

Karl Lemström, MD, PhD: CURRICULUM VITAE

Date and Place of Birth

March 18, 1966, Hyvinkää, Finland

Present Positions

- 2012-2016 Professor of Transplantation Surgery and Immunology, University of Helsinki
- 2004-2011 Consultant Cardiothoracic Surgeon, Helsinki University Central Hospital
- 2011- Section Chief and Director of Heart and Lung Transplantation and Mechanical Assist Device Program, Heart and Lung Center, Helsinki University Hospital
- 1995- Head of Cardiopulmonary Research Group, Transplantation Laboratory, University of Helsinki
(www.hi.helsinki.fi/research/transplantation_laboratory)

Education and Training

- 1985 Matriculation examination, Maunulan yhteiskoulu, Helsinki, Finland
- 1992 MD, University of Helsinki, Helsinki, Finland
- 1993 Medical Licentiate, National Board of Medicolegal Affairs, Helsinki, Finland (1731/450/93)
- 1992-1993 Hesperis, European College of Transplantation, Rome and Munich sessions.
- 1995 PhD, University of Helsinki, Helsinki, Finland
- 1990-1995 Member of the research group of Professor Pekka Häyry
- 1995- Head of Cardiopulmonary Research Group, Transplantation Laboratory, University of Helsinki
- 1995-1996 Military Service, Lieutenant MC (Reserve)
- 1997 Docent in Transplantation Immunology, University of Helsinki, Finland
- 1999 Basics in Health Economics, Department of Public Health, University of Helsinki (20 hours)
- 2000 Certificate of Full Registration as a Medical Practitioner (Principal List), General Medical Council, London, UK (24690548)
- 2000 Board Certificate of General Surgery, National Authority for Medicolegal Affairs, Helsinki, Finland
- 2000-2001 Registrar in Cardiac Surgery and Transplantation for Professor Sir Magdi Yacoub, Royal Brompton and Harefield NHS, Harefield Hospital, Middlesex, UK, 15 months
- 2003 Board Certificate of Cardiothoracic Surgery, National Authority for Medicolegal Affairs, Helsinki, Finland
- 2007-2008 Course on Health Care Management, Helsinki School of Economics, Helsinki, Finland, September 2007 - May 2008 (16 study days)
- 2010 Docent in Cardiothoracic Surgery, University of Helsinki, Finland
- 2012-2016 Professor of Transplantation Surgery and Immunology, University of Helsinki

22.12.2015

Activities as a Scientist

- 1993- Published more than 70 original papers on transplantation and vascular biology in peer-reviewed journals with a mean impact factor of 6.9, 14 review articles, 9 book chapters or books, 9 short commentaries, 26 congress proceedings
- 1992- Attended in over 50 international clinical and basic science congresses on transplantation and cardiac surgery, 11 times as invited speaker, 10 times with oral presentation

Prizes

- 2005 Sigrid Jusélius 75th anniversary prize to young investigators for excellence in medical sciences

Recognized Competence for

- 2006 Sigrid Juselius Professorship for Clinical Molecular Medicine, University of Helsinki

Supervisor of Academic Theses

- 2000 Erkki Kallio, MD, PhD. University of Helsinki
- 2003 Roope Sihvola, MD, PhD. University of Helsinki
- 2003 Jussi Tikkanen, MD, PhD. University of Helsinki
- 2007 Antti Nykänen, MD. University of Helsinki
- 2014 Mikko Keränen, MD. University of Helsinki
- 2014 Rainer Krebs, MSc. University of Helsinki
- 2014 Raimo Tuuminen, MD. University of Helsinki
- 2014 Simo Syrjälä, MD. University of Helsinki
- 2015 Jussi Ropponen, MD. University of Helsinki

Supervisor of Academic Theses, pending

- 2009-2017 Alireza Raissadati, MB. University of Helsinki
- 2011-2016 Alexey Dashkevich, MD. University of Helsinki
- 2015-2020 Emil Holmström, MB. University of Helsinki

Supervisor of Pro Gradu Studies

- 1997-2003 Supervised 4 pro gradu studies.
- 2006-2009 Mentor in 5 pro gradu studies.

Reviewer Appointed by Faculty of Medicine for the Following MD/PhD Theses

- 2003 Tuomas Rissanen, MD. Kuopio University, Kuopio, Finland
- 2004 Marko Uutela, PhD. University of Helsinki, Helsinki
- 2007 Maria Wirzenius, PhD. University of Helsinki, Helsinki
- 2008 Kirsi Vuorinen, PhD. University of Helsinki, Helsinki
- 2008 Jan Kiss, MD. University of Turku, Turku, Finland

Peer Reviewer

- 1994- American Journal of Transplantation, Arteriosclerosis, Thrombosis, and Vascular Biology, Circulation, Circulation Research, FASEB Journal, Journal of Heart and Lung Transplantation, Transplantation, Transplant Immunology, Transplant International, European Journal of

International Grant Reviewer

- 2002-2007 International Society for Heart And Lung Transplantation: Fellowship Awards, Carrier Development Awards
- 2002 United States-Israel National Science Foundation (Lem 77407)
- 2003 National Heart, Lung, and Blood Insitutute (NHLBI), Innovative Research Grant Program (HL073204-01)
- 2006 Swiss National Science Foundation (104020): Endothelial infection with cytomegalovirus in xeno- and allotransplantation: Immunological and procoagulant consequences
- 2007 Swiss National Science Foundation (3200B0-120408): Cell-specific transfer of hepatocyte growth factor in lung injury, inflammation and repair
- 2007 Vidi Proposals, The Netherlands Organisation for Health Research and Development (016.08.364): Mapping of dysregulation of progenitor cells in development of cardiac allograft vasculopathy
- 2007 Canada Foundation for Innovation, Leaders Opportunity Fund (17600). Translational strategies for vascular repair and regeneration

Major Grants of the Cardiopulmonary Research Group

- 1998-2006 Finnish Life and Pension Insurance Companies, Helsinki University Central Hospital Research Funds, Sigrid Juselius Foundation, University of Helsinki. (jointly with P. Koskinen), ca 1.2 mi €
- 2003-2010 Finnish Academy, Finnish Foundation for Cardiovascular Research, Helsinki University Central Hospital Research Funds, Roche Organ Transplantation Research Foundation, Sigrid Juselius Foundation, University of Helsinki, ca 1.1 mi €
- 2012-2017 Finnish Academy, Finnish Foundation for Cardiovascular Research, Helsinki University Central Hospital Research Funds, Sigrid Juselius Foundation, Päivikki and Sakari Sohlberg Foundation, 1.4 mi €

Memberships in scientific societies

- 1992- Transplantation Society, International Society for Heart and Lung Transplantation

National and International Scientific Collaboration

- 1992-2003 Cathrien Bruggeman, Henk Bruning, Department of Medical Microbiology, University of Limburg, Maastricht, The Netherlands. Studies with rat cytomegalovirus
- 1999-2000 Una Ryan, AVANT Immunotherapeutics, Needham, MA, USA. Complement studies
- 2000-2010 Petri Koskinen, Renal Transplantation Research Group, Transplantation Laboratory, University of Helsinki. Studies on chronic rejection on kidney transplant recipients
- 2003-2004 Martine Clozel, Actelion Ltd. Allschwill, Switzerland. Bosentan (Tracleer) studies
- 1997, 2007 Kirsi Vaali, Department of Pharmacology, University of Helsinki. Nitric oxide studies

- 22.12.2015
- 1999-2007 Elisabeth Buchdunger, Jeanette Wood, Novartis Pharma, Basle, Switzerland. Tyrosine kinase inhibitors
- 1999- Seppo Ylä-Herttuala, A.I. Virtanen Institute for Molecular Sciences, University of Kuopio, Kuopio, Finland. Angiogenic growth factors
- 1999- Kari Alitalo, Molecular Cancer Biology Laboratory, Biomedicum Helsinki, University of Helsinki, Helsinki, Finland. Angiogenic growth factors
- 2002-2015 Yan Wu, MD, Daniel J Hicklin, PhD, Imclone Systems Inc., New York, NY, USA. VEGFR monoclonal antibodies
- 2002-2007 Olivier Raisky, Hopital Cardiologique Louis Pradel, Lyon France. Development and studies with a mouse cardiac allograft model
- 2004-2012 Usama Abo Ramadan, Dr.Sc.Phys, PhD, Experimental Magnetic Resonance Imaging laboratory, Neuroscience Program, Biomedicum, University of Helsinki, Helsinki, Finland. Ischemia-reperfusion studies
- 2005- Randall Johnson, MD, PhD, Molecular Biology Section, Division of Biological Sciences, University of California, San Diego, CA, USA. Mice with conditional knockouts of HIF-1a or its negative regulator VHL
- 2007-2013 Gail Walkinshaw, Cell Biology FibroGen, Inc., South San Francisco, CA, USA. Studies with HIF and CTGF
- 2008-2013 Julie Johnston, Penn Vector Core, Gene Therapy Program, Translational Research Labs (TRL), Philadelphia, PA, USA. Studies with AAV-2, -8, and 9
- 2008- Risto Renkonen, Transplantation Laboratory, University of Helsinki. Studies on proteomics and genomics in chronic rejection
- 2010- Gou Young Koh, Biomedical Research Center, Korea Advanced Institute of Science and Technology, Daejeon, South Korea, COMP-Ang1 studies
- 2010- Ching Ching Leow, PhD, Department of Pre-Clinical Oncology, MedImmune, Gaithersburg, MD. Ang2 antibody preclinical and clinical studies
- 2015- Yoshihiro Matsumoto, Fuji Gotemba Research Labs, Chugai pharmaceutical Co, Ltd, tocilizumab studies

Other merits

- 1997 Organizer of the European College of Transplantation (Hesperis Foundation, Paris), International teaching course on transplantation surgery and immunology, Helsinki, May 14-18, 1997
- 2000-2001 Chain of Hope Pediatric Cardiac Surgery Mission with Professor Sir Magdi Yacoub to Luxor International Teaching Hospital, Egypt, February 2001, Maputo Heart Institute, Mozambique, June 2001, and Cairo, Egypt, April 2002
- 2000 Member of the Program Committee for the International Society for the Heart and Lung Transplantation, Osaka, 2000
- 2002- Member, Nordic Thoracic Transplant Study Group, Suborganization of Scandiatransplant
- 2003 Chairman, Committee Organizing Functions of Laboratory Diagnostics and Research Supporting Clinical Transplantation, Helsinki University Central Hospital
- 2004 Member, Committee Planning Recommendations for Donor Care in Finland, Helsinki University Central Hospital

22.12.2015
2005, 2007 Co-organizer of the Biannual Meeting for the Practice and Science of the Finnish Heart and Lung Transplant Patients 2005, 2007, 2013, 2014, 2015, 60-80 participants, Helsinki
2005- Initiated and organized the biannual course on Principles of Organ Transplantation for medical students at the Faculty of Medicine, University of Helsinki, 2005, 2007, 2009, 2011, 2014, 2016
2006- Vice or member of The Scandiatransplant Council of Representatives
2008-2010 Vice member of the Board of Finnish Society of Transplantation Surgery
2010- Organizer for Finnish-Estonian Collaboration in Heart Transplantation and Mechanical Circulatory Support
2012- Member of the advisory board in the parliamentary working group of the association of organ transplant recipients
2013-2015 Member of the national advisory board for organ donation and transplantation, Ministry of Health and Social Affairs
2016- Member of the national advisory board for organ donation, Ministry of Health and Social Affairs