

CURRICULUM VITAE

Full Names: **Raimo Kalevi Tuominen**
Date & Place of Birth: July 21, 1955, Mäntsälä, Finland
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Current Position Professor of Pharmacology and Toxicology, Faculty of Pharmacy,
University of Helsinki, Helsinki, Finland

Education and training:

1983 **Licentiate of Medicine Examination, University of Helsinki, Finland**
1983 Registered Physician (= M.D.), University of Helsinki, Finland
1986 **Doctor of Medicine and Surgery (= Ph.D.), University of Helsinki, Finland**
1991 Senior Lecturer in Pharmacology (= Docent), University of Helsinki, Finland
1988-1990 Post-doctoral training (22 months) (Fogarty International Research Fellowship and Visiting Associate), National Institute of Environmental Health Sciences/ NIH, North Carolina, USA; Dr. John Hong's laboratory.

Previous Professional Appointments (also Present Appointment):

1982 - 2004 Consulting Pharmacology Expert, Orion-Pharma, Espoo, Finland
1982 - 1985 Acting Assistant in Pharmacology, Department of Pharmacology and Toxicology, University of Helsinki, Finland
1986 - 1992 Assistant in Neurobiology, Research Unit of Neurobiology, University of Helsinki
1992 - 1993 Junior Fellow, The Academy of Finland
1992 - 1998 Assistant Professor, Institute of Biomedicine, Department of Pharmacology and Toxicology, University of Helsinki
2004 - 2009 Coordinator of Pro-KinaseResearch Consortium, an Integrated Project of European Union 6th Framework Program
2007 - 2010 Coordinator of an International Research Consortium on Nicotine Addiction
2006 – 2011 Director of FinPharmaNet, a national graduate school network
2012 - 2015 Director of a National FinPharma Doctoral Program
1999 - **Professor of Pharmacology and Toxicology, Faculty of Pharmacy, University of Helsinki**
2000 - Pharmacology Expert, Finnish Pharma Information Center, Pharmaca Fennica

Major Stipendiary Support for Research:

1993 The Academy of Finland: Intracellular signal transduction associated with long-term receptor activation.
1995-1996 The Academy of Finland and Sigrid Juselius Foundation: Dr. Michael K. McMillian, Ph.D., U.S.A. worked as a Visiting Scientists in my laboratory from Sept. 19th, 1995 until August 19th, 1996.
1998-2001 Technology Development Center (TEKES) "Protein kinase C as drug target " in collaboration with prof. Jyrki Taskinen, Faculty of Pharmacy, University of Helsinki.
2001-2004 Research Funds of the University of Helsinki Foundation "Diversity of Brain Cholinergic Nicotinic Receptors –role in brain diseases and drug dependence"
2001-2005 Sigrid Juselius Foundation, "Functional characterization of nicotinic acetylcholine receptor subtypes in the brain using microdialysis and gene manipulation"
2002-2005 Finnish Academy, "Diversity of Brain Cholinergic Nicotinic Receptors – New Basis for Treatment of Neurodegenerative Brain Diseases"
2004-2009 European Union 6th FP, "Protein Kinases – Novel Drug Targets of Post-Genomic Era" (Pro-KinaseResearch Consortium)

- 2007-2010 Michael J. Fox Foundation for Parkinson's disease "CDNF – a novel conserved neurotrophic factor that protects midbrain dopaminergic neurons in vivo" together with three other PIs
- 2007-2010 Finnish Academy, "Behavioral and Molecular Mechanisms of Nicotine Addiction"
- 2009-2011 Era-Net Neuron; Finnish Academy " Long-term effects of CDNF in 6-OHDA induced animal model of Parkinson's disease"
- 2010-2012 Michael J. Fox Foundation for Parkinson's disease "CDNF – a novel conserved neurotrophic factor that protects midbrain dopaminergic neurons in vivo" together with three other PIs
- 2012 – 2014 Finnish Academy: "CDNF and MANF in experimental model of Parkinson's disease – brain neurochemistry and behavior"
- 2013 – 2016 University of Helsinki International evaluation of research (2006-2011): Research Consortium "Pharmacology of Degenerative Brain Diseases, PDBD".
- 2014 – 2017 Jane and Aatos Erkko Foundation: New protein kinase modulators for cancer and Alzheimer's disease
- 2014 – 2018 Finnish Technology Development Center (TEKES): Large Strategic opening "Innovative Induction Initiative, 3i" or 3i Regeneration; 3i-Neuro program

Membership in Scientific Societies:

Finnish Pharmacological Society; Brain Research Society of Finland; Finnish Medical Association Duodecim; Society for Neuroscience (U.S.A.)

Supervisor of PhD theses in Pharmacology:

- 1999 Ilkka Reenilä: Catechol-O-methyltransferase activity, assay, distribution and pharmacological modification, University of Helsinki (co supervisor)
- 2000 Petri J. Vainio: Effects of Cotinine and Nicotine on Chromaffin Cell Signalling, University of Helsinki
- 2005 Sanna Janhunen: Different responses of the nigrostriatal and mesolimbic dopaminergic pathways to nicotinic receptor agonists, University of Helsinki (co supervisor)
- 2006 Tomi Rantamäki: Brain TrkB neurotrophin receptor as a target for antidepressant treatments, University of Helsinki, 2006 (co supervisor)
- 2006 Jukka S. Pakkanen: Upregulation and functionality of neuronal nicotinic acetylcholine receptors, University of Helsinki
- 2007 Saara Nuutinen: The effects of nicotine on the regulation of neuronal alpha7 nicotinic acetylcholine receptors and intracellular signaling pathways, University of Helsinki.
- 2009 Tanja Kivinummi: Effects of chronic nicotine on behavioural and neurochemical responses to morphine (co supervisor), University of Helsinki.
- 2010 Tiina Leppänen: Protein kinase C in the Regulation of Inflammatory Genes iNOS and TTP (co supervisor), University of Tampere, Tampere, Finland
- 2011 Merja H. Voutilainen: CDNF and MANF in an experimental model of Parkinson's disease in rats, University of Helsinki
- 2011 Bernardino Ossola: Putative neuroprotective compounds in *in vitro* models of dopaminergic neurodegeneration
- 2012 Milla Summanen, VHH Activators and Inhibitors for Protein Kinase C Epsilon University of Utrecht, Utrecht, The Netherlands (co-supervisor)
- 2013 Virpi Talman: The DAG-Responsive C1 Domain as a Drug Target: Structure-Activity and *In Vitro* Pharmacology of Isophthalate Derivatives, University of Helsinki
- 2014 Susanne Bäck: CDNF in an Experimental Model of Parkinson's Disease: Studies on Gene Therapy and Protein Infusion, University of Helsinki

Other Academic and Professional Activities:

Dissertation referee

- 1993 Heikki Wuorela, University of Tampere, Finland
- 1996 Mervi Kotamäki, University of Helsinki, Finland

1997 Jyrki Kukkonen, Åbo Akademi University, Turku, Finland
 1998 Anu Kinnunen, University of Helsinki, Helsinki, Finland
 1998 Kirsi Pietilä, University of Helsinki, Helsinki, Finland
 1998 Leena Karhapää, Åbo Akademi University, Turku, Finland
 1998 Esa-Pekka Pälvimäki, University of Turku, Turku, Finland
 1999 Jari O. Summanen, University of Helsinki, Helsinki, Finland
 2002 Esa Meririnne, University of Helsinki, Helsinki, Finland
 2002 Riku Korhonen, University of Tampere, Finland
 2002 Zhong-Jiang Cheng, University of Helsinki, Helsinki, Finland
 2003 Kristiina Haasio, University of Helsinki, Helsinki, Finland
 2004 Markus Storvik, University of Kuopio, Kuopio, Finland
 2004 Aleksi Lahti, University of Tampere, Tampere, Finland
 2005 Markus M. Forsberg, University of Kuopio, Kuopio, Finland
 2011 Elina Koivisto, University of Oulu, Oulu, Finland
 2013 Pramod Sukumaran, Åbo Akademi University, Turku, Finland
 2013 Daniela Karlsson, Åbo Akademi University, Turku, Finland
 2014 Maria Jäntti, University of Helsinki, Helsinki, Finland
 2014 Tuomas Lilius, University of Helsinki, Helsinki, Finland

Dissertation opponent

1995 Aavo Lang, University of Tartu, Tartu, Estonia
 1998 Anne Lecklin, University of Kuopio, Kuopio, Finland
 1999 Vallo Volke, University of Tartu, Tartu, Estonia
 2002 Marko Huotari, University of Kuopio, Kuopio, Finland
 2003 Alar Veraksits, University of Tartu, Tartu, Estonia
 2007 Sonja Balthasar, Åbo Akademi University, Turku, Finland
 2008 Tiina Kääriäinen, University of Kuopio, Kuopio, Finland
 2010 Marjut Louhelainen, University of Helsinki, Helsinki, Finland
 2010 Sanna Kailanto, University of Helsinki, Helsinki, Finland
 2011 Elli Leppä, University of Helsinki, Helsinki, Finland
 2012 Milla Summanen, University of Utrecht, Utrecht, The Netherlands
 2014 Alise Hyrskyluoto, University of Helsinki, Helsinki, Finland

Referee for docentship (= Senior Lecturer)

1996 University of Helsinki: Tomi Taira, Helsinki, Finland
 1997 University of Turku: Hannu Alho, Helsinki, Finland
 1997 University of Kuopio: Atso Raasmaja, Kuopio, Finland
 1999 University of Helsinki: Sampsa Vanhatalo, Helsinki, Finland
 2002 University of Turku: Mikko Uusi-Oukari, Turku, Finland
 2004 University of Helsinki: Eeva Sievi, Helsinki, Finland
 2005 University of Helsinki: Erkki Heinonen, Helsinki, Finland
 2007 Åbo Akademi University: Johnny Näsman, Turku, Finland
 2008 Åbo Akademi University: Jyrki Kukkonen, Turku, Finland
 2011 University of Helsinki: Piet Finkenbergh, Helsinki, Finland
 2014 University of Tampere: Asko Riutta, Tampere, Finland

Referee for professorship

2002 Professor of Pharmacology, University of Tartu, Tartu, Estonia. Renewal of a five year professorship of Prof Alexander Zharkovsky
 2003 Professor in the School of Pharmaceutical Sciences, University Sains MALAYSIA, Associate Professor Mohd. Zaini Asmawi, Ph.D.
 2004 Professor of Pharmacology, University of Wyoming at Laramie, Associate professor Bruce Culver, Ph.D.

- 2008 Professor of Physiological Genomics, University of Tartu, Tartu, Estonia, Dr. Sulev Kõks, MD, PhD
- 2013 Professor of Molecular Toxicology, University of Tartu, Estonia, Dr Allen Kaasik, PhD

Organisation of International Scientific Meetings:

- 1985 Secretary General: Animal Experiments in Teaching Pharmacology and Toxicology, Helsinki, Finland
- 1995 Vice Chairman of the Organizing Committee: The XVI Meeting of the Nordic Pharmacological Society, Helsinki, Finland, May 1995.
- 1997 Member of Organizing Committee: Nicotine and Modern Drug Research, June 1997
- 1998 Member of the Organizing Committee and main organizer: 50 years Anniversary of the Finnish Pharmacological Society, Helsinki, May 1998.
- 1999 Chairman of the Organizing Committee: Ligand Gated Ion Channels as Drug Targets, Helsinki, June 1999.
- 2001 **Congress President**, Helsinki University Congress of Drug Research, June 2001
- 2001 Member of the Organizing Committee of the International Narcotic Research Congress (INRC), July 2001, Helsinki, Finland
- 2002 One day symposium on Ethics in Research, University of Helsinki, Finland
- 2003 Member of the Main Organizing Committee of The XVIth Helsinki University Congress of Drug Research, and Symposium Chairman, June 2003
- 2006 Chairman of the symposium "Protein kinases as drug targets" of The XVIIIth Helsinki University Congress of Drug Research, Helsinki, June 2006
- 2009 Organizing committee of the ESBRA symposium, June 2009, University of Helsinki

Selected administrative duties in the University of Helsinki:

- 1993- 1998 Member of the Executive Group of the Institute of Biomedicine
- 2000- 2004 Member of the Executive Group of the Viikki Drug Discovery Technology Center, Faculty of Pharmacy
- 2001- 2004 Member of the Executive Committee of Viikki Center For Experimental Animals, Biocentrum Viikki
- 2001- 2010 Member of the Executive Committee of Biocentrum Helsinki
- 2003- **Date** Member of the Faculty Council of the Faculty of Pharmacy
- 2004- 2010 Member of the Viikki Campus Research Ethics Committee
- 2007- **Date** Member of the Collegial Body of the University of Helsinki
- 2010- **Date** Member of the Meilahti Campus Campus Committee
- 2010- **Date** Member of the Executive Committee of Institute of Biotechnology
- 2013- **Date** Member of the Executive Committee of Neuroscience Center

Awards, Distinctions and Community Service

- 1992- 1998 Member of the Board of Trustees of the Finnish Drug Research Foundation
- 1996- 2004 Member of the Executive Committee of the Finnish Pharmacological Society
- 2000- 2004 **President** of the Finnish Pharmacological Society
- 2003 Teaching Award given by the Pharmacy Student Association
- 2003 Distinguished Pharmacologist Award. Finnish Pharmacological Society
- 2003- 2005 Board Member and **head (2004 – 2005)** of the Grad School of Pharmaceutical Research
- 2012 Honorary Member of the Latvian Pharmacological Society
- 2013 – 2018 Member of the committee "Tieteellisiin ja opetustarkoituksiin käytettävien eläinten suojelun neuvottelukunta" Maa- ja metsätalousministeriö MMM036:00/2013

Bibliography: See separate documents

About 120 original publications in the field of neuropharmacology, signal transduction and drug discovery