

MAARTEN J. CHRISPEELS

Narrative Biography.

Maarten Chrispeels is Professor of Biology at the University of California, San Diego and the Director of the San Diego Center for Molecular Agriculture. His scientific research is in the area of plant cell and molecular biology. He has made major contributions to our understanding of intracellular protein transport and discovered the proteins that permit water to pass through plant cell membranes. His laboratory has published more than 200 research paper and 50 reviews and book chapters. With David Sadava he has co-authored the textbook "Plants, Genes and Agriculture".

A native of Belgium, he came to the US in 1960 and obtained a doctoral degree in Agronomy from the University of Illinois. His professional service includes numerous government and industry advisory panels and appointment as Editor in Chief of *Plant Physiology* from 1992 to 2000. In 1996 he received the Stephen Hales Award from the American Society of Plant Physiologists and was elected to the US National Academy of Sciences. He has extensive contacts in Latin America and presently serves on advisory panels in Chile and Mexico.

In the area of crop biotechnology, Chrispeels collaborates with Dr. TJ Higgins from Australia. They used gene transfer technologies to produce the first insect resistant seeds by transferring a gene from the common bean to the garden pea. As director of the San Diego Center for Molecular Agriculture, Chrispeels has become a spokesperson/educator about crop biotechnolgy and foods from genetically modified crops. He recently produced a highly successful brochure entitled "Foods from GM Crops" that has been distributed worldwide.

In 1996 he was elected to the National Academy of Sciences of the US, and in 2000 he received a *Doctor honoris causa*, from the University of Guelph

TITLE: Professor of Biology and Director, Center for Molecular Agriculture

BIRTHPLACE: Kortenberg, Belgium

NATIONALITY: USA

EDUCATION:

1960	The State University, Ghent, Belgium	Agricultural Engineer
1964	University of Illinois, Urbana (Advisor: John Hanson)	Ph.D. (Agronomy)
1964-1965	RIAS (with J.E. Varner), Baltimore, MD	Postdoctoral
1965-1967	Michigan State University (with J.E. Varner)	Postdoctoral
1967	Purdue University (with F.C. Neidhardt, 4 months)	Postdoctoral

PROFESSIONAL EXPERIENCE:

1979-Present	Professor , Dept. of Biology, University of California, San Diego, La Jolla, CA
1990-1991	Sabbatical Leave , Calgene, Inc., Davis, CA; Division of Plant Industry, CSIRO, Canberra, Australia
1980-1981	Sabbatical Leave , Division of Plant Industry, CSIRO (with T.J. Higgins), Canberra, Australia
1973-1979	Associate Professor , Dept. of Biology, Univ. of California, San Diego, La Jolla, CA
1973-1974	Sabbatical Leave , University of Durham (with D. Boulter), Durham, U.K.
1967-1973	Assistant Professor , Dept. of Biology, Univ. of California, San Diego, La Jolla, CA

HONORS AND PROFESSIONAL SERVICE:

- Fulbright Hayes Fellow (1960-1961) • John Simon Guggenheim Fellow (1973-1974) • Member, Editorial Board of *Plant Physiology* (1972-1984) • Member, NSF Advisory Panel on Developmental Biology (1975-1978) • Program Manager, CRGO USDA/SEA (4/78-9/78) • Herman Frasch Foundation Grantee (1977-1982) • Member, Editorial Board of the *Annual Review of Plant Physiology* (1978-1982) • Member, Editorial Board of *Planta* (1982-present) • Associate Editor, *Plant Physiology*

(1984-1991) • Member, McKnight Foundation Advisory Panel for Plant Biology (1986-1991) • Executive Committee, American Society of Plant Physiologists (1988-1991) • Chair, Gordon Conference on Plant Molecular Biology (1990) • Editor-in-Chief, *Plant Physiology* (1992-2000) • International Advisory Board, *Agrociencia* (1996-present) • Organizer of the first US-Mexico Symposium in Plant Biotechnology (1995) • Member, National Academy of Sciences of the United States of America (1996) • Stephen Hales Prize, ASPP (1996) • Member, Presidential Scientific Advisory Commission, Chile (1997-2000) • Corresponding Member of the Australian S.P.P. (1998) • Member, Advisory Committee to the government of Chile to establish Millennium Institutes (1999-present) • *Doctor honoris causa*, University of Guelph (2000).

MEMBERSHIPS:

- AAAS • American Society of Cell Biology • International Society of Plant Molecular Biologists • American Society of Plant Physiologists.

CONSULTING:

- Mogen N.V., Leiden, The Netherlands (1992-1998) • SAB Mycogen/Dow AgroSciences (1997-1999)
 - SAB Integrated Protein Technologies (1999-2000) • SAB Phylogix (1999-present).

RESEARCH INTERESTS:

- Structure-function relationship at the cellular level: ER, vacuoles, Golgi, tonoplast • Intracellular signaling and vesicle transport • The role of aquaporins in plant water relations • Plant genetic engineering for crop protection against insects • Evolution of the phytohemagglutinin-arcelin- α -amylase inhibitor genes.