



Curriculum Vitae and Scientific Leadership Profile

KONDOROSI Eva

Academic

L. Eötvös University, Faculty of Sciences: Biology (Budapest), Graduate degree in Biology, PhD in Genetics and Biochemistry at the L. Eötvös University, Budapest, "Candidate" degree in Molecular Biology at the Hungarian Academy of Sciences, "Doctor of Sciences" at the Hungarian Academy of Sciences (1996).

Present and previous work addresses and positions

- 1976- Institute of Biochemistry, Biological Research Centre of the Hungarian Academy of Sciences, 6726 Szeged, Temesvári krt. 62, Hungary
Email: kondorosi.eva@brc.mta.hu,
Position: member of the directory board, group leader
- 2007-2012 Bay Zoltán Foundation for Applied Research
Institute for Plant Genomics, Human Biotechnology and Bioenergy (BAYGEN)
6726 Szeged, Derkovits fasor 2. Hungary
Position: Founder and Director
- 1989-2000 Institut des Sciences Végétales (ISV), UPR 045 (DR2, group leader)
Centre National de la Recherche Scientifique
Avenue de la Terrasse, 91198 Gif-sur-Yvette Cedex, France
Position: group leader
- 2000-2013 Institut des Sciences du Végétal (ISV), UPR 2355 (DR1, group leader)
Centre National de la Recherche Scientifique
Avenue de la Terrasse, 91198 Gif-sur-Yvette Cedex, France
Email : eva.kondorosi@isv.cnrs-gif.fr
Position: group leader
- 1987-1989 Max Planck Institute für Züchtungsforschung, Cologne, Germany (project leader)

Fellowships

L. Eötvös University, Budapest, Hungary; Biological Research Center, Szeged, Hungary; School of Biological Sciences, University of Sussex, England; AFRC Unit of Nitrogen Fixation, University of Sussex, England; Max Planck Institut für Züchtungsforschung, Köln, Germany; Harvard University, Cambridge, MA USA; Boyce Thompson Institute, Cornell University.

Synopsis of chief scientific achievements

Original and significant discoveries in the field of *Rhizobium*-legume symbiosis by studying both the bacterial and plant control of nitrogen fixing root nodule development. Major contribution to the identification (function and regulation) of *Rhizobium* nodulation genes and elucidation of the

molecular mechanism of nodule organogenesis. Demonstration of the importance of the endoreduplication cycles in the differentiation of symbiotic plant cells and in plant development. Characterization of the cell cycle switch CCS52 proteins that act as substrate-specific activators of the anaphase promoting complex (APC) E3 ubiquitin ligase. Revealing the regulatory functions of the APC activators provides one of the most profound recent contributions in the field of plant developmental biology and cell cycle research.

A breakthrough on differentiation of the bacteria; demonstration of plant controlled genome amplification, loss of cell division ability and alteration of the membrane structure in bacteria residing inside the plant cell. Discovery of large nodule specific peptide families. Demonstration that nodule specific peptides govern terminal differentiation of bacteria, which represents a chief contribution to the *Rhizobium*-legume research. Recent identification of the antimicrobial activity of these nodule specific peptides opened an innovative research line in the BAYGEN institute created in 2007. Her present ERC Advanced grant (Symbiotics) focuses on dual exploitation of natural plant strategies in agriculture and public health: enhancing nitrogen-fixation and fighting microbial infections.

resulting in a European patent filing in 2009 on potential applications of these peptides as antibacterials in human and veterinary medicine and in agriculture for plant protection.

Scientific activities and science management

- Corresponding member of the Hungarian Academy of Sciences and active participation in the section of Biological Sciences
- Foreign Associate of the National Academy of Sciences, USA, active participation in the Plant Biology section
- EMBO member
- Member of the EMBO Long Term Fellowship Committee
- Member of the Board of Directors at the International Society of Molecular Plant-Microbe Interactions.
- Founder member of the French Plant Biotechnology Association.
- Editor at the Proc. Natl. Acad. Sci. U.S.A.
- Invited keynote or plenary speaker of international conferences and member of organizing committees of scientific meetings on *Rhizobium*-legume symbiosis, plant molecular biology, cell cycle, plant-microbe interactions.
- Reviewer at many scientific journals, and national and international granting agencies.
- Scientific advisor in several institutes in Europe and Australia and member of department evaluation boards.
- Member of the Scientific Expert Advisory Committee of the Australian Research Council Centre of Excellence for Integrative Legume Research (University of Queensland, Australian National University, University of Melbourne and University of Newcastle)
- She was involved in the initiation of the UNESCO « Women in Science » program and was member of the international jury for the OREAL-UNESCO « Women in Science » Awards.
- Supervisor of 22 master and 25 PhD students.
- Tutor at EMBO and NATO courses and was a board member at the International Max Planck Research School.
- Honorary professor in Hungary.
- Participation in the creation of the CNRS Institut des Sciences Végétales (ISV), including planning and installation of the institute, selecting scientific projects and directing and initiating novel research lines in the field of *Rhizobium*-legume symbiosis. Her group at the ISV received always the highest evaluation by the CNRS.
- 2007-2011. Grant from the Hungarian Office for Research and Technology to create a new institute based on French-Hungarian collaborations (BAYGEN: Institute for Plant Genomics, Human Biotechnology and Bioenergy, Bay Zoltán Foundation for Applied Research). Under her directorship, innovative research lines bridging plant and human/animal have been developed that received rapidly significant international recognition. The complementing potentials of her group at ISV and the BAYGEN join ideally basic science and applications.

- 2011-2016. ERC Advanced Grant “SymBiotics”

Scientific recognition and awards

- 2012. Széchenyi prize given by the Hungarian state for outstanding scientific contribution
- 2012. Award of the the International Society of Molecular Plant-Microbe Interactions
- 2010. Foreign Associate of the National Academy of Sciences, USA,
- 2010. Corresponding member of the Hungarian Academy of Sciences,
- 2010. Member of the Academia Europaea,
- 2006. EMBO (European Molecular Biology Organization) member
- 2007. Hotchkiss award
- 1985. Award of the Hungarian Academy of Sciences