



Ahmad Salehi Najaf Abadi

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Bio

BIO

Dr. Salehi is a neurobiologist working on identifying molecular mechanisms of neurodegenerative disorders including Alzheimer's disease and Down syndrome. In this process, he uses pre-clinical experiments to test the effects of already-approved drugs in improving cognitive function in the mouse models with hippocampal degeneration. In 2010, he received the World Technology Award for the innovative use of mouse models of Down syndrome to identify genes responsible for cognitive disabilities. Recently, he found that increasing beta2 adrenergic signaling would improve cognitive function in a mouse model of Down syndrome. Accordingly, in a collaborative study, he is testing whether already-approved beta2-adrenergic receptor agonists can indeed improve cognitive function and reduce the severity of pathology in individuals with mild to moderate Alzheimer's disease.

Selected Publications

Dang V, Medina B, Das D, Moghadam S, Martin KJ, Lin B, Naik P, Patel D, Nosheny R, Wesson Ashford J, Salehi A. Formoterol, a long-acting β_2 adrenergic agonist, improves cognitive function and promotes dendritic complexity in a mouse model of Down syndrome. *Biol Psychiatry*. 2014 Feb 1;75(3):179-88. doi: 10.1016/j.biopsych.2013.05.024. PMID: 23827853

Salehi A, Faizi M, Colas D, Valletta J, Laguna J, Takimoto-Kimura R, Kleschevnikov A, Wagner SL, Aisen P, Shamloo M, Mobley WC. Restoration of norepinephrine-modulated contextual memory in a mouse model of Down syndrome. *Sci Transl Med*. 2009 Nov 18;1(7):7ra17. doi: 10.1126/scitranslmed.3000258. PMID: 20368182

Salehi A, Delcroix JD, Belichenko PV, Zhan K, Wu C, Valletta JS, Takimoto-Kimura R, Kleschevnikov AM, Sambamurti K, Chung PP, Xia W, Villar A, Campbell WA, Kulnane LS, Nixon RA, Lamb BT, Epstein CJ, Stokin GB, Goldstein LS, Mobley WC. Increased App expression in a mouse model of Down's syndrome disrupts NGF transport and causes cholinergic neuron degeneration. *Neuron*. 2006 Jul 6;51(1):29-42. PMID: 16815330

Salehi A, Delcroix JD, Belichenko PV, Zhan K, Wu C, Valletta JS, Takimoto-Kimura R, Kleschevnikov AM, Sambamurti K, Chung PP, Xia W, Villar A, Campbell WA, Kulnane LS, Nixon RA, Lamb BT, Epstein CJ, Stokin GB, Goldstein LS, Mobley WC. Increased App expression in a mouse model of Down's syndrome disrupts NGF transport and causes cholinergic neuron degeneration. *Neuron*. 2006 Jul 6;51(1):29-42.

Links:

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Linkedin: <https://www.linkedin.com/in/ahmadsalehi1/>

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