchimura Y, Boxer A, Galasko DR, Jutel M, Kaye JA, Leszek J, Miller B, Minthon L, Quinn JF, Robinson WH, Sabbagh MN, So Y, Sparks DL, Tabaton M, Tinklenberg J, Yesavage J, Tibshirani R, Blennow K and **Wyss-Coray T**. (2007). Molecular classification and class prediction of Alzheimer's disease based on secreted signaling proteins in plasma. *Nature Med*, 13:1359-1362.
2. Villeda SA, Luo J, Mosher KI, Zou B, Britschgi M, Bieri G, Stan TM, Fainberg N, Ding Z, Eggel A, Lucin KM, Czirr E, Park JS, Couillard-Després S, Aigner L, Li G, Peskind ER, Kaye JA, Quinn JF, Galasko DR, Xie XS, Rando TA and **Wyss-Coray T**. (2011). The ageing systemic milieu negatively regulates neurogenesis and cognitive function. *Nature*, 477:90-4.



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