

June 2, 2014

CURRICULUM VITAE for

Matti Pastell, born 15th of April 1981.

ADDRESS

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CURRENT POSITION

Senior Research Scientist. MTT Agrifood Research Finland.

DOCENTSHIPS

Docent of Agricultural and Environmental Engineering, University of Helsinki 2009

PREVIOUS PROFESSIONAL APPOINTMENTS

- University lecturer, Department of Agricultural Sciences, University of Helsinki. Since August 2008. On leave until 1.4.2016.
- Post Doctoral Researcher, Dep of Agrotechnology. University of Helsinki. January - July 2008
- Researcher, Dep. Of Agtechnology. University of Helsinki June 2004 - December 2007
- Guest scientist, Technical University of Denmark (DTU) January - March 2007
- Trainee, Dep. Of Agtechnology. University of Helsinki January - April 2004

EDUCATION

- Master of Science. Agricultural engineering. University of Helsinki 2005
- Dr. of Agriculture and Forestry. University of Helsinki 2007 Dissertation: "Automatic Lameness Detection in a Milking Robot: Instrumentation, measurement software, algorithms for data analysis and a neural network model"

RECEIVED PROJECT FUNDING

- Project leader: SOWMONITOR - Automatic monitoring of farrowing, 2011 - 2013. 190 000 euro. Funded by Finnish Ministry of Agriculture and Forestry.
- Subproject coordinator: SORJAT - Early Detection and Prevention of Lameness in Dairy Cattle, 2009 - 2012. Share of the project funding 150 000 euro. Funded by Finnish Ministry of Agriculture and Forestry.
- Subproject coordinator: REMOWELL - New welfare technologies in monitoring health and welfare of production animals, 2010-2013. Share of the project funding 90 000 euro. Funded by Finnish Ministry of Agriculture and Forestry.

GROUP MEMBER IN RESEARCH PROJECTS

- Respiratory infections in Swine - 2010 - 2013.
- Turkey welfare during transportation - 2008. Funded by Ministry of Agriculture.

- ECOSTALL -Emissions from uninsulated cold dairy buildings. 2005-2007. EU - project.
- Interrobo. Animal welfare measurement methods. 2005. EU Interreg-project.
- Kartek-Tekno. Automatic monitoring of animal health and welfare. 2005-2007. Funded by Ministry of Agriculture.
- Sika-Tekno. Technology to supervise the farrowing of pigs . 2005-2007. Funded by Ministry of Agriculture.

SUPERVISED PROJECTS

- Currently supervising 4 PhD students:
- 5 Masters thesis in Agrotechnology and Animal Science (2006–2013)
- 1 Masters thesis in Signal processing, Technical University of Helsinki (2006)

MOST IMPORTANT INTERNATIONAL VISITS

- Invited teacher in PhD level course “Measurements, Modelling, Automation for Precision Agriculture (incl. PLF) and Food Production Chain” in the Estonian University of Life Sciences, Tartu. 3-4.12.2013.
- Invited teacher in PhD level course “Biosystems Instrumentation” in the University of Copenhagen. 20 - 30.10.2009.
- Guest scientist for 3 months in the Technical University of Denmark (DTU). 1.1.-31.3.2007
- Several research visits to Estonian University of Life Sciences. In total of 4 weeks during 2005-2007.
- Lameness workshop in Ghent, Belgium. 3-5.12.2007
- ASABE annual meeting in Portland, USA and research visits to: Washington state university, Iowa state university and University of Minnesota. 9-23.7.2006

OTHER SCIENTIFIC ACTIVITIES

Expert tasks

- Reviewer for International Journals: *Journal of Dairy Science*, *Biosystems Engineering*, *Computers and Electronics in Agriculture*, *Journal of Equine Veterinary Science*.
- Evaluator for the European Commission in Seventh Framework Programme, Call KBBE-2010.
- Reviewer for conferences: “Precision Livestock Farming’09”, “Precision Livestock Farming 2013”, “IFAC Agricontrol 2013”.
- Reviewer for funding applications of “Industrial Research Fund K.U Leuven” 2009.
- Vice member in board of the “Foundation of Agricultural Machinery Research” (Maatalouskoneiden tutkimussäätiö) 2007 -
- Member of the ISO/TC23/SC19/WG3 “animal identification” working group. 2006 -

Invited talks

- Keynote speech "Possibilities and application of precision livestock farming in modern un-insulated loose housing dairy farm" at NJF seminar "Dairy production in modern loose housing cowsheds – practical implications and future challenges" 3.5.2012 Tartu, Estonia.
- Keynote speech "Application of Precision Livestock Farming to promote animal welfare". 22nd Nordic Symposium of the International Society for Applied Ethology 20-22 January 2010. Kuopio, Finland.
- Invited lecture "Technical Prospects for Automated Behavioral Monitoring" in Workshop: "Welfare monitoring using automatic measurement of behaviour", ISAE conference 4-7 August 2010. Uppsala, Sweden.

Scientific positions of trusts and administration

- Member of the Finnish milking machine committee (Lypsykonetoimikunta). 2007-
- Member of the Board of Department of Agrotechnology 2008-2010.
- Member of the Board of the Department of Agricultural Sciences. 2010 - 2013.
- Member of the Board of the Finnish Society of Applied Ethology 1.1.2008-31.12.2011
- President of the Technical Committee of The Scientific Agricultural Society of Finland 1.6.2008-
- Member of the Board of the Experimental Farm of University of Helsinki. 2007-2010.

TEACHING

- In charge of M.Sc course "Measurement Technology", 7 ect. (2010-2013)
- In charge of M.Sc course "Automation in agricultural machinery", 15 ect. (2006, 2008, 2010, 2013)
- Course "Livestock production technology", 10 ect. (2004-2012)
- Instructor for "Field Robot Event" - team. (2011-)
- Lectures in courses "Research practises in agrotechnology", "Introduction to animal production", and "Modelling, numerical solution and simulation of biosystems".
- Member of Teaching Evaluation Board of the Faculty of Agriculture and Forestry. 2010-2014.