



Curriculum vitae

NAME

Surname, forenames Voutilainen (nee Kauppinen), Merja Hannele
Sex Female
Date of CV 29.11.2015

DATE AND PLACE OF BIRTH, NATIONALITY

Date and place of birth 16.05.1979, Helsinki
Nationality Finnish
Place of residence Helsinki
Personal info Married, mother of two children, born 2009 and 2011

DEGREES

Ph.D. (Pharm) University of Helsinki, Major subject: Pharmacology, 28.1.2011,
Thesis grade excellent (5/5)
Dissertation approved with distinction
Topic of doctoral dissertation: CDNF and MANF in an experimental
model of Parkinson's disease in rats
Master of Science (Pharm) University of Helsinki, 30.09.2004

LANGUAGE SKILLS

English, Swedish, German and Finnish (native language)

PRESENT EMPLOYMENT RELATIONSHIP

Post Doctoral researcher Academy of Finland University of Helsinki, Institute of Biotechnology
1.9.2014-

MOST IMPORTANT FOREIGN VISITS

Attended Society for Neuroscience meeting in several years (2006, 2008, 2010, 2014, 2015) and attended also other Parkinson's and ALS-related international congresses. Presented 15 poster presentations during years 2005-2015.

One week visit to prof. Michael Sendtner's laboratory 8.9-14.9.2013, including learning different ALS-related methods (primary motoneuron culture, motoneuron and neuromuscular junction staining and analysis) and an oral presentation to prof. Sendtner and his group. The presentation was entitled "CDNF and MANF in genetic model of ALS"

Lecture for Professor Barry Hoffer's group 20.11.2008, NIDA, Baltimore, United States "Intrastriatal injection of MANF: brain distribution and neurorestoration in an experimental Parkinson's disease model in rats"

Master thesis experimental work (6 months) at the University of Bath, United Kingdom, department of Biology and Biochemistry 2.1.2004-15.6.2004

Seminar lecture for professor Susan Wonnacott's group 7.3.2005, University of Bath, United Kingdom "MANF and GDNF in an experimental Parkinson's disease model"

TEACHING MERITS AND EXPERIENCE

Basics of University pedagogy- course at the University of Helsinki 8.12.2005-15.9.2006 (10 credits), completed

Teaching on various courses during years 2004 until 2013 at University of Helsinki, Faculty of Pharmacy, Division of Pharmacology and toxicology. I have given lectures on pharmacology related topics, guided practical laboratory work of students in *in vitro* and *in vivo* methods courses. I have also supervised by now several Bachelor (8) and Master thesis (11) students in the lab and supervised also their theses. At the moment supervisor of 4 PhD students. Year 2015 I have organized two Doctoral courses and kept there lectures for students.

RESEARCH METHODS

Various *in vivo* and *in vitro* models of ALS and Parkinson's Disease. Methods: Stereotaxic brain surgery, Gene therapy, Behavioural analysis with different behavioural methods, Immunohistochemistry, Stereological assessment of neuron number, Cell culture, Ligand binding

SCIENTIFIC EXPERT POSITIONS AND AWARDS

Non-clinical consultant at Hermo Pharma Ltd / Herantis Ltd. 1.9.2012-

The best PhD thesis in Pharmacology field in Finland in 2010 awarded by The Finnish Pharmacological Society

MOST IMPORTANT RESEARCH GRANT FOR MH VOUTILAINEN / PD and ALS PROJECTS:

Year	Foundation	Purpose	Amount (€)
2014	Academy of Finland	Post Doctoral grant	270 000
2014	Solhberg Foundation	Project grant for ALS	39 000
2014	Ella and Georg Ehnrooth Foundation	Project grant for ALS	22 000
2013	Jane and Aatos Erkkö Foundation	Post doctoral & project grant for ALS	200 000
2013	Finnish Cultural Foundation	Project grant for ALS	26 000
2011	Alfred Kordelin Foundation	Project grant for PD	25 000

PUBLICATIONS

Lindholm P., **Voutilainen M.H.**, Laurén J., Peränen J., Leppänen V-M., Andressoo J-O., Lindahl M., Janhunen S., Kalkkinen N., Timmusk T., Tuominen R.K, and Saarma M. (2007). Novel neurotrophic factor CDNF protects and rescues midbrain dopaminergic neurons *in vivo*. *Nature* 448 (7149):73-7. **IF Impact Factor: 38.597**

Voutilainen M.H., Bäck S., Pörsti E., Toppinen L., Lindgren L., Lindholm P., Peränen J., Saarma M. and Tuominen R.K (2009) Mesencephalic astrocyte-derived neurotrophic factor is neurorestorative in rat model of Parkinson's disease. *J neurosci* 29(30):9651-9659. Impact Factor: 7.11

Voutilainen M.H., Bäck S., Peränen S., Lindholm P., Raasmaja A., Männistö P., Saarma M. and Tuominen R.K (2011). Chronic infusion of CDNF prevents 6-OHDA-induced deficits in a rat model of Parkinson's disease. *Exp Neurol* 228(1):99-108. Impact Factor: 4.645

Voutilainen MH., Arumäe U., Airavaara M., Saarma M., (2015) Therapeutic Potential of Endoplasmic Reticulum Located and Secreted CDNF/MANF Family of Neurotrophic Factors in Parkinson's disease. *FEBS letters* Oct 9. Impact factor: 3.169

Airavaara M.*, **Voutilainen M.H.***, Wang Y., Hoffer B. Neurorestoration (review). *Parkinsonism Relat Disord.* 2012 Jan;18 Suppl 1:S143-6. Impact Factor: 3,3

Airavaara M., Harvey B.K., **Voutilainen M.H.**, Shen H., Chou J., Lindholm P., Lindahl M., Tuominen R.K., Saarma M., Wang Y., Hoffer B. CDNF protects the nigrostriatal dopamine system and promotes recovery after MPTP treatment in mice. *Cell Transplant.* 2011 Sep 22. Impact Factor: 5.13

Bäck S., Peränen J., Galli E., Pulkkila P., Lonka-Nevalaita L., Tamminen T., **Voutilainen M.H.**, Raasmaja A., Saarma M., Männistö P.T and Tuominen R.K (2013). Gene therapy with AAV2-CDNF provides functional benefits in a rat model of Parkinson's disease. *Brain Behav.* 2013 Mar;3(2):75-88. Open access journal, no IF number available

Abin-Carrquiry A., **Voutilainen M.H.**, Barik J., Cassels B.K., Bermudez I., Dajas F. and Wonnacott S. (2006). C3-halogenation of cytosine generates potent and efficacious nicotinic receptor agonists. *EJP* 536 (1-2) 1-11. Impact Factor:2.592

Nadella R., **Voutilainen MH.**, Saarma M., Gonzalez-Barrios JA., Leon-Chavez BA., Dueñas Jimenez JM., Dueñas Jimenez SH., Escobedo L., Martinez-Fong D (2014) Transient transfection of human CDNF gene reduces the 6-hydroxydopamine-induced neuroinflammation in the rat substantia nigra. *J Neuroinflammation* 11:209, **Impact factor** 4.351

MOST IMPORTANT SCIENTIFIC POSITIONS

The Main Organizer of "From research to Therapies", Prof Raimo K Tuominen 60 years symposium. Symposium was held at University of Helsinki 28.8.2015.

Organizer of Helsinki Spring course of Parkinson's disease, this 2-day course was held at University of Helsinki May 2015.

Scientific secretary, member of organizing committee and treasurer at Helsinki Drug Research 2008 Congress (congress held in Helsinki 6/2008).