

Curriculum Vitae



Personal information

First name(s) / Surname(s)

Markku Mäki

Address

University of Tampere
School of Medicine
Tampere Center for Child Health Research
Biokatu 10
33014 University of Tampere

Work experience

Current positions

Dates 2001-, Professor of Paediatrics, University of Tampere, School of Medicine

Occupation or position held 2001-, Chief Physician (part-time), Dept. of Paediatrics, Tampere University Hospital

Main activities and responsibilities Academic appointments

Name and address of employer 2000-2001, Professor in Medical Technology and Biotechnology, Institute of Medical Technology, University of Tampere (Leave of absence, Professor of Paediatrics, University of Tampere)

Type of business or sector

1999-2001, Professor of Pediatrics (40%), University of Tampere

1997-1998, Research Director, Tampere University Hospital

1996-1997, Senior Scientist, Medical Research Council, Academy of Finland

1996, Professor of Pediatrics, University of Tampere

1995, Professor of Medical Technology and Biotechnology, University of Tampere

1992-1995, Senior Research Fellow, Medical Research Council, Academy of Finland

1991-1992, Acting Associate Professor of Pediatrics, University of Tampere

1990-1991, Junior Research Fellow, Medical Research Council, Academy of Finland

Hospital occupations

1975-2012, Tampere University Hospital

1973-2012, Primary care physician, Trainee in Paediatrics, Trainee in Paediatric Gastroenterology,

Consultant, Chief physician, Hospitals in Finland and Tampere University Hospital

Education and training

Dates 1989, Subspecialist in Pediatric Gastroenterology, Tampere University Hospital

Title of qualification awarded 1984, Docent in Pediatrics, University of Tampere

Principal subjects/occupational skills covered 1982, Doctor of Medical Sciences, University of Tampere

1979, Specialist in Pediatrics, Tampere University Hospital

Name and type of organisation providing education and training 1973, Licentiate of Medicine, University of Turku

Personal skills and competences

Mother tongue(s)

Swedish

Other language(s) Finnish, English, German

Other skills and competences

Duties as scientific expert

Invited, as visiting professor abroad, or as lecturer at international scientific meetings, altogether 162 times; as chairman or co-chairman, 68 times; responsible or organizing symposia at international scientific meetings, 33 times.

President and organizer for the International Coeliac Disease Scientific Conference, Helsinki, Finland Sept 6-9, 2012

2011- Member of the Scientific Advisory Board, ImmusanT, Inc. USA

2011- Member of the Clinical Advisory Board, BioLinex Ltd, Israel

2011- Member of the Scientific Advisory Board, Flamentera AG, Switzerland

2006- Member of the Scientific Advisory Board of Alvine Pharmaceuticals Inc, USA

Nov. 2006 Tekes Washington & US Dept. of Agriculture "Interdisciplinary Research for Better Nutrition and Wellbeing"

2003-2006 International Life Science Institute, ILSI-Europe, member of Expert Group on Coeliac Disease and Wheat Allergy

2002-05 Member of the Scientific Advisory Board of the Celiac Sprue Research Foundation USA

2002-2005 Member of the Steering Committee of the ESF (European Science Foundation)

Programme on Transglutaminases and protein modifications: structure-function relationships

Referee statements for several international peer review scientific journals, including Gastroenterology, Gut, American Journal of Gastroenterology, Lancet, New England Journal of Medicine, Nature Clinical Practice Gastroenterology & Hepatology, PLoS Medicine, Science

Organizing committee of M. Curie Actions TRACKS Partners and researchers meeting and Workshop on Immunology Aug 24-28, 2009, Tampere, Finland

President and organizer of the international congress "Transglutaminases, protein cross-linking and coeliac disease" Workshop, European Science Foundation Transglutaminase programme, September 14-15, 2001, Tampere, Finland

1999- Reference Laboratory for United Kingdom National External Quality Assessment Service, UKNEQAS for Immunology, Allergy and Immunohistochemistry, Coeliac Disease

President and organizer of the international congress "Changing Features of Coeliac Disease", July 10-12, 1998, Tampere, Finland

1997- Member of Finnish Board of Management model for celiac disease (Käypähoito)

1996- Member of Finnish standardization committee of coeliac disease antibody tests, LabQuality Ltd.

President and organizer of the Seventh International Symposium on Coeliac Disease, September 5-7, 1996, Tampere, Finland

Industrial research collaboration: Association des Amidonneries de Cereales de l'Union Européenne - AAC, Belgium; Alvine Pharmaceuticals Inc., USA; Pharmacia Diagnostics (Phadia), Sweden; Inova Diagnostics, Inc, USA; ChemoCentryx Inc., USA; Nexpep Ltd, Australia. Finn-Medi Research Ltd, Finland; Raisio Oyj, Finland; SITRA (The Finnish National Fund for Research and Development)/ERA Coeliac Disease Minicluster, Finland; Moilas GF Ltd, Finland; Ani Biotech Oy, Finland; Oy Sinebrychoff Ab, Finland; Tekes (Finnish Funding Agency for Technology and Innovation)

1982- Founder and Leader of Coeliac disease Study Group, Tampere, 31 MD/PhD or PhD thesis programmes completed, 31 Advanced studies (MD) and Master's thesis programmes completed.

Research awards and major grants

2011-2014 EU Reintegration Grants ERG, Markku Mäki for Sergio Caja, 45 000€

2010-2013 TEKES/IMO/SHOK "Intelligent monitoring of health and well-being" 387 793€

2010-2013 TRANSCOM/IAPP (EU/Marie Curie Actions : Industry-Academia Partnerships and Pathways, 1 680 000 € /6 partners) 292 000 € UTA

2009-2012 Sigrid Jusélius Foundation, (M.Mäki&K.Kaukinen), 177 000€

2008-2012 Centre for International Mobility CIMO, 31 200 €

2007-2010 Marie Curie Actions: Research Training Networks RTN "TRACKS" (EU) 400 000 €

2007-2010 Academy of Finland, Health Research Council, "Management of gluten intolerance: novel insights in occurrence, immunogenetics, food processing and safety", No. 117930, 251 440 €, 2007-

2010 Academy of Finland, Health Research Council, "Improving the diagnostics and treatment of gluten induced disease entities", No. 116396, 240 000 €

2003-2006 Academy of Finland, Health Research Council, "Functional characterization of novel gene products differentially expressed in experimental intestinal crypt-villus axis", No. 201361, 200 000 €

2007-2013 Competitive Research Funding of the Pirkanmaa Hospital District, Tampere University Hospital, 445 000 €

2001-2003 Päivikki and Sakari Sohlberg Foundation, 168 000 €

2001-2004 Foundation of the Friends of the University Children's Hospitals in Finland, 34000€

2001-2003 Academy of Finland, Health Research Council, "Functional genomics of gluten-induced enteropathy, coeliac disease", No. 73498, 126 000 €, Academy of Finland

2000-2002 EU Fifth Framework Quality of Life and Management of Living Resources, 3-year grant 2000-2002 for COELIAC-EU/CLUSTER, "Evaluation of the prevalence of coeliac disease and its genetic components in the European population", Contract No QLK1-CT-1999-00037, total 4 mil €
1993-1995 Research Contract with the Medical Research Council

Scientific honours and prizes

2013 Max Siurala Award

2010 PQLPY Prize for exceptional contribution to raising celiac disease awareness, Coeliac Research Fund, Australia

2009 Wm. K. Warren Jr. Prize in Celiac Disease in Clinical/Translational Research, San Diego, USA

2006 Knight, First Class, the Order of the White Rose of Finland

2006 Prize of Honour on Coeliac Disease Research, Finnish Coeliac Society

2005- Member of the Finnish Academy of Science and Letters

2005 H.R. Nevanlinna Medal, Red Cross Finland Blood Service

2000 Maud Kuistila Prize

1998 SGO Johansson Award, The Swedish Society of Medicine

1997 Celebration Grant, Medical Research Fund of Tampere University Hospital

Most important scientific positions of trust held

2009- The Finnish Medical Foundation, Executive Committee Member

1997-2000 United European Gastroenterology Federation, Council member

1997-2000 European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN), Secretary-General, council member

1996- Chairman of the Medical Advisory Board, the Finnish Coeliac Society

1997-2000 President of the Finnish Coeliac Society

1976 Nordic Association of Pediatrics, 1988-1991 Executive Committee Member

1980- Finnish Society of Gastroenterology, 1983-1984 Executive Committee Member

1976- Finnish Society of Pediatrics, 1985-87 Executive Committee member, 1987 Vice Chair

International collaboration

2010-2013 EU/Marie Curie Actions: Industry-Academia Partnerships and Pathways "TRANSCOM/IAPP"

2006-2010 EU Marie Curie Actions: Research Training Networks (RTN) "TRACKS"

2007- The Walter & Eliza Hall Institute of Medical Research (WEHI), Melbourne, Australia (Dr B. Anderson)

Research collaborations with University of Debrecen, Hungary (Dr. Ilma Korponay-Szabo), University of Sheffield, UK (Dr. M. Hadjivassiliou), University of Salerno, Italy, (Dr Carla Esposito).

2006-2009 Marie Curie Excellence Team on Celiac Disease Genetics. Dr. Päivi Holopainen, University of Helsinki, Department of Medical Genetics, Biomedicum Helsinki, Finland

2000-2002 COELIAC-EU/CLUSTER, Contract No QLK1-CT-1999-00037, (4.0 mil EUR) "Evaluation of the Prevalence of the Coeliac Disease and its Genetic Components in the European Population" consisting of three component projects: Epidemiology, Genetics, and Pathogenesis. Collaboration of 16 research groups in 8 European countries. Continuation of the Network 2003-

1993-2000 European Multicentre Projects on Serological Screening for Coeliac Disease.

Standardization of serological screening test. (CD-Screen), organized by European Society for Pediatric Gastroenterology and Nutrition together with European MRC Clinical Network for Gastrointestinal Immunology, coordinator Prof. Martin Stern, Tübingen, Germany

1988-1991 Secretary for European Multicentre Study on the Epidemiology of Coeliac Disease, promoted by the European Society for Pediatric Gastroenterology and Nutrition, Chairman Prof. Jarmo K. Visakorpi, Tampere, Finland

1985-1988 Secretary for International Multicentre Coeliac Disease Family Study, Chairman Prof. Salvatore Auricchio, Naples, Italy

Additional information

Publications

455 articles, 2 films, 5 patents, 536 abstracts

Hirsch Index 56, Citations 9960, average citations per year 292.94, 972 citations in 2012, average citations per item 33.76, abstracts excluded (Web of Science Jan 22, 2013)

Annexes

Selected publications (Annex 1)

1. Mäki M, Hällström O, Verronen P et al. Reticulin antibody, arthritis, and coeliac disease in children. **Lancet** 1988; I:479-80. [Impact factor, IF 38.278]
2. Mäki M, Holm K, Lipsanen V, Hällström O, Viander M, Collin P, Savilahti E, Koskimies S. Serological markers and HLA genes among healthy first-degree relatives of patients with coeliac disease. **Lancet** 1991;338:1350-53., [IF 38.278]
3. Mäki M, Hällström O, Marttinen A. Reaction of human non-collagenous polypeptides with coeliac disease autoantibodies. **Lancet** 1991;338:724-25. [IF 38.278]
4. Mäki M, Holm K, Collin P, Savilahti E. Increase in gamma/delta T cell receptor bearing lymphocytes in normal small bowel mucosa in latent coeliac disease. **Gut** 1991;32:1412-4. [IF 10.111]
5. Mäki M, Aine L, Lipsanen V, Koskimies S. Dental enamel defects in first-degree relatives of coeliac disease patients. **Lancet** 1991; 337:763-4. [IF 38.278]
6. Holm K, Mäki M, Savilahti E, Lipsanen V, Laippala P, Koskimies S. Intraepithelial gamma/delta T-cell-receptor lymphocytes and genetic susceptibility to coeliac disease. **Lancet** 1992;339:1500-03. [IF 38.278]
7. Savilahti E, Reunala T, Mäki M. Increase of lymphocytes bearing the gamma/delta T-cell receptor in the jejunum of patients with dermatitis herpetiformis. **Gut** 1992;33:206-11. [IF 10.111]
8. Mäki M, Huupponen T, Holm K, Hällström O. Seroconversion of reticulin autoantibodies predicts coeliac disease in insulin-dependent diabetes mellitus. **Gut** 1995;36:239-42. [IF 10.111]
9. Mäki M. Coeliac disease and autoimmunity due to unmasking of cryptic epitopes? **Lancet** 1996;348:1046-47. [IF 38.278]
10. Halttunen T, Marttinen A, Rantala I, Kainulainen H, Mäki M. Fibroblasts and transforming growth factor b induce organization and differentiation of T84 human epithelial cells. **Gastroenterology** 1996;111:1252-62. [IF 11.675]
11. Mäki M, Collin P. Coeliac disease. **Lancet** 1997;349:1755-9. [IF 38.278]
12. Sulkanen S, Halttunen T, Laurila K, Kolho K-L, Korponay-Szabo I, Sarnesto A, Savilahti E, Collin P, Mäki M. Tissue transglutaminase autoantibody enzyme-linked immunosorbent assay in detecting celiac disease. **Gastroenterology** 1998;115:1322-8. [IF 11.675]
13. Reunala T, Collin P, Holm K, Pikkarainen P, Miettinen A, Vuolteenaho N, Mäki M. Tolerance to oats in dermatitis herpetiformis. **Gut** 1998;43:490-3. [IF 10.111]
14. Mustalahti K, Collin P, Sievänen H, Salmi J, Mäki M. Osteopenia in patients with clinically silent coeliac disease warrants screening. **Lancet** 1999;354:744-5. [IF 38.278]
15. Halttunen T, Mäki M. Serum immunoglobulin A from patients with celiac disease inhibits human T84 intestinal crypt epithelial cell differentiation. **Gastroenterology** 1999;116:566-72. [IF 11.675]
16. Iltanen S, Collin P, Korpela M, Holm K, Partanen J, Polvi A, Mäki M. Celiac disease and markers of celiac disease latency in patients with primary Sjögren's syndrome. **Am J Gastroenterol** 1999;94:1042-6. [IF 7.282]
17. Kaukinen K, Halme L, Collin P, Färkkilä M, Mäki M, Vehmanen P, Partanen J, Höckerstedt K. Celiac disease in patients with severe liver disease: gluten-free diet may reverse hepatic failure. **Gastroenterology** 2002;122:881-8. [IF 11.675]
18. Janatuinen E, Kemppainen T, Julkunen R, Kosma V-M, Mäki M, Heikkinen M, Uusitupa M. No harm of five-year ingestion of oats in celiac disease. **Gut** 2002;50:332-5. [IF 10.111]
19. Korponay-Szabó IR, Laurila K, Szondy Z, Halttunen T, Szalai Z, Dahlbom I, Rantala I, Kovács JB, Fésüs L, Mäki M. Missing endomysial and reticulin binding of coeliac antibodies in transglutaminase 2 knockout tissues. **Gut** 2003;52:199-204. [IF 10.111]
20. Mäki M, Mustalahti K, Kokkonen J, Kulmala P, Haapalahti M, Karttunen T, Ilonen J, Laurila K, Dahlbom I, Hansson T, Höpfl P, Knip M. Prevalence of celiac disease among children in Finland. **N Engl J Med** 2003;348:2517-24. [IF 53.298]
21. Korponay-Szabo IR, Dahlbom I, Laurila K, Koskinen S, Woolley N, Partanen J, Kovacs JB, Mäki M, Hansson T. Elevation of IgG antibodies against tissue transglutaminase as a diagnostic tool for coeliac disease in selective IgA deficiency. **Gut** 2003;52:1567-71. [IF 10.111]
22. Korponay-Szabo IR, Halttunen T, Szalai Z, Laurila K, Király R, Kovács JB, Fésüs L, Mäki M. In vivo targeting of intestinal and extraintestinal transglutaminase 2 by coeliac autoantibodies. **Gut** 2004;53:641-8. [IF 10.111]
23. Salmi T, Collin P, Korponay-Szabo IR, Laurila K, Partanen J, Huhtala H, Kiraly R, Lorand L, Reunala T, Mäki M, Kaukinen K. Endomysial antibody-negative coeliac disease: clinical characteristics and intestinal autoantibody deposits. **Gut** 2006;55:1746-53. [IF 10.111]
24. Hadjivassiliou M, Mäki M, Sanders DS, Williamson C, Grünewald RA, Woodroffe N, Korponay-Szabó IR. Autoantibody targeting of brain and intestinal transglutaminase in gluten ataxia. **Neurology** 2006;66:373-77. [IF 8.312]
25. Korponay-Szabó IR, Szabados K, Pusztai J, Uhrin K, Ludmány É, Nemes É, Kaukinen K, Kapitány A, Holopainen P, Sipka S, Imre A, Mäki M. District nurses finding coeliac disease in the population by decentralised rapid antibody testing at age six. **BMJ** 2007;335:1244-7. [IF 14.093]
26. Lohi S, Mäki M, Montonen J, Knekt P, Pukkala E, Reunanen A, Kaukinen K. Malignancies in cases with screening-identified evidence of coeliac disease: a long-term population-based cohort study. **Gut** 2009;58:643-7. [IF 10.111]
27. Kurppa K, Collin P, Viljamaa M, Haimila K, Saavalainen P, Partanen J, Laurila K, Huhtala H, Paasikivi K, Mäki M, Kaukinen K. Diagnosing mild enteropathy celiac disease: a randomized, controlled clinical study. **Gastroenterology** 2009;136:816-23. [IF 11.675]

28. Dubois PC, Trynka G, Franke L, Hunt KA, Romanos J, Curtotti A, Zhernakova A, Heap GA, Adány R, Aromaa A, Bardella MT, van den Berg LH, Bockett NA, de la Concha EG, Dema B, Fehrmann RS, Fernández-Arquero M, Fiatal S, Grandone E, Green PM, Groen HJ, Gwilliam R, Houwen RH, Hunt SE, Kaukinen K, Kelleher D, Korponay-Szabo I, Kurppa K, MacMathuna P, Mäki M, Mazzilli MC, McCann OT, Mearin ML, Mein CA, Mirza MM, Mistry V, Mora B, Morley KI, Mulder CJ, Murray JA, Núñez C, Oosterom E, Ophoff RA, Polanco I, Peltonen L, Platteel M, Rybak A, Salomaa V, Schweizer JJ, Sperandeo MP, Tack GJ, Turner G, Veldink JH, Verbeek WH, Weersma RK, Wolters VM, Urcelay E, Cukrowska B, Greco L, Neuhausen SL, McManus R, Barisani D, Deloukas P, Barrett JC, Saavalainen P, Wijmenga C, van Heel DA. Multiple common variants for celiac disease influencing immune gene expression. **Nat Genet** 2010;42:295-302. **[IF 35.532]**
29. Korpimäki S, Kaukinen K, Collin P, Haapala A-M, Holm P, Laurila K, Kurppa K, Saavalainen P, Haimila K, Partanen J, Mäki M, Lähdeaho M-L. Gluten-sensitive hypertransaminasemia in celiac disease: an infrequent and often subclinical finding. **Am J Gastroenterol** 2011;106:1689-96. **[IF 7.282]**
30. Simon-Vecsei Z, Király R, Bagossi P, Tóth B, Dahlbom I, Caja S, Csősz E, Lindfors K, Sblattero D, Nemes E, Mäki M, Fésüs L, Korponay-Szabó IR. A single conformational transglutaminase 2 epitope contributed by three domains is critical for celiac antibody binding and effects. **Proc Natl Acad Sci USA** 2012;109:431-6. **[IF 9.681]**

Selected Patent:

1. Mäki M, Korponay-Szabo I. Methods and Means for Detecting Gluten-Induced Diseases. **USA** States Patent Number 7,361,480 - USA, Patent Granted 22.4.2008. **European** Patent No. 1390753. European Patent Office 22.10.2008, resulting in a commercial product for medical health care, coeliac disease point of care test, Biocard Celiac Test, AniBiotech Oy, Vantaa, Finland