

CURRICULUM VITAE

Name:

Alejandro Calderón-Urrea, M. Sc., Ph. D.

Address:

Associate Professor of Developmental Biology
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Education:

1996-1997 Postdoctoral Associate, Plant Gene Expression Center, USDA-ARS, Albany, CA.
1990-1996 Ph.D., Biology. Yale University.
1986-1988 M.Sc., Plant Molecular Biology. Vrije Universiteit Brussel, Belgium.
1979-1985 B.Sc., Genetics. Universidad del Valle, Colombia.

Research and academic experience:

Aug. 2001-present Associate Professor of Developmental Biology, Department of Biology, CSU-Fresno, CA.
Duties include academic advising of graduate and undergraduate students, and teaching Genetics 172 (Developmental Biology) and Botany 137 (Plant Growth and Development) and other courses to strengthen the developmental and molecular biology sections of the Biology curriculum. I also have the responsibility to develop a research program that involve graduate (M.S.) and undergraduate students.
Research interest: 1) molecular genetics of programmed cell death (PCD) in plants; 2) use of PCD in plant biotechnology; 3) PCD during sex determination in plants.

Aug. 1997-July 2001 Assistant Professor of Developmental Biology, Department of Biology, CSU-Fresno, CA.
1996-1997 Postdoctoral Associate, Plant Gene Expression Center, USDA-ARS, Albany, CA. Research topic: Use of agro-infiltration in the characterization of the tobacco mosaic virus elicitor of the N gene in tobacco.
Postdoctoral Advisor: Dr. Barbara Baker.

1990-1996 Graduate Student (Ph.D.), Department of Biology, Yale University.
Research topic: Cell death during sex determination in maize.
Thesis Advisor: Dr. Stephen L. Dellaporta.

1989-1990 Research Associate, International Center for Tropical Agriculture (CIAT), Cali, Colombia. Research topic: Plant genetic transformation and RFLP markers for disease resistance.
Supervisor: Dr. William Roca.

Oct-Dec. 1988 Research Assistant, Molecular Biology Institute, Vrije Universiteit Brussel, Brussels, Belgium. Research topic: Cassava transformation.
Supervisor: Prof. Jean-Pierre Hernalsteen.

1986-1988 Graduate Student (M.Sc.), Plant Molecular Biology Institute. Vrije Universiteit Brussel, Belgium. Research topic: Plant genetic transformation.
Thesis Advisor: Prof. Jean-Pierre Hernalsteen.

Jan.-Aug. 1986 Research Assistant, International Center for Tropical Agriculture (CIAT), Cali, Colombia. Plant transformation, somatic cell genetics.
Supervisor: Dr. William Roca.

Honors and awards:

2005-2008 term Elected to the Research Awards Committee of the Academic Senate. California State University, Fresno.
Summer 2005 Visiting Professor, USAC-Universidad Nacional, Heredia Costa Rica.
Fall 2004 Sabbatical leave: Visiting Scientist, Biotechnology Institute, University of Ghent, Ghent, Belgium.
July 11-14, 2004 Received an award from The North American *Arabidopsis* Steering Committee (NAASC) to attend the Fifteenth International Conference on *Arabidopsis* Research (*Arabidopsis* XV). Held in Berlin, Germany.

Summer 2003 Visiting Scientist, Biotechnology Institute, University of Ghent, Ghent, Belgium.
May 2003 Member of Phi Kappa Phi Honor Society.
Summer 2001 USDA's Hispanic Serving Institutions Fellows Program.
2000 Outstanding Faculty Mentor Award. Ronald E. MacNair Program. California State University, Fresno.
2000 Best published paper of 1999. Department of Biology, CSU-Fresno.
1999 Travel Grant Award from the American Society of Plant Physiologists to attend the 1999 annual meeting in Baltimore, MD. July 24-28, 1999.

- 1998 Travel Grant Award from the American Society of Plant Physiologists to attend the 1998 annual meeting in Madison, WI. June 27-July 1, 1998.
- 1996 John Spangler Nicklas Prize for best dissertation, Department of Biology, Yale University.
- 1994-1995 Programa de Estimulo a Investigadores, Colombian Government.
- 1990-1995 Rockefeller Foundation, Graduate Fellowship.
- 1986-1988 A.B.O.S/A.G.C.D. Belgium, Graduate Scholarship.

Current funding support (external):

- August 2005-July 2009 Program Director. NIH-MBRS-RISE: MBRS-RISE Program at California State University, Fresno. Total amount awarded: approximately 1,500,000.00.
- September 2002 - May 2006 (PI) California Agricultural Research Initiative (ARI-CATI): "A novel biotechnology approach for plant protection against nematodes: the use of programmed cell death". Total amount awarded: 342,799.00.

Served on the following review panels:

- February '01, '02, '03 and '04 NSF Graduate Research Fellowship. Panelist participant. Chaired the February '03 and '04 panels.
- September 2000 IGERT review panel. National Science Foundation.
- May 1999 Member of the review panel of the National Science Foundation's Course, Curriculum and Laboratory Improvement Program (CCLI) for FY 1999.

Invited speaker:

- July 2005 The use of programmed cell death genes to control plant parasitic nematodes. . Invited seminar at the Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), Turrialba, Costa Rica.
- April 2004 Programmed cell death in plants: A perspective on old concepts and new directions. Invited seminar at the Department of Biology, University of Puerto Rico, Mayaguez Campus. Puerto Rico.
- July 2003 Programmed cell death in plants: A perspective on old concepts and new directions. Invited seminar at the Biotechnology Institute, University of Ghent, Ghent, Belgium.
- June 2001 IV Latin-American Meeting on Plant Biotechnology, REDBIO-2001. Goiania, Brazil. Talk title: "Using programmed cell death to engineer plants resistant against nematode and insect pests".
- March 2001 AgBiotechnology 2001, Tenaya Lodge, Fish Camp, CA. Talk title: "Programmed cell death in plants: applications to biotechnology".
- June 2000 15th Anniversary Celebration of the foundation of GETEG. Universidad del Valle, Cali, Colombia. Talk title: "Molecular genetics of programmed cell death in plants and its potential use in plant Biotechnology".
- June 1998 57th Annual Meeting of the Society for Developmental Biology. Stanford University, Palo Alto, CA. Talk title: "Cell death, cell protection and cell arrest determine floral organ fate in maize".
- June 1995 II Latin-American Meeting on Plant Biotechnology, REDBIO-95. Puerto Iguazu, Argentina. Talk title: "Molecular genetics of sex determination in maize".
- May 1994 7th International Rice Biotechnology Meeting, Bali, Indonesia. Talk title: "Mechanism and evolution of sex determination in maize".
- June 1993 EUCARPIA conference, Bergamo, Italy. Talk title: "Sex determination in maize".