

CURRICULUM VITAE: HEIKE REBHOLZ

Professional Experience

- Sept 2019: Group leader Laboratory of Signaling mechanisms in neurological disorders
Institute de Psychiatrie et de Neurosciences de Paris, Universite de Paris-
Associate Professor Descartes University
- Oct. 2019: Associate Professor Danube Private Univeristy, Krems, Austria
- 2018-2019 : Independent Principal investigator at Università Cattolica del Sacro
Cuore (Istituto di Biochimica e Biochimica Clinica)
- 2012-2018: Research Assistant Professor at CUNY Medical School (Dept of Physiology,
Pharmacology and Neuroscience)
- 2009-2011: Research Associate at Rockefeller University
- 2005-2009: Post-doctoral Associate at Rockefeller University

Education

- 2001-2004: PhD degree University College London, Department of Biochemistry**
Laboratory of Dr. Ivan Gout, Ludwig Institute for Cancer
Research/UCL/GSK Harlow
PhD thesis: "Membrane association and tyrosine phosphorylation of ribosomal
protein S6 Kinases"
- 1993-1996: Master's degree in biochemistry at Free University Berlin, Germany**
Laboratory of Dr. Bernard Salles at the Institut de Pharmacologie et Biologie
Structurale (IPBS), CNRS, Toulouse, "Characterisation of kinase activity of DNA-
PK in the presence of UV-induced DNA lesions"
- 1991-1993: BSc in biochemistry at Free University Berlin, Germany**

Supervision of Students

- 2014-Jan 2019: supervisor of PhD student from CUNY biochemistry program
- 2012-2018: supervision of research internships of six MD students from CUNY Medical School
- 2014-2017: co-supervisor of PhD student from CUNY neuroscience program
- 2013-2016: supervisor of undergrad biochemistry student at CUNY
- 2008- 2011: supervisor of technician
- 2007-2009: supervisor of MD/PhD cand.from LMU
- 2007-2008: supervisor for Master's degree student from Humboldt Uni, Berlin
- 2006: research mentor for undergrad student from Oxford Uni

Science journalism

- 2004-2015: Producer and lead author for German science TV program "Quarks & Co".
- 2000-2001: Assistant Producer for BBC1 science documentary series "Child of Our Time"
Assistant Producer for science documentary series "Horizon/NOVA", BBC2/PBS,
Associate Producer for Brook Lapping Productions, London
- 1998-1999: Researcher for "Horizon/NOVA", BBC2/PBS
Assistant producer for the documentary series "Eureka Eutopia" for Arte and
BBC2 (UK), Presenter of the science program "Projekt Zukunft" of Deutsche Welle-
TV, Presenter for "Wissenschaft live".
- 1995-1999: Producer for Science department of WDR, German Public TV ("Quarks und Co").
Contribution to print and web publications

Patents

Co-Inventor "Method for avoiding or inhibition of dyskinesia" (US-2017-0224643-A1, PCT 15/425,435) with Dr A Kottmann, CUNY.

Peer Review/Commissions of Trusts

Since Jan. 2019: Member of the evaluation committee of PhD programme in Biomedical Sciences and Public Health at Universita Cattolica del Sacro Cuore, Rome
2018: Grant reviewer for AAPG Grant of The French National Research Agency (ANR), Biology/ Healthcare Department
Since 2017: Peer reviewer for the journals Human Molecular Genetics, Pharmaceuticals, Molecular and Cellular Biochemistry, Neuropsychiatric Disease and Treatment, and Neuroscience, Neuropharmacology
2008 – present: member Society for Neuroscience
2006-2016: member New York Academy of Sciences

Publications

Rebolz H, Friedman E and Castello J: Alterations of expression of the serotonin 5-HT₄ receptor in brain disorders (Int J Mol Sci. 2018 Nov 13;19(11)).
Castello J, LeFrancois B, Flajolet M, Greengard P, Friedman E and **Rebolz H**: CK2 regulates 5-HT₄ receptor signaling and modulates depressive-like behavior (Mol. Psychiatry. 2018 Apr;23(4):872-882).
Cortes M, Malave L, Castello J, Flajolet M., Cenci MA, Friedman E and **Rebolz H**: CK2 knockout in D1 and D2 medium spiny neurons affects L-DOPA-induced dyskinesia in opposing ways (J Neurosci. 2017 Nov 2. pii: 0443-17. doi: 10.1523/JNEUROSCI.0443-17.2017)
Castello J, Ragnauth A, Friedman E and **Rebolz H**. CK2- An Emerging Target for Neurological and Psychiatric Disorders. Pharmaceuticals 2017 Jan 5;10(1).
Nishi A, Sánchez Matamales M, Musante V, Kuroiwa M, **Rebolz H**, Greengard P, Girault JA and Nairn AC: Glutamate counteracts dopamine/PKA signaling via nuclear sequestration of inactive DARPP-32 (J Biol Chem. 2017 Jan 27;292(4):1462-1476).
Rossi M, Ruiz de Azua I, Barella LF, Sakamoto W, Zhu L, Cui Y, Lu H, **Rebolz H**, Matschinsky FM, Doliba NM, Butcher AJ, Tobin AB, Wess J.: CK2 acts as a potent negative regulator of receptor-mediated insulin release in vitro and in vivo. Proc Natl Acad Sci U S A. 2015 Dec 8;112(49) E6818-24.
Fontanesi C, Kvint S, Frazzitta G, Brera R, Ferrazzoli D, Di Rocco A, **Rebolz H**, Friedman E, Pezzoli G, Quartarone A, Wang HY and Ghilardi MF: Intensive rehabilitation treatment enhances lymphocytes BDNF-TrkB signaling in patients with Parkinson's disease. Neurorehabilitation & Neural Repair 2015 Aug 7. pii: 1545968315600272.
Rebolz H, Zhou M, Nairn AC, Greengard P and Flajolet M: Selective knockout of the CK2 kinase in D1 medium spiny neurons controls dopaminergic function (Biol Psychiatry. 2013 Jan 3: S0006-3223(12)00994-8).
Ceglia I, Flajolet M and **Rebolz H**: Predominance of CK2 α over CK2 α' in the mammalian brain, Mol. Cell. Biochem. Mol Cell Biochem. 2011 Oct; 356(1-2):169-75.
Zhou M, **Rebolz H**, Brocia C, Warner-Schmidt JL, Fienberg AA, Nairn AC, Greengard P and Flajolet M: Forebrain overexpression of CK1 δ leads to down-regulation of dopamine receptors and altered locomotor activity reminiscent of ADHD. PNAS, 2010 Mar 2;107(9):4401-6.
Rebolz H, Nishi A, Liebscher S, Nairn AC, Flajolet M and Greengard P: CK2 negatively regulates G_s signalling. PNAS, 2009 Aug 18;106(33):14096-101.
Rebolz H, Fenton, T, Panasyuk, G, Nemazanyy, I, Valovka, T, Ronnstrand, L, Stephens, West, A and Gout, IT: Receptor association and tyrosine phosphorylation of S6 kinases. FEBS J. 2006 May;273(9):2023-36.

Harrington LS, Findlay GM, Gray A, Tolkacheva T, Wigfield S, **Rebholz H**, Barnett J, Leslie NR, Cheng S, Shepherd PR, Gout I, Downes CP and Lamb RF: The TSC1-2 tumor suppressor controls insulin-PI3K signaling via regulation of IRS proteins. *J Cell Biol.* 2004 Jul 19;166(2):213-23.

Zhyvoloup A, Nemazanyy I, Panasyuk G, Valovka T, Fenton T, **Rebholz H**, Wang ML, Foxon R, Lyzogubov V, Usenko V, Kyyamova R, Gorbenko O, Matsuka G, Filonenko V and Gout IT: Subcellular localization and regulation of coenzyme A synthase. *J Biol Chem.* 2003 Dec 12; 278(50): 50316-21.

Valovka T, Verdier F, Cramer R, Zhyvoloup A, Fenton T, **Rebholz H**, Wang ML, Gzhegotsky M, Lutsyk A, Matsuka G, Filonenko V, Wang L, Proud CG, Parker PJ and Gout IT: Protein kinase C phosphorylates ribosomal protein S6 kinase beta II and regulates its subcellular localization, *Mol Cell Biol.* 2003 Feb; 23(3): 852-63.

Zhyvoloup A, Nemazanyy I, Babich A, Panasyuk G, Pobigailo N, Vudmaska M, Naidenov V, Kukhareenko O, Palchevskii S, Savinska L, Ovcharenko G, Verdier F, Valovka T, Fenton T, **Rebholz H**, Wang ML, Shepherd P, Matsuka G, Filonenko V and Gout IT: Molecular cloning of CoA Synthase. The missing link in CoA biosynthesis. *J Biol Chem.* 2002 277(25): 22107-10.

Conference presentations

Rebholz H: Speaker and panel member: CK2- dosage and phenotyping, Okur-Chung Neurodevelopmental Disorder (OCND) meeting, August 17-19th, 2018, Newark, NJ, USA

Rebholz H: Speaker: CK2 as negative regulator of serotonergic signaling
September 6-9, 2016: 8th International Conference on Protein Kinase CK2, Bad Homburg, Germany.

Castello J, LeFrancois B, Friedman E and **Rebholz H:** CK2 modulates 5-HT4 receptor signaling and depressive-like behaviors, FENS Conference Copenhagen July 2nd-6th, 2016 (poster)

Cortes M, Malave L, Friedman E and **Rebholz H:** CK2 knockout in D1 and D2 medium spiny neurons affects L-DOPA-induced dyskinesia in opposing ways, FENS Conference Copenhagen July 2nd-6th, 2016 (poster)

Rebholz H: ISpeaker: CK2- a potential target for treatment of neurological disorders?

September 10-13, 2013: 7th International Conference on Protein Kinase CK2, Lublin, Poland.

Rebholz H, Nairn AC, Flajolet M and Greengard P: A role for CK2 in dopamine signaling. September 22-25, 2011: FENS Featured Neuroscience Conference, Ljubljana, Slovenia (poster).

Rebholz H: Speaker: The role of CK2 in Dopamine receptor signaling. September 7-10, 2010, 6th International Conference on Protein Kinase CK2, Cologne, Germany.