

04/2015

CURRICULUM VITAE

Christel J E Lamberg-Allardt

Present Position/title: Professor, University Lecturer

Department of Food and Environmental Science, University of Helsinki

2002- **University Lecturer** (Nutrition)
 1986- **Adjunct Professor (Docent)**(Nutrition), University of Helsinki
 2010-2013 **Head of Department, Professor** Department of Food and Environmental Sciences

Education

M.Sc. (Organic Chemistry), University of Helsinki, Helsinki, Finland, 1978; M.Sc. (Nutrition), University of Helsinki, Helsinki, Finland, 1979; Lic.Sc. (Nutrition), University of Helsinki, Helsinki, Finland, 1983
 Ph.D. (Nutrition), University of Helsinki, Helsinki, Finland, 1984(Serum 25-hydroxvitamin D concentration and vitamin D intake):

Main Academic Work Experience and Positions heldAcademy of Finland:

1982-1986 Research Assistant (4 1/2 yr); 1984-1987 Acting Junior Research Fellow (2 years); 1988-1991 Junior Research Fellow (22 months); 1988-1989 Acting Senior Research Fellow (12 months); 1993-1996 Senior Research Fellow (including 6 month grant for advanced researcher); 1997 Acting Senior Research Fellow (6 months); 1998 Acting Senior Research Fellow (4 1/2 month)

University of Helsinki:

1980-1982 Teaching Assistant, (2 1/2 yrs); 1987 Acting Teaching Assistant (assistant), (1/2 year); 1987-1988 Acting Associate Professor (10 months); 1989 Acting Professor, (1 1/2 months); 1991-2001 Teaching Assistant (on leave for the Academy of Finland 1991, 1993-1996); 1992-1993 Acting Senior Assistant (överassistent); 2001 Acting university lecturer (5 months); 2008 Professor (Acting, Nutritional physiology) (12 months); 2009 Head of Division of Nutrition; 2007-2009 Head of Department, Department of Applied Chemistry and Microbiology,

Others: 1987- 1996, Head of Calcium Research Unit, Minerva Foundation Institute for Medical Research, 1996- Calcium Research Unit at Department of Applied Chemistry and Microbiology; 1987-2001 Consultant Oy Medix Ab (Clinical Laboratory)

Scientific Training: (besides above mentioned)

1973, 1978-1984, Junior Researcher, 1984-1996, Senior Researcher, Minerva Foundation, Institute for Medical Research, Helsinki, Finland; 1990, 1 week, Nordic course in Endocrinology, Oslo, Norway; 1994, 2 weeks, Department of Cell Physiology, University of Leiden, Leiden, The Netherlands; 1996, 2 weeks, Advanced course in Epidemiological Methods, London School of Hygiene and Tropical Medicine, University of London

International Scientific Collaboration

1. CALEUR-study, (4th Framework of European Commission, Coordinator: National Food Institute, Zeist, the Netherlands) (1996-1998)
2. IEFS-Food Additive Intake Study (Coordinator: Institute for European Food Studies, Ireland) (1997-1999)
3. OPTIFORD (5th Framework of European Commission, Coordinator: National Food Institute, Denmark) (2001-2004)
4. CALEX-study (Coordinator: Sulin Cheng, University of Jyväskylä)
5. EURRECA Network of Excellence (6th Framework of European Commission) Member of a working group 2008.
6. Bangla-D (Vitamin D status in Bangladesh, Coordinator: Christel Lamberg-Allardt, Cooperation with University of Dhaka, 2001-)
7. How can we standardise the measurement of plasma 25 (OH)D in national surveys? - a study initiated for the National Dietary Survey (Coordinator: Margaret Ashwell, Ashwell Ass UK, Funding Food Standard Agency, UK) 2009
8. Vitamin D standardization - a Nordic collaboration with our neighbours in the West (Coordinator, DTU, Denmark) 2013-2014
9. ODIN (7th Framework of European Commission), Coordinator: University of Cork, Ireland, 2013-2017

Positions of Trust in International Scientific Committees and comparables

1. Committee on European Guidelines for Osteoporosis, member; Secretary of working group on nutritional factors and osteoporosis, appointed by the European Commission (DG V). 1997-98
2. European Union Osteoporosis Consultation Panel, Expert member, 2002-
3. EFSA (European Food Safety Authority), NDA panel, external expert (health claims) 2008
4. Nordic Nutrition Recommendations 2012; invited chair of groups for vitamin D as well as calcium (2010-2013)
5. EFSA, NDA panel workgroup on dietary recommendations, 2014-2015

Positions of Trust in Scientific Organizations

1. *Finnish Bone Society*, Chairman 1999-2000, Secretary 1993-1996, Vice-president 1998, Member of the Board 1988 -2000, Founding Member
2. *Finnish Society for Nutrition Research*, Chairman 1988-1991, Vice-president 1998-2001, Secretary 1985-1987, Member of the Board 1985-1991, 1996-2001, Founding Member

3. *Finnish Society of Chemists*, Chairman 1992, 1993; member of the Board 1990-1998
4. *Association of Finnish Chemists*, vice-president 1993-1995, member of the board 1993-1995
5. *Member of the Board for the Bioscience Days*, 1994-1995.

Membership of Scientific Organizations

International

1. American Bone and Mineral Society(USA)
2. Endocrine Society(USA)
3. European Calcified Tissue Society
4. European Academy of Nutritional Sciences
5. Vitamin D Council(USA)
6. World Public Health Nutrition Association, founding member 2008

National

1. Society for Clinical Chemists
2. Societas Biochemica, Biophysica et Microbiologia Fenniae
3. Finnish Endocrinological Society
4. Finnish Bone Society
5. Finnish Society for Nutritional Research
6. Society for Nutritional Therapists in Finland

National Scientific Committees

1. Member of a group appointed by Duodecim (Finnish Society for Physicians), the Finnish Endocrine Society, the Finnish Society for Gynaecology for care guidelines for osteoporosis 2000; 2006
2. Member of an Expert committee for the National Nutrition Board (Valtion ravitsemusneuvottelukunnan asiantuntijatyöryhmä) 1999-2002
3. Invited expert for health claims, ministry of Trade, 2007
4. Member of the Committee on Novel Foods (Uuselintarvikelautakunta), 2009-2012, deputy member 2000-2008
5. Member of National Nutrition Council (Valtion Ravitsemusneuvottelukunta) 2008-2011
6. Chairman of a vitamin D working group appointed by the National Nutrition Council(2009-2010)

Other positions of Trust in Research Administration

1. Minerva Foundation Institute for Medical Research, Member of Steering Group 1990-1996
2. Minerva Foundation Institute for Medical Research, Council, Deputy Member 1992-1996
3. Minerva Foundation Institute for Medical Research, Chairman of Ethical Committee for Animal Research, 1990-1995.

Other positions of Trust in National Organisations

1. *Finnish Osteoporosis Society*, Member of the Board 1996-2000, Secretary 1996-1997, Treasurer 1997-98, Founding Member
2. *Victoria Foundation*, member of the Board, responsibility for postgraduate proposals, 2005-
3. *Center for Food Culture*, Chairman if the Board 2005- 2012, Member of Board 2013- Founding Member
4. *Finnish Osteoporosis Association*, Member of the Board, 2008-2012
5. *Society for Gerontological Nutrition*, Founding Member, Chairman of the Board2014-2016, Member of Board 2013-

Positions of Trust at the University of Helsinki

1. Deputy member of Faculty Council (Faculty for Agriculture and Forestry) 1998-2000, 2001-2003, 2004-2006
2. Member of the Steering Board at the Department of Applied Chemistry and Microbiology, 2004-2006
3. Member of Faculty Council (Faculty for Agriculture and Forestry), 2007-2009
4. Member of Strategic Planning Group ((Faculty for Agriculture and Forestry), 2007-2009
5. Head of the Steering Board at the Department of Applied Chemistry and Microbiology, 2007-2009
6. Head of Department, Department of Applied Chemistry and Microbiology 2007-2009
7. Head of the Steering Board at the Department of Food and Environmental Sciences, 2010-13
8. Head of Department, Department of Department of Food and Environmental Sciences 2010-2013
9. Member of Faculty Steering Group, 2010-2013

Positions of Trust at the Nordic Agricultural University (NOVA)

1. Member of NOVA Food group 2000-2005

Positions of Trust at International Meetings:

1. Second Nordic Nutrition Congress, Programme Secretary, 1980;
2. Third Nordic Vitamin D Meeting, Organizer, 1987
3. 2nd Baltic Bone Conference, Member of Organizing Committee,1997
4. 3rd Baltic Bone Conference, Member of Organizing Committee,1999
5. 7th Nordic Nutrition Congress, Congress President and chairman of organizing committee, 2000
6. 27th European Symposium on Calcified Tissues, Scientific Secretary, Member of organizing committee, 2000

7. International Congress on Food Safety and Toxicology, Member of Organizing Committee, 2001
8. 12th Vitamin D Workshop, Maastricht 2003, Member of Programme Committee 2002-2003
9. Calcium in Health and Disease, Rovaniemi, Member of organizing Committee, 2004
10. 5th Baltic Bone Conference, Member of Organizing Committee, 2005
11. 13th Vitamin D Workshop, Victoria, Washington State, USA, 2006, Member of Programme Committee 2005-2006
12. Second International Symposium on Trace Elements in Health, Helsinki 2007, Member of Organizing Committee, 2005-2007
13. 14th Vitamin D Workshop, Brugge, Belgium November 2009, Member of Programme Committee 2008-2009
14. 15th Vitamin D Workshop, Houston, TX, USA, Member of Programme Committee 2011-2012
15. 16th Vitamin D workshop, San Francisco, USA, Member of Programme Committee 2012-2013
16. Member of the European Calcified Tissue Society Professional Practice Committee on vitamin D, 2013-2015
17. 18th Vitamin D workshop, Delft, The Netherlands April 2015, Member of Scientific Programme Committee 2014-2015
18. 11th Nordic Nutrition Conference, Malmö, Sweden, June 2016, Member of Scientific Programme Committee, 2014-2016.

Participation as invited speaker, session chairman etc at international meetings

By invitation

- 1984 Consultation on the prevention of osteoporosis, Gothenburg, Sweden, organized by the World Health Organization (Temporary Adviser)
- 1987 14th Congress of the Panhellenic Endocrine Society, Thessaloniki, 8-10 April, 1987 (invited speaker)
- 1990 VII Medical Symposium of the Yrjö Jahnsson Foundation, Porvoo, Finland
(Does 1,25-dihydroxyvitamin D have a role in osteoporosis, invited keynote speaker)
- 1993 Symposium on vitamin D deficiency in the elderly, Dublin, Ireland, (invited speaker: Vitamin D deficiency in the elderly)
- 1995 1st Baltic Symposium on Osteoporosis and Osteoarthritis, Sopot, Poland (Chairman at one session).
- 1995 Higher Education in Agricultural and Food Sciences: Challenges and European Strategies Athens, 28-29 April 1995
(Rapporteur at one workshop)
- 1997 2nd Baltic Bone Conference, Bornholm, Denmark (Chairman at one session).
- 1997 5th Panhellenic Conference on Osteoporosis and Bone Disease, Thessaloniki, Greece (invited speaker)
- 1999 6th European Congress in Nutrition, Lillehammer, Norway (Plenary lecture and chairman at one session)
- 1999 3rd Baltic Bone and Cartilage Conference, Ronneby, Sweden, (chairman at one session)
- 2000 27th European Symposium on Calcified Tissues, Tampere, Finland (chairman at one session)
- 2003 Annual meeting of the Irish Section of the Nutrition Society, Cork, Ireland, Nutrition Towards Osteoporosis Prevention, 18-20 June, 2003 (invited keynote speaker)
- 2003 National Institute of Health Conference: Vitamin D and health in the 21st Century, October 9-10, National Institute of Health Bethesda, USA (invited keynote speaker)
- 2004 Euforti. Fortification of Food in Europe, Copenhagen, June 4th – 5th 2004 (Invited speaker: Two invited talks: vitamin D status in Europe; Bioavailability of vitamin D from fortified bread).
- 2004 27th Annual Meeting of the American Society for Bone and Mineral Research, Seattle, September 2004, Co moderator for and at the Nutrition and Bone Working Group meeting
- 2004 Advancing to new levels in osteoporosis management, Stockholm, 29-30 October, 2004 (Invited speaker: vitamin D Current dietary guidelines for vitamin D intake)
- 2004 Joint meeting of the NAFA and Endo meeting, Helsinki, October 7th, 2004 (Invited keynote speaker vitamin D polymorphisms)
- 2004 3rd European Union Osteoporosis Consultation Panel Meeting Brussels, Wednesday, November 10, 2004 (Invited speaker Preventive strategies Case: vitamin D)
- 2005 5th Baltic Bone and Cartilage Conference, Naantali, 1-3 Sept, 2005 (Chairman at one session)
- 2005 ICNIRP/BfS/WHO/EuroSkin Workshop on UV exposure guidance 17-18 October 2005, Munich, Germany (Invited keynote speaker: Vitamin D from foods and supplements)
- 2007 Osteologie 2007, Vienna, Feb 28-March 3, 2007 (Invited keynote speaker: Vitamin D and calcium insufficiency in Europe)
- 2007 22nd Marabou Symposium: the changing faces of vitamin D, Stockholm, June (Invited participant)
- 2007 46th annual meeting of the European Society for Pediatric Endocrinology, Helsinki, June 2007, (Invited keynote speaker: Vitamin D and bone in children and adolescents)
- 2007 National Institute of Health Conference: Vitamin D and health in the 21st century – an update, National Institute of Health (NIH), Bethesda, USA, September 2007 (Invited keynote speaker: Vitamin D status and health outcomes in adolescents)
- 2007 Mat och hälsa (Food and bone health), meeting arranged by Swedish Nutrition Foundation and others, Stockholm, Sweden, October 2007 (Invited keynote speaker: Do we have vitamin D deficiency in the Nordic countries, in Swedish)
- 2008 EURRECA workshop, Norwich, February 2008, (Invited keynote speaker: Assessment of calcium and vitamin D status)
- 2008 7th Nordic Nutrition Conference, Copenhagen, 1-4th June 2008, (Invited plenary speaker: Fortification with vitamin D)

- 2008 Vitamin D and health- meeting arranged by the University of Tampere, 1st October, 2008, Tampere(invited keynote speaker: How much Vitamin D?)
- 2009 7th International Symposium on Nutritional Aspects on Osteoporosis, Lausanne , Switzerland, May 4th-7th, 2009(Invited keynote speaker: Phosphate and bone)
- 2009 RANK meeting on vitamin D, University of Surrey, July 2-3, 2009, (Invited plenary speaker: The Finnish Experience)
- 2009 14th Workshop on vitamin D, Bruges, Belgium, October 4-8 2009 (Invited member of discussion panel)
- 2009 Food Standard Agency workshop on 'Diet, Sunlight & Vitamin D Status', November 4th,(Invited participant)
- 2009 UK consensus workshop on 25-OHD methodology, November 4th-6th,(Invited speaker: Is there a need for separate measurement of 25-OHD2 and 25OHD3 in national surveys?: session chairman)
- 2011 11th Nordic Meeting of Dietitians, Helsinki,Finland, June 15th. Invited key note speaker: Phosphorus, the skeleton and vascular mineralization;
- 2011 Vitamin D Workshop: Do we get enough? Wageningen ,NL, Sept 29(Invited expert)
- 2011 D-vitamin – var står vi, vart går vi?, Uppsala, Sweden, December 15th, Invited key note speaker,: D-vitaminstatus, intag och rekommendationer
- 2012 13th Bergmeyer Symposium, Vitamin D in health and disease, Garmisch-Partenkirchen, Germany, March 5-7th, Invited key note speaker: Vitamin D in children and adolescents.
- 2012 10th Nordic Nutrition Conference, Reykjavik, Iceland, June 2nd-5th, Invited key note speaker: Effect of diet, fortification and supplementation on vitamin D)status
- 2013 Mjölakens roll för äldres hälsa, Stockholm, 12 December,2014, Invited keynote speaker: Vitamin D and calcium from milk and bone health of the elderly(in Swedish).
- 2014 British Nutrition Foundation Conference: Vitamin D – a European perspective, London, 20 May, Invited keynote speaker: European Recommendations for Vitamin D including the evidence base behind the increased Nordic Nutrition Recommendation for Vitamin D
- 2014 47th ESPGHAN Meeting, Jerusalem, 9-12 June, invited key note speaker: Bone Health in Children and Adolescents
- 2015 18th vitamin D workshop, Delft, the Netherlands, 21-24 april, session chair
- 2015 Joint WHO/ vitamin D workshop session, Delft The Netherlands, 21-24-april, speaker and panel member; vitamin D fortification policy in Finland

Talks nationally Numerous talks nationally (4-8/yr)

Other Academic and Professional Activities:

Opponent of doctoral thesis

1. 1993 University of Oulu (Faculty of Medicine, Department of Anatomy, Teuvo Hentunen, Cell biology)
2. 1993 University of Kuopio(Department of Biochemistry, Anitta Mahonen, Biochemistry)
3. 1995 University of Helsinki (Department of Applied Chemistry and Microbiology, Pirjo Mattila, Food Chemistry)
4. 2001 University of Oulu (Faculty of Medicine, Department of Anatomy, Joanna Ilvesaro, Cell biology)
5. 2009, University of Turku.(Faculty of Medicine, Katja Fagerlund, Cell biology and anatomy)
6. 2011, University of Tampere (Faculty of Medicine, Adatunji T Toriola, Epidemiology)
7. 2012, University of Tampere (Faculty of Medicine, Ilkka Laaksi)

Referee for doctoral thesis: six times

Referee for thesis for Lic Sc: twice

Referee for the appointment to a professorship in nutrition(University of Turku, 2015)

Advisor on the appointment to the post of Assistant Professor (Docent):three time

Reviewer for journals:

2007-2011: British journal of nutrition, Public health nutrition, European journal of clinical nutrition, American Journal of Clinical Nutrition, Journal of Nutrition, Nutrition, Journal of clinical endocrinology and metabolism, BMC Health Annals of Epidemiology, Calcified Tissue International, Bone, Osteoporosis International, Scandinavian Journal of Nutrition; Nature reviews(Endocrinology)

Member of editorial board: Open Bone Journal 2008- ;

Associate editor: Public Health Nutrition 2010- ;Journal of Nutrition and Metabolism 2008-

Others : Nordisk Nutrition 2008- (Sweden; rapporteur from Finland)

Reviewer for international funding bodies:

Health Research Board, Ireland 2006, Research Fellowships for the Therapy Professions, one application
Food Standard Agency(UK), 2007, review of proposals; 2009-2010, evaluation of completed projects
Strategic Research Programme (Iceland) 2009-2015 (2008) ;National Science Foundation, USA, review of proposal, 2010;
Wellcome Trust, reviewer, 2010 National Osteoporosis Society(UK), review of proposal,2011; UK Department of Health Policy Research Programme, subject expert on an ad-hoc Commissioning panel, March 2012

M Sc and Lic Sc and Doctoral Thesis Supervised:

M Sc Thesis 44 supervised, 4 in progress; 1 Lic Sc

Doctoral Thesis 11 supervised, 3 in progress

Research group : Calcium Research Unit :

The research projects in the Calcium Research Unit focus mainly nutrition and bone health. We have been using different protocols spanning from epidemiological studies to experimental studies in humans, animals and cell lines and a number of different methods.

Vitamin D

Vitamin D deficiency is a worldwide health problem. It is well known that vitamin D deficiency leads to rickets in children, which is characterized by defective mineralization of the skeleton. The corresponding condition in adults is called osteomalacia. Vitamin D insufficiency has also been related to osteoporosis. Vitamin D deficiency seems to correlate with a many other health outcomes, but the evidence is circumstantial. However, there is much biological and physiological evidence for roles of the active vitamin D metabolite in many biological systems. Below are short descriptions of our ongoing projects and some older ones.

The EU-financed ODIN- project(Food-based solutions to Food-based solutions for optimal vitamin D nutrition and health through the life cycle, Project No.: FP7-613977-ODIN) started late in 2013(www.odin.eu). The total budget is about 8 million euros, of which our budget is over 500 000 euros. The number of partners is about 35. ODIN is a four-year collaborative project aimed at preventing vitamin D deficiency in European citizens. The scientific contribution of ODIN is to bring high quality research approaches to the area of public health. The major challenge of the project is to clarify the optimal way of eradicating vitamin D deficiency in Europe with novel foods obtained via innovative fortification processes. One task of the ODIN project is to create a 25OHD (25-hydroxyvitamin D) , the marker of vitamin D deficiency, unified analytical platform and a Vitamin D Standardization Program (VDSP). Thus, meta-analyses and individual subject-level meta-regression analyses to integrate standardized data on vitamin D status will be conducted. Our group is responsible for one work package, two intervention studies and the Finnish part of the integrated data on vitamin D status. In 2014 we performed an intervention study with vitamin D fortified yeast in bread and in the end of 2014 and 6-month vitamin D intervention in ethnic groups was started.

We are currently involved in the Maamu-cohort(immigrant health study) at THL, including about 3000 subjects of different ethnic groups, as regards vitamin D status and vitamin D intake. We have earlier studied vitamin D status in some ethnic groups in Finland, and found that the vitamin D status, as indicated by serum 25OHD) is very low in East African and Bangladeshi women.

Vitamin D status has been low in ethnic Finns in Finland, as we and others have shown earlier, but fortification of fluid milk products and of spreads since 2010 has increased the vitamin D intake in Finland substantially according to the latest Finrisk report. We are currently responsible for analyzing the vitamin D status in the THL administered Health 2011 cohort and to compare it to the situation in the year 2000(Health 2000). We are currently studying some SNPs related to genes involved in vitamin D metabolism e.g. the vitamin D transporting protein(Gc-protein).

Furthermore we have recently studied the association between maternal vitamin D status during pregnancy and the effect on the bone quality in newborns and at the age of 1yr in collaboration with researchers at the Hospital for Children and Adolescents. We are also collaborating with e.g. the UKK-institute (DEX-project) and the Pori Health project in the elderly.

Dietary phosphorus intake and health outcomes

Dietary phosphate intake is high in industrial countries. Phosphate-containing food additives are used commonly in food industry, increasing the phosphate load. Some earlier studies in healthy humans have indicated that a low calcium/ high phosphate intake could be deleterious to bone. We have shown in human acute studies and animal long term studies(in our large Luufos-project) that a high phosphate intake, especially food additive intake, has deleterious effects on bone and bone markers in a dose-dependent manner. We started, in 2009, a population based study, PHOMI, involving 800 subjects, on the association among phosphorus intake, bone health and vascular mineralization and the data analyses are still ongoing. We have, however, recently shown an association between a

high phosphorus food additive intake and increased carotid arterial intima media thickness indicating an increased risk for atherosclerosis.

Principal investigator : [Christel Lamberg-Allardt](#)

Group members:

Folasade Adebayo MSc, doctoral student
[Zahirul Islam](#), adjunct professor, Ph.D.
[Suvi Itkonen](#), Oh.D, post doc
[Heini Karp](#), Ph.D.
[Virpi Kemi](#), post doc, Ph.D.
[Merja Kärkkäinen](#), Adjunct professor, Ph.D
[Kalevi Laitinen](#), Adjunct professor, M.D., Ph.D.
 Elina Pajala, M Sc student
[Minna Pekkinen](#), post doc, Ph.D affiliated
 Pilvi Saaristo, MSc student, Research assistant
[Elisa Saarnio](#), M.Sc., doctoral student
 Essi Skaffari MSc. student, research assistant
 Taina Öhman, M.Sc.project coordinator

Starting from 2001 the main own projects are (Calcium Research Unit, head: Christel Lamberg-Allardt):

1. Luufos-effect of phosphate intake on bone metabolism (leader of project, funding from TEKES-National Technology Agency in Finland, 2001-2005, national research collaboration, food industry, now funding from foundations).
2. OPTIFORD -towards optimal vitamin D fortification (funding from European Commission 2001-2004, collaboration with University of Cork, University of Madrid, National Food Institute in Warsaw, National Food Institute in Denmark)
3. Bangla-D(Vitamin D status in Bangladesh)funding from Academy of Finland, 2001-, Collaboration with researchers at the University of Dhaka)
4. Signal transduction in osteoblasts(funding from private funds and Ministry of Education)
5. DESE I Vitamin D status follow-up study (funding from Ministry of Social Affairs and Health 2004-2005)
6. DESE II (Vitamin D status of the elderly(funding from Ministry of Social Affairs and Health 2006)
7. New aspects on vitamin D(funding University of Helsinki 2006-2009)
8. Vitamin D status in immigrant women(2007- funding private foundations)
9. PHOMI- Phosphorus intake and bone and vascular mineralization (2009- , Academy of Finland)
10. ODIN, European Commission, 2013-2017

In addition we have been cooperating in other projects, for instance:

1. CALEX-study(Effect of exercise, calcium and vitamin D on bone in young girls, intervention study) (Coordinator Dr Sulin Cheng, University of Jyväskylä, funding Academy of Finland, cooperation with Dr Fran Tylavsky, University of Tennessee, national collaboration).
2. The effect of bioactive peptides on bone(a part of project: BIOPEP-The use of bioactive peptides in the development of food stuffs, Coordinator, Anne Pihlanto, funding TEKES, national collaboration) 2000-2005
3. Numerous smaller national cooperation projects(continuously)
4. A (national and international) industrial cooperation projects(Valio, Hartwall, Lallemand)

New larger cooperation projects (2008-:

1. VIDU (Vitamin D supplementation of newborn and its relation to health outcomes, Coordinator, Sture Andersson, Helsinki University Central Hospital) 2010-
2. DEX-study (Vitamin D supplementation and exercise in the prevention of fractures in the elderly) (Adj, prof.Uusi-Rasi, UKK-institute,Tampere) 2009-
3. FIND -Finnish Vitamin D Trail (Jyrki Virtanen, Ph.D University of Kuopio) 2010-
4. Vitamin D and T1D-study(Maija Miettinen Ph.D., Institute for Health and Welfare) 2008-

Main external funding (2001-):

Total: about 3,0 million euros

2001-2004: European Commission: Optiford-project (QLK1-CT-2000-00623) (towards optimal vitamin D fortification), c. 340 000 €(our part), 1,5 million in total
 2001-2005: TEKES-National Technology Agency in Finland & industry (Luufos-project, phosphate and bone health) 630 000 €
 2001-2002: Academy of Finland(Vitamin D status in Bangladesh): c. 100 000 €
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 2004-2006 : Ministry of Social Affairs and Health (Vitamin D status in Finland after fortification of milk, DESE I , 240 000 €
 2003-2005:Academy of Finland(Bangla-D): c. 150 000 €
 2006-2007 Ministry of Social Affairs and Health (Vitamin D status of elderly) DESE II 75 000 €
 2006-2009 University of Helsinki (New aspects on vitamin D) 120 000 €
 2009-2012 Academy of Finland (Phosphorus intake and bone and vascular mineralization) PHOMI, 280 000 €
 2009: Food Standards Agency (UK):How can we standardise the measurement of plasma 25 (OH)D in national surveys? (Ashwell, Lamberg-Allardt, Wallace), 20 000 €
 2001-: Others TEKES (Biopep-project), private foundations, Ministry of Education (PG-schools) about 400 000€; Industrial cooperation 2009: 70 000 €
 2013-2017 EU funded ODIN - Food based strategies for vitamin D deficiency (FP7-613977-ODIN) 530 000€(about 8 mill in total)

Interaction with society

I give on an average 10 radio-, television- and magazine interviews as well as popularised lectures per year.

Innovation disclosures

2009: 1 (qPCR based genotyping method for detect vitamin D binding Gc-protein polymorphism)

More information : Research data base TUHAT: <https://tuhat.halvi.helsinki.fi/portal/en/>

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Honorarys

Society for Nutritional Therapists in Finland, Honorary Member 2013
 Professor (President of Finland, 19.12.2014)
 Finnish Society for Nutritional Research, Honorary Member 2015
 Finnish Bone Society, Honorary Member (June 2015)

Position of trust in society

Town of Kauniainen, Finland

- City Council
Member 1989-2000, 2005-2008, 2013-2016
Deputy member 2001-2004, 2009-2012
- City Board
Deputy member 2005-2008
- □ Board for Social Affairs and Health
Deputy member 1989-1992
Chairman 1993-2000
Member 2005-2008; 2013-2016
- Board for Educational affairs
Member 2001-2004, 2009-2012
- Board for Environmental Affairs
Member 1989-1991
- Board for Technical Affairs

Deputy member 1991-1992

- Building Committee
Member 2013-2016

Helsinki University Central Hospital

- Member of Council 1993-1996,
- Member of Auditing Committee 1993-1996
- Member of Steering Board for Catering Services(Ravioli) 2003 -2009
- Deputy member of the Board for Helsinki University Central Hospital 2006–2008