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Education: 1980 "Kandidaats" degree in Biology (B.S. equivalent)
1982 "Ingenieurs" degree in Biology (M.S. equivalent)
1984 Doctorate, Faculty of Agricultural Sciences
All degrees were from the Agricultural University, Wageningen, The Netherlands, and were conferred cum laude

Professional experience:

1980-1981 Research Associate, Departments of Botany, and Physiology & Biophysics, University of Illinois at Urbana/Champaign, Urbana IL
1981-1982 Research Associate, MSU/DOE Plant Research Laboratory, Michigan State University, East Lansing MI
1982-1983 Research Associate, Max-Volmer-Institute of Physical & Biophysical Chemistry, Technische Universität Berlin, Berlin, Germany
1983-1984 Scientist, Department of Plant Physiological Research, Agricultural University, Wageningen, The Netherlands
1984-1986 Visiting Scientist, Central Research & Development Department, E.I. du Pont de Nemours & Co., Inc., Wilmington DE
1986-1990 Assistant Professor, Dept of Botany & Microbiology, Arizona State Univ
1990-1994 Associate Professor, Department of Botany, Arizona State University
1992-1993 Visiting Professor (sabbatical leave), Department of Biochemistry, Stockholm University, Stockholm, Sweden
1994-1997 Director, Center for the Study of Early Events in Photosynthesis, Arizona State University
1994-2003 Professor, Department of Plant Biology, Arizona State University
1999-2000 Visiting Professor (sabbatical leave), Lehrstuhl für Biochemie der Pflanzen, Ruhr University, Bochum, Germany
1999-2000 Visiting Professor (sabbatical leave), Microbiology group, University of Amsterdam, Amsterdam, The Netherlands
2003-2005 Associate Director, School of Life Sciences, Arizona State University
2003-present Professor, School of Life Sciences, Arizona State University

Selected Honors, Awards and Professional Service:

1980 Unilever Chemistry Award
1981 Dutch Ministry of Agriculture and Fisheries Research Award
1982 "Deutsche Akademische Austauschdienst" fellowship
1988 Organizer, ASU/UofA Molecular Biology/Biochemistry Conference
1989-1998 Editorial Board member, *Photosynthesis Research*
1990 NSF Presidential Young Investigator Award
1991 Organizer, first Western Photosynthesis Conference (held at ASU)
1991 Organizer, International Conference on the Molecular Biology of Photosynthesis, Tempe AZ
1993 Member, Organizing Committee, 6th International Conference on Applied Algology, Czech Republic

- 1996 US Organizer of the US/Japan Workshop on Advances in the Molecular Biology of Photosynthesis, Grand Canyon AZ
- 1998-2001 Editorial Board member, *Plant Cell Physiology*
- 1998-1999 Panel manager, USDA NRICGP Photosynthesis and Respiration program
- 1999 Alexander von Humboldt Research Fellowship
- 1999-2007 Editorial Board member, *Journal of Bacteriology*
- 2000-2009 Member, Organizing Committee, the International Symposia of Photosynthetic Prokaryotes
- 2000-present Associate Editor, *Plant Molecular Biology*
- 2002-2005 Advisory Board member, Genomes to Life project on *Synechococcus* sp. WH 8102
- 2003 Symposium co-organizer, American Society for Microbiology Meeting
- 2004-2010 Member, Executive Committee of the International Society for Photosynthesis Research
- 2006-2008 Vice Chair and Chair, Gordon Conference on Photosynthesis
- 2007 Innovator of the Year Award, Arizona Technology Enterprises and ASU

Refereed Publications:

- Vermaas, W.F.J., and van Rensen, J.J.S. (1981) Mechanisms of bicarbonate action on photosynthetic electron transport in broken chloroplasts. *Biochim. Biophys. Acta* **636**, 168-174.
- van Rensen, J.J.S., and Vermaas, W.F.J. (1981) Action of bicarbonate and photosystem II-inhibiting herbicides on electron transport in pea grana and in thylakoids of a blue-green alga. *Physiol. Plant.* **51**, 106-110.
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- Vermaas, W.F.J., Arntzen, C.J., Gu, L.-Q., and Yu, C.-A. (1983) Interactions of herbicides and azidoquinones at a photosystem II binding site in the thylakoid membrane. *Biochim. Biophys. Acta* **723**, 266-275.
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- Vermaas, W.F.J., Renger, G., and Arntzen, C.J. (1984) Herbicide binding to photosystem II: an allosteric model. *Z. Naturforsch.* **39c**, 368-373.
- Vermaas, W.F.J., Steinback, K.E., and Arntzen, C.J. (1984) Characterization of chloroplast polypeptides in the 32 kDa region. *Arch. Biochem. Biophys.* **231**, 226-232.
- Vermaas, W.F.J., and Rutherford, A.W. (1984) EPR measurements on the effects of bicarbonate and triazine resistance on the acceptor side of photosystem II. *FEBS Lett.* **175**, 243-248.
- Vermaas, W.F.J., Williams, J.G.K., Rutherford, A.W., Mathis, P., and Arntzen, C.J. (1986) A genetically engineered mutant of the cyanobacterium *Synechocystis* 6803 lacks the photosystem II chlorophyll-binding protein CP47. *Proc. Natl Acad. Sci. USA* **83**, 9474-9477.
- Vermaas, W.F.J., Williams, J.G.K., and Arntzen, C.J. (1987) Sequencing and modification of *psbB*, the gene encoding the CP-47 protein of photosystem II, in the cyanobacterium *Synechocystis* 6803. *Plant Mol. Biol.* **8**, 317-326.

- Vermaas, W.F.J., Williams, J.G.K., and Arntzen, C.J. (1987) Site-directed mutations of two histidine residues in the D2 protein inactivate and destabilize photosystem II in the cyanobacterium *Synechocystis* 6803. *Z. Naturforsch.* **42c**, 762-768.
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Selected invited reviews:

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- Vermaas, W.F.J., and Govindjee (1981) Unique role(s) of carbon dioxide and bicarbonate in the photosynthetic electron transport system. *Proc. Ind. Natl Sci. Acad.* **B47**, 581-605.
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- Vermaas, W.F.J., Pakrasi, H.B., and Arntzen, C.J. (1987) Photosystem II and inhibition by herbicides. *In: Models in Plant Physiology and Biochemistry*, Vol. I (D.W. Newman and K.G. Wilson, eds.), pp. 9-12, CRC Press, Boca Raton.
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- Vermaas, W.F.J. (1995) Functional effects of structural changes in photosystem II as measured by chlorophyll fluorescence kinetics. *In: Methods in Plant Cell Biology, Part B* (D.W. Galbraith, D.P. Bourque, and H.J. Bohnert, eds.), pp. 15-30. Academic Press, San Diego.
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Professional memberships:

American Association for the Advancement of Science
 American Society for Microbiology
 Arizona Arts, Sciences and Technology Academy (Founding Fellow)
 International Society for Photosynthesis Research
 Union of Concerned Scientists

Invited lectures since 2003 include:

- 2003 Biotechnology Centre of Oslo, Norway
 Boden Research Conference on Artificial Photosynthesis, Sydney, Australia
 Free University, Amsterdam, The Netherlands
 American Society for Microbiology Annual Meeting, Washington DC
 11th International Symposium on Photosynthetic Prokaryotes, Tokyo, Japan
 Technical University, Berlin
- 2004 Protein Production Facility Workshop, Albuquerque NM
 "Photosynthesis and the Post-Genomic Era" Workshop, Trois Rivieres, Canada (Speaker)

- and Session Chair)
 University of Umea, Sweden
 Sandia National Laboratory, Albuquerque NM
- 2005 ESF Research Conference on Molecular Bioenergetics of Cyanobacteria, Sant Feliu de Guixols, Spain
 American Chemical Society National Meeting, San Diego CA
 Gordon Conference on Photosynthesis (discussion leader)
- 2006 International Symposium of Photosynthetic Prokaryotes, Pau, France (Speaker and Session Chair)
 University of Turku, Finland
- 2007 University of Illinois
 International Photosynthesis Conference, Glasgow
 NAS / Gates Foundation Emerging Technologies Workshop, Washington DC
 Minerva Symposium: “Photosynthesis: from Molecular Mechanisms to Environmental Impact”, Rehovot, Israel
 7th International Conference on Tetrapyrrole Photoreceptors in Photosynthetic Organisms, Kyoto, Japan
- 2008 ITESM, Monterrey, Mexico
 US Department of Agriculture, Maricopa
 ESF-EMBO symposium on “Molecular Bioenergetics of Cyanobacteria: towards systems biology level of understanding”, Saint Feliu de Guixols, Spain
 Midwest Photosynthesis Conference, Turkey Run, IN

University service, past five years:

Interdepartmental:

- 2003-2004 Member, University-wide Academic Professionals Task Force
 2006-present Member, Executive Committee, Computational Biosciences Program
 2007-2008 Member, Molecular and Cell Biology graduate program committee
 2008-present Faculty Liaison, ASU Biotechnology Club
 2008-present Dean's Strategic Planning and Academic Resources Advisory Council, CLAS

Departmental:

- 2003-2004 Chair, Search Committee for Evolutionary and Systems Biology faculty
 2003-2005 Chair, Academic Professionals Personnel Committee, School of Life Sciences
 2003-2005 Chair, Initiatives Programs Committee, School of Life Sciences
 2004-2006 Member, Search Committee for Metabolic Biology faculty
 2005-present Mentoring Program Coordinator, Molecular Biosciences and Biotechnology
 2005-2007 Faculty advisor, Associated Students for Biotechnology
 2006-present Faculty Honors Advisor, Molecular Biosciences and Biotechnology
 2006-2007 Chair, Search Committee for three faculty members
 2008-present Member, Strategic Planning Committee

Thesis/dissertation:

Current graduate students:

- YiFei Wu, Ph.D., Plant Biology
 Christoph Trautner, Ph.D., Microbiology
 Raul Gonzalez, Ph.D., Plant Biology
 Vicki Moore, Ph.D., Biology
 Danny Yao, Ph.D., Plant Biology

ASU graduates from my laboratory:

- Shelly D. Carpenter

Michael R. Zianni
M. Elisabeth Eggers
Jiujiang Yu
Gaozhong Shen
Pradip Manna
Qingfang He
Martin Tichy
Anna Keilty
Jason Cooley
Hong Xu
Hatem Mohamed
Zhi Cai
Sawsan Hamad

Undergraduate education in the laboratory, past five years:

Eric Lovullo
Federico Martin
Folarin Akinola
Ankita Sharma
Nicholas Tatonetti
Shaw Shariari
Martin Dotson
Christopher Dixon
Bryan Hricik
Aaron Walker

Visiting scientists/postdoctoral research associates/visiting students, past five years:

Dr. Bing Wang
Miguel Hernandez (University of Umea, Sweden)
Professor Udo Johanningmeier
Professor Christer Sundqvist (University of Goteborg, Sweden)
Helder Miranda (University of Umea, Sweden)
Dr. Otilia Cheregi (University of Umea, Sweden)
Dr. Hongliang Wang
Dr. Shuqin Li
Cazimir ten Brink (Agricultural University, Wageningen)

Students at other institutions for whom I recently was dissertation defense opponent:

2003	Frank de Weerd (Free University, Amsterdam, The Netherlands)
2004	Natasha Yeremenko (University of Amsterdam, committee co-chair)
2006	Pengpeng Zhang (University of Turku, Finland)