

Curriculum Vitae of Jan Hillert (Born Oct 21, 1955, pnr 551021-0296)

A. Professional preparations

1981 Medical Degree, Karolinska Institutet. 1987 Qualified specialist i Neurology
1993 Doctor of Medical Sciences, Thesis: Immunogenetics of Multiple sclerosis
1996- Associate professor of Neurology, Karolinska Institutet

B. Appointments

1995- Consultant in Neurology, Karolinska University Hospital
2000-2012 Director MS-Centrum, Huddinge (Multiple Sclerosis Center)
2000-2009 Chief (sektionschef), Division of Neurology, KI at Huddinge
2001- Professor of Neurology at Karolinska University Hospital, Huddinge
2005- 2010 deputy chair (stf prefekt), Department of Clinical Neuroscience
2010- 2017 Chair (prefekt), Department of Clinical Neuroscience
2017- 2018 Director of Research and Education (FoU-direktör), Karolinska University Hospital. In this capacity, I served on several boards and committees within Karolinska Universitetssjukhuset (including the hospital executive board), KI (including its executive board, as K representative) and SLL (including its Research Board, of which I were co-chair).

C. Commissions of trust

Since 2000, I chair the Swedish MS registry (SMSreg), a national quality registry with longitudinal data on 20,000 MS patients. Since 2014 the SMSreg has widened its scope and is currently the Swedish Neuro Registry, providing a registry data base and interface for soon 10 different patient groups throughout neurology (except for stroke).

President of the Swedish Multiple sclerosis Society 2005-2007. 1995-1998 Scientific secretary in the Swedish Society of Neurology. Associate Editor of Neuroscience Letters 2000-2002. On the editorial Board of J Neuroimmunology since 2000. Past reviewer of grant applications to the Norwegian Research Council, the Italian MS foundation, the Hertie Foundation (Germany), the Swedish Stroke Foundation, the Rheumatology Association and Research Funds of Karolinska Institutet. Occasional reviewer for the British, French, Italian and Canadian MS Societies.

D. Clinical Experience

Since 1993 physician and 2000-2012 responsible of the Multiple Sclerosis Center at Karolinska University Hospital at Huddinge, seeing MS out-patients weekly. The Center has approximately 1,400 patients, mostly with MS. JH has taken part in more than one dozen clinical trials in MS, including phases 0, 2, 3 and 4. JH has been certified for EDSS, MSFC and taken part in several training sessions on Good Clinical Practice in the context of trials.

E. Teaching Experience

From 2011 to 2017 I was responsible for Upptaktskursen, the first four weeks of the medical program at KI, with extensive teaching responsibilities, being the first professor for over 2,300 medical students.

F. Networks in Academia and Industry

Chair of Big MS Data, a collaboration between the world's 5 leading multiple sclerosis registries. Big MS Data is currently negotiating a network of Post Approval Safety Studies with EMA and a consortium of 6 pharma in the MS field to provide a next generation of PASS based on real world data from registries.

Founding chair of the Nordic MS genetics Network group 1994-2010 (8 academic units in four countries).

Member of the International MS Genetics Consortium since 2007.

Scientific academic collaborations with joint publications with all Nordic partners, universities of Oxford, Cambridge, Western Ontario, Cagliari, Rome, Milan, Malaga.

Ongoing research support contracts with Biogen Inc, Merck, Novartis, Sanofi-Genzyme. Previous contracts but ongoing collaboration with AstraZeneca and deCode Genetics.

G. Financial support:

Research bodies:

-Swedish Brain Foundation, 500 kSEK 2018

-Swedish Research Council 1,200,000 SEK/yr 2019-2021

Industrial partners:

Biogen 1,200 kSEK for 2018, extension pending

Merck 600 kSEK + 350 kSEK for 2018,

Roche 300 kSEK for 2018

Currently negotiating a 17 year long contract with Merck and a 10 year long contract with Roche to run registry based Post Approval Safety Studies in multiple sclerosis.

Other:

Sveriges Kommuner och Landsting (SKL) 3,675 kSEK for 2018 for Svenska Neuroregistret

H. Graduate student supervision:

I have served as main supervisor for 20 graduate students of which the first graduated in 1998 and the latest in June 2014. Assistant supervisor for 12 graduate students from 1997 to 2018.

Presently, I am the main supervisor for 1 graduate students and assistant supervisor for 1 student.

My research group presently consists of one associate professor (docent), 3 assistant professors (Fo-ass), three post-docs and two graduate students.

I. Academic reviews and other relevant qualifications

I have served as a reviewer/faculty opponent in for 14 doctoral theses, in the Karolinska Institute (three times), University of Linköping (2001 and 2004), University of Cambridge (2002) University of Sydney (2004), University of Lund 2005, University of Uppsala (2008), University of Oxford (2006), University of Turku, 2008 and University of Umeå (2006 + 2007), University of Copenhagen 2009.

Wennmalms Prize (for best thesis), 1993. Max och Edit Follin's Prize, (150.000 SEK) 1996

J. Publications

I have authored and co-authored 339 scientific papers within the field of Neurology, mostly on multiple sclerosis (MS) but also on stroke, headache, or basic science. My foremost research objective remains epidemiology of MS. Over 14,500 citations, current H-index is 57 (WoS).

10: Selected publications:

1. Lundmark F, Duvefelt K, Iacobaeus E, Kockum I, Wallström E, Khademi M, Oturai A, Ryder LP, Saarela J, Harbo HF, Celius EG, Salter H, Olsson T, Hillert J. Variation in interleukin 7 receptor alpha chain (IL7R) influences risk of multiple sclerosis. *Nat Genet.* 2007 Sep;39(9):1108-13. Epub 2007 Jul 29 PMID: 17660816

2. International Multiple Sclerosis Genetics Consortium (IMSGC). Refining genetic associations in multiple sclerosis. *Lancet Neurol.* 2008 Jul;7(7):567-9. PMID: 18565446

3. Brynedal B, Bomfim IL, Olsson T, Duvefelt K, Hillert J. Differential expression, and genetic association, of CD58 in Swedish multiple sclerosis patients. *Proc Natl Acad Sci U S A.* 2009 Jun 9;106(23):E58; author reply E59. Epub 2009 Jun 2. PubMed PMID: 19497873; PubMed Central PMCID: PMC2695099

4. International Multiple Sclerosis Genetics Consortium; Wellcome Trust Case Control Consortium 2. Genetic risk and a primary role for cell-mediated immune mechanisms in multiple sclerosis. *Nature.* 2011 Aug 10;476(7359):214-9. doi: 10.1038/nature10251. PMID:21833088

5. Lundström W, Highfill S, Walsh ST, Beq S, Morse E, Kockum I, Alfredsson L, Olsson T, Hillert J, Mackall CL. Soluble IL7R α potentiates IL-7 bioactivity and promotes autoimmunity. *Proc Natl Acad Sci U S A.* 2013 May 7;110(19):E1761-70. doi: 10.1073/pnas.1222303110. Epub 2013 Apr 22.

6. Westerlind H, Ramanujam R, Uvehag D, Kuja-Halkola R, Boman M, Bottai M, Lichtenstein P, Hillert J. Modest familial risks for multiple sclerosis: a registry-based study of the population of Sweden. *Brain : a journal of neurology* 2014 137;Pt 3 770-8

7. Ramanujam R, Hedström AK, Manouchehrinia A, Alfredsson L, Olsson T, Bottai M, Hillert J. Effect of Smoking Cessation on Multiple Sclerosis Prognosis. *JAMA Neurology* 2015 72;10 1117-23

8. Kavaliunas A, Manouchehrinia A, Stawiarz L, Ramanujam R, Agholme J, Hedström AK, Beiki O, Glaser A, Hillert J. Importance of early treatment initiation in the clinical course of multiple sclerosis. *Multiple sclerosis J.* 2017 23;9 1233-1240

9. International Multiple Sclerosis Genetics Consortium (IMSGC). Low-frequency and rare-coding variation contributes to multiple sclerosis risk. *Cell.* Nov 29,175(6): 1679-1687

10. Beiki O, Manouchehrinia A, Frumento P, Bottai M, Hillert J. The risk of reaching multiple sclerosis disability milestones is decreasing: a nationwide population-based cohort study in Sweden. *JAMA Neurology* 2019 (in press)