

Curriculum Vitae: Professor Eva-Mari Aro

September 2017

Name: EVA-MARI ARO

Current Position: Professor of Molecular Plant Biology; Academy Professor 2014-2018

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Nationality: Finnish

Shortly: Aro is a professor of Plant Molecular Biology in the Department of Biochemistry at the University of Turku, presently awarded an Academy professorship. She received the honorary title of Academician of Science in 2017. Aro has published over 330 peer reviewed scientific papers, mostly on biophysics, biochemistry and molecular biology of the photosynthetic apparatus, and how the function of the photosynthetic apparatus guides plant acclimation to environmental changes. More recently, her research has also included applied bioenergy research and synthetic biology approaches, in applying photosynthetic principles towards production of sustainable fuels in cyanobacteria cell factories. Aro has chaired the Academy of Finland CoE (AFCoE) “Integrative photosynthesis, bioactive compound and biohydrogen research” (2008-2013) and is now chairing the AFCoE “Molecular biology of primary producers” 2014-2019. Aro is a partner and coordinator of several EU and Nordic research networks, and also a partner of an Australian (ARC) CoE on Plant Energy Biology. 2004-2010 she has been a president and past president of the International Society of Photosynthesis Research. Aro has served the Finnish Academy of Science and Letters 2010-2015, first as a board member, then as a vice president and president. She is also working for the Board of the European Academies of Sciences Advisory Council (EASAC) since 2014, first three years as a member and from the beginning of 2017 as a vice president. EASAC focuses in science based advice for decision making in EU Commission and Parliament. Aro has also many other research- and science policy-related national and international duties of trust and has served in the board/search committee for the Millennium Prize and the Körber European science prize. She presently belongs to the Scientific Advisory Board (SAB) of Max Planck Institute (Golm) and The Dutch Government Program “BioSolarCells”. In 2014 her group, together with the groups from VTT (State Technical Research Institute) and Aalto Technical University, were awarded a Big Strategic Opening Grant on “Living Synthetic Factories” by TEKES (the State Technical Funding Agency). Since April 2017 Aro is leading and chairing a Nordic CoE “NordAqua” (2017-2022) funded by NordForsk, with nine other partners from Nordic countries.

Education:

Candidate in Philosophy (M.Sc.), 1975, University of Turku

Doctor in Philosophy, University of Turku, 1982, University of Turku

Professional Experience:

Junior Researcher and Assistant teacher in Botany, University of Turku 1977-1980

Junior and Senior Researcher, Academy of Finland, 1981-89, 1995-97 (on leave from associate professorship)

Associate Professor in Physiological Botany, University of Turku, 1987-1998

Professor in Physiological Botany (Molecular Plant Biology), University of Turku, 1.8.1998-31.12.2019

Academy Professor, Academy of Finland, 1998-2008; 2014-2018

Agreed to continue as a research director in University of Turku, starting 2020-

Studies and Research Abroad:

- Department of Agricultural Chemistry, Washington State Univ., Pullman, Washington, USA, 1976
- University of California, Berkeley, California, USA, 1978-1979, Asla Fulbright Scholarship
- Department de Biologie, Service de Radio-Agronomie, CEN, Cadarache, France, 1982-1983
- Department of Biochemistry, University of Stockholm, Sweden, 1989-1990
- Research School of Biological Sciences, Australian National University, Canberra, 4 months 1992
- The Hebrew University, Jerusalem, Israel, 3 months 1997-1998

Honours and Awards:

- *Academician of Science, Academy of Finland, 2017*
- Academy Professor, Academy of Finland, 1998-2008 and 2014-2018
- Edward Tolbert Memorial Lecture, Michigan State University, USA, 2016
- Arnon lecture, University of California, Berkeley, USA, 2016
- Honorary Doctor of the Faculty of Agriculture and Forestry, University of Helsinki, Finland, 2014.
- Professor of the Year 2013 awarded by the Finnish Professor Union
- SPPS Award 2013 for lifelong research achievements (Scandinavian Plant Physiology Society)
- First member and then the vice president for EASAC, 2014-2016, 2017-
- First board member, then vice president and president (2010-2015) of the Finnish Academy of Science and Letters
- Honorary doctor of the Faculty of Science and Technology at Umeå University, Sweden, 2012
- Invited member of the Finnish Technical Sciences Academy, 2012
- Finnish Cultural Foundation prize, 2009
- Honorary doctor of the Chinese Academy of Sciences, Department of Botany, 2006
- Suomen Valkoisen Ruusun I luokan ritarimerkki from the President of Finland, 2005
- Elias Tillandz prize, Finland, 2005
- Invited member to Finnish Academy of Science and Letters, 2002

- **Awards and grants for several EU and Nordic research networks (as a coordinator and a partner)**

Main International Academic Activities

- *Vice president of the European Academies Science Advisory Council (EASAC) 2017-*
- Member of the European Academies Science Advisory Council (EASAC) 2014-2016
- Member of the evaluation board for Swedish Strategic Foundation: Biological Production Systems, 2014-2015
- Member of the Steering Group of the Breakthroughs in Low Carbon Emission Energy Strategies of EASAC, 2013-2015
- Member of the Scientific advisory board, the Max Planck Institute of Molecular Plant Physiology, Potsdam, Germany, 2011-2017
- Member of the Biosciences Steering Panel of the European Academies Science Advisory Council (EASAC), 2010-2014
- Member of the review panel "Enhancing Photosynthesis" BBSRC Program, UK, 2010
- Member of the Scientific Advisory Board of the Dutch Government research programme (FOM/ALW) "Towards BioSolar Cells", 2010-2015
- Member of the evaluation panel of the Dutch FOM/ALW-programme Towards BioSolar Cells, 2010-
- European Plant Science Organisation (EPSO) Board member, 2009-2014
- Member of the International Selection Committee of Millennium Technology Prize, 2009-2014
- Member of the preparation team in ESF Science Policy Brief "Clean solar fuels for renewable domestic energy supply" (EUROSOLARFUELS), 2008
- Member of the search committee for "Körber European Science Award" 2007-2015
- Member of the International Evaluation Board of "Functional Genomics in Norway (FUGE) program" of The Research Council of Norway, 2006-2007
- Member of the Steering Committee of the European Initiative for Clean Solar Fuels, 2006-
- Member of the International Evaluation Board of Helsinki University, 2005
- Member of the International Evaluation Board of Spanish CSIC Research Centres, 2005
- President and Past President of the International Society of Photosynthesis Research, ISPR, 2004-10
- Vice-President of the Scandinavian Plant Physiology Society (SPPS), 2001-2008
- Expert evaluator of several professorships in Finland, Sweden, Norway, Denmark, The Netherlands, Belgium, Israel, Australia, USA
- Expert evaluator in EU programs and in various European, USA and Israel governmental funding programs

Major International congresses with invited talk/plenary lecture/session chair since 2010

- 50 years of Plant Science, Umeå, Sweden 2017
- SPPS2017, Naantali, Finland, 2017
- Society of Experimental Biology, Gothenburg, Sweden, 2017
- FOR2092, Bavaria, Germany, 2016
- 13th Nordic Photosynthesis Congress, Copenhagen, Denmark, 2016
- Enhancing Photosynthesis in Crop Plants, The Royal Society, London, UK, 2016
- 17th International Congress on Photosynthesis, Maastricht, Netherlands, 2016
- European Networks Conference in Algal and Plant Photosynthesis, Valletta, Malta, 2016
- Arnon Lecture, Berkeley, USA 2016
- Gordon Research Conference on Mitochondria and Chloroplasts, Mount Snow in West Dover, USA, 2016
- Inno-Indico Bioeconomy Congress, New Delhi, India, 2016
- 17th International congress on Photosynthesis, Maastricht, Netherlands, 2016
- Bioenergy Congress, Umeå, Sweden, 2016
- International School on Photosynthesis, Venice, Italy, 2016
- China-Germany bilateral photosynthesis Meeting, München, Germany, 2015
- International Symposium: Dynamics and Regulation of Photosynthesis, Kyoto, Japan, 2015
- Photosynthesis Research for Sustainability, Hania, Greece, 2015
- French Photosynthesis Congress, Paris, France, 2015
- The Plant Journal Scientific Meeting, London, UK, 2015
- 1st International Solar Fuels conference (ISF-1), Uppsala, Sweden, 2015
- 56th Annual Meeting of the Japanese Society for Plant Physiologists, Tokyo, Japan, 2015
- Finnish-Japanese Joint Seminar: Design of Superior Machinery of Light Energy Conversion in Photosynthetic organisms, Sapporo, Japan, 2014
- 16th International Congress on Photobiology, Cordoba, Argentina, 2014
- Gordon Research Conference of Photosynthesis, West Dover, USA, 2014
- 18th European Bioenergetics Conference EBEC, Lisbon, Portugal, 2014
- Royal Society Artificial Photosynthesis congress, London, UK, 2014
- SEB annual conference, Manchester, UK, 2014
- Plant Biology Europe FESPB/EPSO 2014 Congress, Dublin, Ireland, 2014
- SPPS Student Congress, Uppsala, 2014
- 25th SPPS Conference, Helsingør, Denmark, 2013
- Annual Meeting of the Botanical Society of Italy, Ferrara, Italy, 2013
- Annual meeting BioSolar Cells, Ede, Netherlands, 2013
- Photosynthesis Research for Sustainability, Baku, Azerbaijan, 2013
- ESF-EMBO Symposium “Molecular Bioenergetics of Cyanobacteria, Pultusk, Poland, 2013
- 5th Umeå Renewable Energy Meeting, Umeå, Sweden, 2013
- 10th International Congress on Plant Molecular Biology, Jeju, Korea, 2012
- International Workshop on Photosynthesis: from Science to Industry, Netherlands, 2012
- 11th Nordic Photosynthesis Congress, Naantali, Finland, 2012
- The IUBMB-FEBS Congress, Sevilla, Spain, 2012
- 14th International Symposium on Phototrophic Procarvates ISPS, Porto, Portugal, 2012
- Gordon Research Conference on Mitochondria and Chloroplasts, Rhode Island, USA, 2012
- European Federation of Biotechnology congress “Microbial from Molecules to Systems”, Italy, 2012
- Royal Society Theo Murphy meeting “Structure and dynamics of the thylakoid membrane”, UK, 2012
- Lorenz Center Workshop “Hacking the Biological Clock, Leiden, Netherlands, 2012
- International Workshop on Photosystem II, Chengdu, China, 2011
- Conference of the Polish Society of Experimental Plant Biology, Wroclaw, Poland, 2011
- Towards Global Artificial Photosynthesis congress, Lord Howe Island, Australia, 2011
- International Meeting “Photosynthesis Research for Sustainability”, Baku, Azerbaijan, 2011
- ESF-EMBO/Molecular Bioenergetics of Cyanobacteria, San Feliu, Spain, 2011
- The 5th European Plant Science Conference (EPSO), Olos, Finland, 2010
- The 15th International Photosynthesis Congress, Beijing, China, 2010
- The 16th European Bioenergetics Conference, Warsaw, Poland, 2010
- The 35th FEBS Congress - Molecules of Life, Gothenburg, Sweden, 2010

Organizer of International Conferences since 2008

- Photosynthesis “Plug and Play”, synthetic biology congress, Leiden, Holland, 2016 (chair)
- Photosynthesis Research for Sustainability, Puschino, Russia, 2014 (organization committee)
- 12th European Congress on Molecular Biology of Cyanobacteria, Netherlands, 2014 (member of scientific organization committee).
- EASAC Breakthrough in Renewable Energy Technologies, Stockholm, Sweden, 2013
- Initiator of the Jap-Fin bi-national Congress Series since 2004, (chair and organizer 2012 and 2016)
- EPSO-FESPB congress, Freiburg, Germany, 2012 (member of organization committee)
- International Workshop Photosynthesis: from Science to Industry, Noordwijkerhout, Netherlands, 2012 (member of organization committee)
- 11th European Congress on Molecular Biology of Cyanobacteria, Finland, 2011 (chair)
- SPPS Congress in Stavanger, Norway, 2011 (member of organization committee)
- 10th Nordic Photosynthesis Congress, Tartu, Estonia, 2010 (member of organization committee)
- The EPSO Conference, Lapland, Finland, 2010 (member of int. and local organization committees)
- 15th International Photosynthesis Congress, Beijing, 2010 (co-chair of meetings progr committee)
- International Photobiology Congress, Dusseldorf, 2009 (session chair and organizer)
- ESF-EMBO Congress "Molecular Bioenergetics of Cyanobacteria, 2008, San Feliu, Spain (chair)

Editor, Guest Editor or Member of Editorial Board of International Journals

- Editor of the Plant Journal 2013-
- Royal Society’s Interface Editorial Board Member 2012-2018
- Member of the Review Editorial Board of Frontiers in Plant Physiology 2010-
- Editorial board member of BBA Bioenergetics 2009-
- Assistant Editor of BMC Plant Biology 2008-2016
- Advisory Editor of Plant Physiology and Biochemistry 2008-
- Guest Editor of Special Issues “Photosynthesis” and “Photosystem II”: Biochimica & Biophysica Acta, Bioenergetics 2006 and 2012, respectively
- Subject-editor "Physiologia Plantarum" 1998-2009
- Editorial board member of Photosynthesis Research 1995-
- PNAS Guest Editor (occasionally)

Citation report according to Thompson Web of Science, September 19th 2017

- Citations 11216 (without self-citations), H-index 62
- 12 “highly cited papers” during 2010-2016 of which two are also marked as “hot paper”
- Aro is listed as a “Highly Cited Researcher” in Plant and Animal Science by Clarivate Analytics

