

CURRICULUM VITAE OF JERRY J. BARON

IR-4 Project Headquarters, New Jersey Agriculture Experiment Station,
Rutgers, The State University of New Jersey
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EDUCATION

1985 **Ph.D.** Horticultural Science, North Carolina State University, Raleigh
1982 **M.S.** Horticultural Science, Ohio State University, Columbus
1981 **B.S.** Plant Pathology, Ohio State University, Columbus

PROFESSIONAL EXPERIENCE

2006 – Present **Executive Director**, IR-4 Project, Rutgers University and
Associate Director, New Jersey Agricultural Experiment Station
2002 - 2006 **Associate Director**, IR-4 Headquarters, Rutgers University
2001 – 2002 **Associate to the Cook College Executive Director**, Rutgers
University
1998-2002 **Assistant Director and Research Professor**, IR-4 Project
Headquarters, Rutgers University
1991-1997 **National Coordinator and Associate Research Professor**, IR-4
Project Headquarters, Rutgers University
1986-1990 **Coordinator and Assistant Research Professor**, IR-4 Project
Headquarters, Rutgers University
1983 – 1985 **Graduate Research Assistant**, Department of Horticultural
Science, North Carolina State University
1981-1982 **Graduate Research Associate**, Department of Horticulture, Ohio
State University
1979-1981 **Student Research Assistant**, Department of Entomology, Ohio
State University

AWARDS and HONORS

President, Northeastern Weed Science Society - 2008-2009
Outstanding Alumni, College of Agriculture and Life Science, North Carolina State
University-2007
Graduate, New Jersey Agriculture Leadership Development Program - 2003
Outstanding Research Award, Northeastern Weed Science Society - 2002
United States Environmental Protection Agency Team Award - 2001
Cook College/NJAES Team Award - 2001
IR-4 Meritorious Service Award -2000
IR-4 Award of Excellence – 1993

PROFESSIONAL ACTIVITIES

- Reviewer**, American Association for the Advancement of Science, Research Competitiveness Service (2008-2009)
- Chair**, Global Minor Use Summit (2007, 2011)
- Member**, US EPA's Pesticide Program Dialogue Committee Member (Since 2002)
- Delegate**, CODEX Committee on Pesticide Residues (Since 2005)
- Member**, US Interagency Aquatic Herbicides Working Group (Since 2003)
- Member**, Cook College Executive Dean Search Committee, (2003-2004)
- Government Delegate**, North America Free Trade Agreement's Pesticide Working Group (Since 1998)
- Chair**, Legislative Committee, Northeastern Weed Science Society (1996-2003)
- Member**, Executive Board, Northeastern Weed Science Society (1996 -2003)
- Member**, Legislative and Regulatory Committee, Weed Science Society of America (1997-2000)
- Member**, Herbicides for Minor Use Committee, Weed Science Society of America (1988- 1996)

SELECTED PUBLICATIONS FOR JERRY J. BARON FOR THE PAST 3 YEARS

Baron, J.J., S. Archambault, M. Braverman, H. Chen, M.A Cotero-Garcia, RE. Holm, S. Keller, D.K. Kunkel, A Noreen, V. Powell, D. Richardson, AW. Rotteveel, N. Takahashi, and M. Wick. 2009. The Availability of Crop Protection Products for Specialty Crops - The Minor Use Problem. In Pest Management Science. Samantha Swann (ed). John Wiley and Sons, NY, NY (in review)

Barney, W. D. Kunkel and J. Baron. 2009. The Use of Crop Grouping in International Maximum Levels (MRLS) Harmonization. *Outlooks on Pest Management*. Volume 20(5). Pp 229-231.

Kunkel, D.L., F.P. Salzman, M. Arsenovic, J.J. Baron, M.P. Braverman, and RE. Holm. 2008. The Role of IR-4 in the Herbicide Registration Process for Specialty Food Crops. *Weed Technology*, 22:373-377.

Baron, J.J, RE Holm, D.L. Kunkel and H. Chen. 2007. "Impact of Pesticide Residues on the Global Trade of Food and Feed in Developing and Developed Countries" in *Pesticide Chemistry*, Wiley-VCH pg.323-330.

Braverman, M., D. Kunkel, J. Baron, and R Holm. 2006. "Interregional Research Project NO.4 Program and Minor Crops: Developing Choices for Pest Resistance Management. In: *Management of Pesticide Resistance: Strategies Using Crop Management, Biotechnology and Pesticides*". Council for Agricultural Science and Technology. No. 24, pp 109-115.

Holm, R., J. Baron, and D. Kunkel. 2006. 'The IR-4 Program: Interactions with the Crop Protection Industry and With the Regulators'. *Outlooks on Pest Management*. Volume 17 (4). Pp 185-188.

Holm, R, J. Baron, and D. Kunkel. 2006. "Challenges Faced by the IR-4 Project and U.S. Specialty Crop Growers". *Proceedings from European and Mediterranean Plant Protection Organization on Mutual Recognition of Minor Uses*. (In press).

ROBERT M. HOLLINGWORTH

Department of Entomology and National Food Safety & Toxicology Center,
51 Natural Science Building
Michigan State University
E. Lansing, MI 48824
Phone: (517) 930-0180; e-mail: rmholl@msu.edu

Education/Training

University of Reading, England: B.Sc.(Hons.) 1962 Agricultural Chemistry
University of California, Riverside: Ph.D. 1966 Insecticide Toxicology

Research and Professional Experience

1966-1971 Assistant Professor, Department of Entomology, Purdue University
1971-1975 Associate Professor, Department of Entomology, Purdue University
1975-1976 Visiting Scientist, Department of Biochemistry, Stauffer Chemical Co,
Mountain View, CA (Pesticide metabolism)
1975-1987 Professor, Department of Entomology, Purdue University
1981 Visiting Scientist, Insecticide Basic Research Group, Ciba-Geigy Corp.,
Basel, Switzerland (Insecticide modes of action)
1987-2007. Professor, Department of Entomology, Michigan State University
2007-pres. Professor Emeritus, Department of Entomology, Michigan State University
1987-pres. Director, North Central Region IR-4 Project
1987-1998 Director, Pesticide Research Center, Michigan State University
1991-1999 Director, National Food Safety and Toxicology Center, Michigan State
University
1997-2005. Chair, National IR-4 Project, Project Management Committee
1999-2007. Professor, National Food Safety & Toxicology Center, Michigan State
University
2007-pres. Professor Emeritus, National Food Safety & Toxicology Center, Michigan
State University

Honors

1981 Fellow Award, Pesticide Chemistry Division, American Chemical Society.
1996 Group Honor Award for Research Excellence, US Department of Agriculture.
1999 Fellow, American Association for the Advancement of Science.
2003 International Award for Research on Agrochemicals, Amer. Chem. Soc.

Memberships in Professional and Scholarly Societies

American Association for the Advancement of Science
American Chemical Society
Entomological Society of America

Editorial Boards (Recent)

Pesticide Biochemistry and Physiology (1986-2007)
Pesticide Science/Pest Management Science (1987-2007)

Resistant Pest Management Newsletter (Co-editor) (1990-present)

Research Interests.

Mechanisms of action and metabolism of insecticides, particularly in the context of selective toxicity and resistance.

Risk assessment as it relates to the comparative risk of pesticides, genetically modified foods, and other toxic components in the human diet.

Pesticide regulation and registration for minor crops

Recent Publications (2006-2009)

Mota-Sanchez, D., Hollingworth, R. M., Grafius, E. J., and Moyer, D D. 2006.

Resistance and cross-resistance to neonicotinoid insecticides and spinosad in the Colorado potato beetle, *Leptinotarsa decemlineata* (Say) (Coleoptera: Chrysomelidae). *Pest Manag. Sci.* 62: 30-37.

Hollingworth, R.M. 2006. Physiological targeting of insecticides and acaricides. In: Use and Management of Insecticides, Acaricides and Transgenic Crops. All, J. and Treacy, M. (Eds.). APS Press. St. Paul, MN, 156 pp.

Hollingworth, R.M. and Treacy, M.F. 2006. Classification and properties of commercial insecticides and acaricides. In: Use and Management of Insecticides, Acaricides and Transgenic Crops. All, J. and Treacy, M. (Eds.). APS Press. St. Paul, MN, 156 pp.

Tan, J., Galligan, J. and Hollingworth, R.M. 2007. Agonist actions of neonicotinoids on nicotinic acetylcholine receptors expressed by cockroach neurons. *NeuroToxicol.* 28: 829-842.

Tan, J., Salgado, V.L. and Hollingworth, R.M. 2008. Neural actions of imidacloprid and their involvement in resistance in the Colorado potato beetle, *Leptinotarsa decemlineata* (Say). *Pest Manag. Sci.* 64: 37-47.

Mota-Sanchez, D., Wise, J.C., Vander Poppen, R., Gut, L.J. and Hollingworth, R.M. 2008. Resistance of codling moth, *Cydia pomonella* (L.) (Lepidoptera: Tortricidae) larvae in Michigan to insecticides with different modes of action and the impact on field residual activity. *Pest Manag, Sci*, 64: 881-890.

[Tanis, S.](#), [Cregg B.](#), [Mota-Sanchez, D.](#), [McCullough D.G.](#), [Poland T.M.](#) and Hollingworth R.M. (2008). Distribution and persistence of imidacloprid in ash trees following trunk injection: Spring versus fall injections. *Hortsci.* 43:1160-1161.

Whalon, M.E., Mota-Sanchez, D., and Hollingworth, R.M. 2008. "*Global Pesticide Resistance in Arthropods*". CABI Press, Wallingford, UK, 209 pp.

Whalon, M.E., Mota-Sanchez, D. and Hollingworth, R.M.. 2008. Analysis of Global Pesticide Resistance in Arthropods, in: *Global Pesticide Resistance in Arthropods*, pp. 5-31, Ed. Whalon, M.E., Mota-Sanchez, D., and Hollingworth, R.M.. CABI Press, Wallingford, UK, 209 pp.

Mota-Sanchez, D., Whalon M.E., Hollingworth, R.M. and Xue Q. 2008. Documentation of Pesticide Resistance in Arthropods, in: *Global Pesticide Resistance in Arthropods*, pp. 32-39, Ed. Whalon, M.E., Mota-Sanchez, D., and Hollingworth, R.M.. CABI Press, Wallingford, UK, 209 pp.

Hollingworth, R.M. and Dong, K. 2008. The biochemical and molecular genetic basis of resistance to pesticides in arthropods, , in: *Global Pesticide Resistance in Arthropods*, pp. 40-89, Ed. Whalon, M.E., Mota-Sanchez, D., and Hollingworth, R.M.. CABI Press, Wallingford, UK, 209 pp.

Mota-Sanchez, M., Cregg B., McCullough, D.G., Poland T.M. and Hollingworth, R.M.
2009. Distribution of trunk-injected ¹⁴C-imidacloprid in ash trees and effects on
Emerald Ash Borer (Coleoptera:Buprestidae) adults. *Crop Protect.* 28: 655-661.

MAURICE R. MARSHALL

FETL/FSHN University of Florida S.W. 23 rd Drive, P.O. Box 110720 Gainesville, FL 32611- 0720	(352) 392-1978, ext 405 (352) 392-1988 (FAX) Email: martym@ufl.edu WebPage: http://fshn.ifas.ufl.edu/faculty/mrmarshall
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EDUCATION

B.S.	1974	Biology	Duquesne University
M.S.	1976	Food Science	Rutgers University
Ph.D.	1980	Food Science	Ohio State University

PROFESSIONAL EXPERIENCE

7-1-90 to present - Professor, Food Science and Human Nutrition Department, University of Florida. Teaching: 50%, Research: 50%. Director, Southern Region USDA/IR-4 Program

7-1-85 to 7-1-90 - Associate Professor, Food Science and Human Nutrition Department, University of Florida.

7-1-83 to 7-1-85 - Assistant Professor, Food Science and Human Nutrition Department, University of Florida, Gainesville, FL.

7-13-80 to 7-1-83 - Assistant Professor, Institute of Food and Agricultural Sciences, Citrus Research and Education Center, University of Florida, Lake Alfred, FL.

RESEARCH INTERESTS

Chemistry and biochemistry of marine products, characterization and regulation of enzymes associated with food quality, development of rapid analytical methods as quality indices in seafood products, specialty crop pesticide registration.

PROFESSIONAL ACTIVITIES

Institute of Food Technologists (IFT)

General Arrangements Committee for National IFT97 Meeting in Orlando, Florida, CoChair of the Sessions Committee (1995 to 1997)

American Chemical Society

Agricultural and Food Chemistry Division

Trop. Subtrop. Fish. of the Americas (Executive Comm., 1986 to 1994)

Associate Editor, Journal of Food Biochemistry (2005-present)

Director, Southern Region USDA IR-4 Program (1998-present)

Chair, IR-4 Project Management Committee (2005-present)

Charter Member, University of Florida Center for Smell and Taste (UFCST) (1998-present)

Faculty exchange program with Korean National Universities - Food Chemistry and Quality в Korea

Editorial Board - Korean, Journal of Food and Nutraceuticals в Korea

External Reviewer - Work with Food Science & Technology and Food Biotechnology departments – Malaysia

CONTRACTS AND GRANTS (for last 4 years)

1. FL Citrus Production Research Advisory Council, Control of Citrus Greening by Securing Labels for Low Volume Application of Select Pesticides, \$180,000, 1 Year, 2009, PI
2. Rutgers State University, IR-4 Minor Crop Pest Management, \$6,500, 2 Year, 2008, PI
3. Rutgers State University, IR-4 Minor Crop Pest Management, \$80,550, 2 Year, 2008, PI
4. Rutgers State University, IR-4 Minor Crop Pest Management, \$16,000, 1 Year, 2008, PI
5. U S Dept of Agriculture, Southern Region Program to Clear Pest Control Agents for Minor Use, \$1,916,660, 1 Year, 2008, PI
6. Agric & Agri-Food Canada, Analysis of Canadian Samples for Residue, \$13,801, 1 Year, 2008, PI
7. Rutgers State University, IR-4 Minor Crop Pest Management, \$74,734, 3 Years, 2007, PI
8. Rutgers State University, A National Agricultural Program: Clearance of Chemicals and Biologics for Minor or Special Pesticides, \$261,600, 1 year, 2005, PI
9. USDA, Southern Region Program to Clear Pest Control Agents for Minor Uses, \$1,539,100, 2005, PI
10. Rutgers State University, IR-4 Applied Research Industry, \$117,323, 2 Years, 2004, PI
11. USDA, Consumer Preference and Phytonutrient Contents of Specialty Tomatoes and Tropical Fruits in the Caribbean Region. \$32,454, 1 Year, 2004, CoPI
12. USDA, High Pressure Carbon Dioxide Processing of Tropical and Subtropical Fruit Juices. \$46,779, 1 year, 2004, CoPI
13. Rutgers State University, IR-4 Applied Research Biopesticide, \$141,500, 2 years, 2004, PI
14. USDA, Consumer Preference and Phytonutrient Contents of Specialty Tomatoes and Tropical Fruits in the Caribbean Region, \$32,454, 2 years, 2004, CoPI
15. North Carolina State Univ., Integrated Pest Management Center Network-Puerto Rico, \$4,821, 2 years, 2004, CoPI

PUBLICATIONS: (last 5 years)

1. Yoruk R & Marshall MR. 2009. Importance of pH on Antibrowning Activity of Oxalic Acid. *Journal of Food Biochemistry* 33(4):522-534.
2. Yagiz Y, Kristinsson H, Balaban M, Welt B, Ralat M & Marshall M. 2009. Effect of high pressure processing and cooking treatment on the quality of Atlantic salmon. *Food Chemistry* 116(4):828-835
3. Yagiz Y, Kristinsson H, Balaban M & Marshall M. 2007. Effect of high pressure treatment on the quality of rainbow trout (*Oncorhynchus mykiss*) and mahi mahi (*Coryphaena hippurus*). *Journal of Food Science* 72(9):C509-C515
4. Yagiz Y, Balaban M, Kristinsson H, Welt B & Marshall M. 2009. Comparison of Minolta colorimeter and machine vision system in measuring colour of irradiated Atlantic salmon. *Journal of the Science of Food and Agriculture* 89(4):728-730.
5. Simonne AH, Fuzere JM, Simonne E, Hochmuth RC & Marshall MR. 2007. Effects of nitrogen rates on chemical composition of yellow grape tomato grown in a subtropical climate. *Journal of Plant Nutrition* 30(4-6):927-935.
6. Yagiz Y, Kristinsson H, Balaban M & Marshall M. 2007. Effect of high pressure treatment on the quality of rainbow trout (*Oncorhynchus mykiss*) and mahi mahi (*Coryphaena hippurus*). *JOURNAL OF FOOD SCIENCE* 72(9):C509-C515.
7. Boynton BB, Welt BA, Sims CA, Balaban MO, Brecht JK & Marshall MR. 2006. Effects of low-dose electron beam irradiation on respiration, microbiology, texture, color, and

sensory characteristics of fresh-cut cantaloupe stored in modified-atmosphere packages. *Journal of Food Science* 71(2):S149-S155.

8. Kincal D, Hill WS, Balaban M, Portier KM, Sims CA, Wei CI & Marshall MR. 2006. A continuous high-pressure carbon dioxide system for cloud and quality retention in orange juice. *Journal of Food Science* 71(6):C338-C344.
9. Simonne AH, Behe BK & Marshall MM. 2006. Consumers prefer low-priced and high-lycopene-content fresh-market tomatoes. *Horttechnology* 16(4):674-681.
10. Boynton BB, Welt BA, Sims CA, Brecht JK, Balaban MO & Marshall MR. 2005. Effects of low-dose electron beam irradiation on respiration, microbiology, color, and texture of fresh-cut cantaloupe. *Horttechnology* 15(4):802-807.
11. Kincal D, Hill WS, Balaban MO, Portier KM, Wei CI & Marshall MR. 2005. A continuous high pressure carbon dioxide system for microbial reduction in orange juice. *Journal of Food Science* 70(5):M249-M254.
12. Antoine FR, Wei CI, Otwell WS, Sims CA, Littell RC, Hogle AD & Marshall MR. 2004. Chemical analysis and sensory evaluation of mahi-mahi (*Coryphaena hippurus*) during chilled storage. *Journal of Food Protection* 67(10):2255-2262.
13. Chung HW, Hong JH, Kim MC, Marshall MR, Jeong Y & Han SB. 2004. Detection properties of irradiated ostrich meat by DNA comet assay and radiation-induced hydrocarbons. *Journal of Food Science* 69(5):C399-C403.
14. Simonne AH, Nille A, Evans K & Marshall MR, Jr. 2004. Ethnic food safety trends in the United States based on CDC foodborne illness data. *Food Protection Trends* 24(8):590-604.

BIOGRAPHICAL SKETCH

David M. Soderlund, Regional Director

PRESENT POSITION:

Professor and Chair
Department of Entomology
Cornell University
New York State Agricultural Experiment Station
Geneva, New York 14456

EDUCATION:

B.S.	Pacific Lutheran University	1971	Biology
Ph.D.	University of California at Berkeley	1976	Entomology

PROFESSIONAL EXPERIENCE:

1971-1976	NIH Graduate Trainee, University of California, Berkeley, CA
1976-1977	Postdoctoral Fellow, Rothamsted Experimental Station, Harpenden, U.K.
1978-1999	Assistant Professor (1978-1984), Associate Professor (1984-1992), and Professor (1992-1999), Department of Entomology, Cornell University, NYS Agricultural Experiment Station, Geneva, NY
1999-2007	Professor, Departments of Entomology and Food Science and Technology, and Director, Northeast IR-4 Program, Cornell University, NYS Agricultural Experiment Station, Geneva, NY
2007-	Professor and Chair, Department of Entomology, and Director, Northeast IR-4 Program, Cornell University, NYS Agricultural Experiment Station, Geneva, NY

HONORS, AWARDS, FELLOWSHIPS:

1967-1971	National Merit Scholarship
1971-1976	NIH Predoctoral Traineeship in Toxicology
1976-1977	Rockefeller Foundation Postdoctoral Fellowship
1979	Cornell University Traveling Fellowship
1990	Fullbright Grant-in-Aid (Declined)
1990	Pacific Lutheran University Centennial Alumnus
2001	Entomological Society of America Eastern Branch Distinguished Achievement Award in Insect Physiology, Biochemistry and Toxicology
2008	International Award for Research in Agrochemicals, American Chemical Society Division of Agrochemicals
2009	Paul A. Dahm Memorial Lecture in Entomology, Iowa State University

PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science
American Chemical Society
Entomological Society of America
Society for Neuroscience
Society of Toxicology

PUBLICATIONS (2004-PRESENT):

- Soderlund, D. M. 2004. Pyrethroids and sodium channels. In "Neurotox '03: Neurotoxicological Targets from Functional Genomics and Proteomics" (D. J. Beadle, I. R. Mellor and P. N. R. Usherwood, Eds.), Society of Chemical Industry, London, pp. 79-86.
- Choi, J.-S. and D. M. Soderlund. 2004. Cyclosporin A and deltamethrin block the downregulation of Na_v1.8 sodium channels expressed in *Xenopus* oocytes. *Neurosci. Lett.* **367**: 389-393.
- Silver, K. and D. M. Soderlund. 2004. Differential sensitivity of mammalian sodium channel isoforms to pyrazoline-type insecticides. *Soc. Neurosci. Abst.* **30**: 398.12. [Abstract]
- Silver, K. S. and D. M. Soderlund. 2005. Action of pyrazoline-type insecticides at neuronal target sites. *Pestic. Biochem. Physiol.* **81**: 136-143.
- Soderlund, D. M. 2005. Sodium channels. In "Comprehensive Molecular Insect Science" (L. I. Gilbert, K. Iatrou and S. S. Gill, Eds.), Elsevier, New York, Vol. 5, pp. 1-24.
- Silver, K. and D. M. Soderlund. 2005. State-dependent block of rat Na_v1.4 sodium channels expressed in *Xenopus* oocytes by pyrazoline-type insecticides. *NeuroToxicology* **26**: 397-406.
- Soderlund, D. M. and K. S. Silver. 2005. Actions of pyrazoline-type insecticides at the sodium channel local anesthetic receptor. *Soc. Neurosci. Abst.* **31**: 264.5. [Abstract]
- Choi, J.-S. and D. M. Soderlund. 2006. Structure-activity relationships for the action of 11 pyrethroid insecticides on rat Na_v1.8 sodium channels expressed in *Xenopus* oocytes. *Toxicol. Appl. Pharmacol.* **211**: 233-244.
- Silver, K. S. and D. M. Soderlund. 2006. Differential sensitivity of rat sodium channel isoforms to pyrazoline-type insecticides. *Toxicol. Appl. Pharmacol.* **214**: 209-217.
- Silver, K. S. and D. M. Soderlund. 2007. Point mutations at the local anesthetic receptor site modulate the state-dependent block of rat Na_v1.4 sodium channels by pyrazoline-type insecticides. *NeuroToxicology* **28**: 655-663.
- Soderlund, D. M. 2008. Pyrethroids, knockdown resistance and sodium channels. *Pest Manag. Sci.* **64**: 610-616.
- Yoon, K. S., Symington, S. B., Lee, S. H., Soderlund, D. M. and J. M. Clark. 2008. Three mutations identified in the voltage-sensitive sodium channel α -subunit gene of permethrin-resistant human head lice reduce the permethrin sensitivity of house fly Vssc1 sodium channels expressed in *Xenopus* oocytes. *Insect Biochem. Mol. Biol.* **38**: 296-306.
- Tan, J. and D. M. Soderlund. 2009. Human and rat Na_v1.3 voltage-gated sodium channels differ in inactivation properties and sensitivity to the pyrethroid insecticide tefluthrin. *NeuroToxicology* **30**: 81-89.
- Lee, S. H. and D. M. Soderlund. 2009. Cloning and maintenance of the housefly sodium channel gene using low copy number vector and two sequential host strains. *J. Asia-Pac. Entomol.* **12**: 51-53.
- Soderlund, D. M. 2009. State-dependent modification of voltage-gated sodium channels by pyrethroids. *Pestic. Biochem. Physiol.* (in press).
- Soderlund, D. M. 2009. Toxicology and mode of action of pyrethroid insecticides. In "Hayes' Handbook of Pesticide Toxicology, Third Edition" (R. I. Krieger, Ed.), Elsevier, New York (in press).
- Breckenridge, C. B., Holden, L., Sturgess, N., Weiner, M., Sheets, L., Sargent, D., Soderlund, D. M., Choi, J.-S., Symington, S., Clark, J. M., Burr, S. and D. Ray. 2009. Evidence for a separate

mechanism of toxicity for the Type I and Type II pyrethroid insecticides. *NeuroToxicology* (in press).

Knipple, D. C. and D. M. Soderlund. 2009. The ligand-gated chloride channel gene family of *Drosophila melanogaster*. *Pestic. Biochem. Physiol.* (in press).

He, B. and D. M. Soderlund. 2009. Human embryonic kidney (HEK293) cells express endogenous voltage-gated sodium currents and Na_v1.7 sodium channels. *Neurosci. Lett.* (submitted).

Curriculum Vitae

Marion G. Miller, Professor
Department of Environmental Toxicology
University of California
Davis, CA 95616

Education

B.Sc. Pharmacology (Hons.), 1976, Aberdeen University, Aberdeen, Scotland, UK
Ph.D. Pharmacology, 1982, Medical University of South Carolina, Charleston, SC
Post Doctoral, Pharmacology/Toxicology, 1983, Medical University of South Carolina, Charleston, SC
Postdoctoral Teaching/Research Assistant, 1984-85, Toxicology Unit, University of London, London, UK

Employment

1986-87 Visiting Assistant Professor, Department of Environmental Toxicology, University of California, Davis
1987-1992 Assistant Professor, Department of Environmental Toxicology, University of California, Davis
1992-1998 Associate Professor, Department of Environmental Toxicology, University of California, Davis
1997 Visiting Associate Professor, Department of Cell Biology and Anatomy, University of British Columbia
1998-2003 Professor and Chair, Department of Environmental Toxicology, University of California, Davis
2003-present Professor, Department of Environmental Toxicology, University of California, Davis

Administrative Titles

1998-2003 Chair, Department of Environmental Toxicology, University of California, Davis
2002-present Director, Western Region IR-4 Project (USDA): A National Agricultural Program to clear pest control agents for minor use crops
2002-present Associate Director, UC Toxic Substances Research and Teaching Program

Honors and Awards

Member (1994-2004) and Chair (2002-2003), Governor appointed Science Advisory Board for OEHHA (Office of Environmental Health Hazard Assessment), Cal EPA, Developmental and Reproductive Toxicant (DART) Identification Committee for the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
Member, Executive Committee (Junior and Senior Councilor) Reproductive and Developmental Toxicology Specialty Section, Society of Toxicology 1998-2000
Outstanding Mentor Award, Consortium for Women and Research, UC Davis, 2002
Member, K-12 Education Sub-Committee, Society of Toxicology, 2001-2004
Member (ad hoc) Special Emphasis Panel. Innovative Toxicology Models, National Cancer Institute, 4/04
Member (ad hoc) Integrative Clinical Endocrinology and Reproduction (ICER) NIH Study Section, 2/06
Member (ad hoc) Integrative Clinical Endocrinology and Reproduction (ICER) NIH Study Section, 6/07
Member, Editorial Board, Toxicology and Applied Pharmacology 2007-present

Selected Publication

Jewell, W.T., R.A. Hess, and M.G. Miller. 1998. Testicular toxicity of molinate in the rat: Metabolic activation via sulfoxidation. Toxicol. Appl. Pharmacol. 149: 159-166.

Jewell, W.T. and M.G. Miller. 1998. Identification of a carboxylesterase as the major protein bound by molinate.. Toxicol.

Appl. Pharmacol . **149**: 226-234

Jewell, W.T. and M.G. Miller. 1999. Comparison of human and rat metabolism of molinate in liver microsomes and slices.

Drug Metab Dispos. **27**: 842-7.

Berger, T., M.G. Miller, and C.M. Horner. 2000. In vitro fertilization following in vivo treatment of rats with three reproductive toxicants. *Reprod. Toxicol.* **14**: 45-53.

Jelks, K., T. Berger, C. Horner, and M.G. Miller. 2000. Alpha-Chloroethydrin-induced changes in sperm fertilizing ability in the rat: association with diminished sperm ATP levels and motility. *Reprod. Toxicol.* **15**: 11-20.

Gravance, C.G., D.L. Garner, M.G. Miller, and T. Berger. 2000. Fluorescent probes and flow cytometry to assess rat sperm integrity and mitochondrial function. *Reprod. Toxicol.* **15**: 5-10.

Winder, B.S., C.S. Strandgaard, and M.G. Miller. 2001. The role of GTP binding and microtubule associated proteins in the inhibition of microtubule assembly by carbendazim. *Toxicol. Sci.* **59**: 138-146

Correa, L.M., and M.G. Miller. 2001. Microtubule depolymerization in rat seminiferous epithelium is associated with diminished tyrosination of alpha tubulin. *Biol. Reprod.* **64**:1644-52.

Jelks, K., and M.G. Miller. 2001. Alpha-Chloroethydrin inhibits glyceraldehyde-3-phosphate dehydrogenase in multiple organs including sperm. *Toxicol. Sci.* **62**, 115-123.

Reeve, I.T., and M.G. Miller. 2002. 1,3-Dinitrobenzene metabolism and protein binding. *Chem. Res. in Toxicol.* **15**: 352-360.

Reeve, I.T., J.C. Voss and M.G. Miller. 2002. 1,3-Dinitrobenzene metabolism and glutathione depletion. *Chem. Res. in Toxicol.*, **15**: 361-6.

Correa, L.M., M. Nakai, C.S. Strandgaard, R.A. Hess, and M.G. Miller. 2002. Microtubules of the mouse testis exhibit differential sensitivity to the microtubule disruptors carbendazim and colchicine. *Toxicol. Sci.* **69**: 175-182

Nakai, M., M.G. Miller, K. Carnes, and R.A. Hess. 2002. Stage specific effects of the fungicide carbendazim on Sertoli cell microtubules in the rat testis. *Tissue & Cell.* **34**: 73-80.

Gravance, C.G., D.L. Garner, M.G. Miller, and T. Berger. 2003 Flow cytometric assessment of changes in rat sperm mitochondrial function after treatment with pentachlorophenol. *Toxicol. in Vitro.* **17**: 253-7.

DuTeaux, S.B., M.J. Hengel, D.E. DeGroot, K.A. Jelks, M.G. Miller. 2003 Evidence for trichloroethylene bioactivation and adduct formation in the rat epididymis and efferent ducts. *Biol. Reprod.* **69**: 771-9.

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Current Research Support

T32 ESO 7059 (Rice)	7/1/08-6/30/13	0.3 calendar
NIH/NIEHS Training Grant in Environmental Toxicology. Dr Miller is one of 20 training grant faculty. This grant provides support for graduate student training in Environmental Toxicology.		
T35 ESO07301 (Miller)	4/1/05-3/31/09	1.2 calendar
NIH/NIEHS Minority Short-Term Training in Environmental Toxicology. This grant provides support for a summer undergraduate research program in Environmental Toxicology for under represented groups		
1R25 ESO 16249 (Miller)	11/1/07-10/31/12	0.3 calendar
NIH/NIEHS Short Term Educational Experiences for Research (STEER) Training in Environmental Health Sciences at UC Davis. This grant provides support for a summer research program for outstanding undergraduate students.		
IR-4 (Miller)	4/1/04-3/31/09	1.8 calendar
CSREES/USDA	\$2,400,000	
Western Region IR-4 Program to support a field research program and pesticide analytical laboratory		
000 (Aldana)	9/1/07-8/31/09	0.6 calendar
UC Mexus		
Research on pesticide residues of Mexico's food		
1R01 ESO 1409 (K Hammond, UC Berkeley)	4/1/08-3/31/12	0.3 calendar
NIH/NIOSH		
Neurologic and Reproductive Effects of Hexane on Workers. Dr Miller's role as a co-investigator on this grant is to assist the PI and other members of the research team in the component of the work that deals with reproductive effects.		

PAUL H. SCHWARTZ

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Education/Training

University of Maryland, College Park	B. Sc 1959	Entomology
University of Maryland, College Park	M. Sc 1961	Entomology
University of Florida, Gainesville	Ph.D. 1964	Entomology

Research and Professional Experience

1961-1964	Medical Entomologist, ARS, Gainesville, FL
1964-1965	Medical Entomologist, U.S. Public Health Service, Atlanta, GA
1965-1969	Research Entomologist, ARS, Moorestown, NJ
1969-1971	Assistant to Branch Chief, Fruit Insects, ARS, Beltsville, MD
1971-1972	Assistant to Director, ARS, Entomol. Res. Div., Beltsville, MD
1972-1973	Staff Specialist, ARS, NPS, Beltsville, MD
1973-1982	National Research Program Leader, ARS, NPS, Beltsville, MD
1983-1986	Chair, IR-4 Technical Committee
1991-1997	Chair, IR-4 Technical Committee
1976-pres	Technical Committee/Project Management Committee of IR-4
1976-pres	Coordinator, ARS Minor Use Pesticide Program
1983-pres	Staff Scientist, ARS, BARC, NRI/ANRI, Beltsville, MD

Honors

1982	Science and Education Directors Award
1994	IR-4 Administrative Advisors Special Award for Excellence
1996	Secretary's Group Honor Award, U.S. Department of Agriculture
1997	IR-4 Award of Special Recognition
2009	IR-4 Award of Appreciation

Membership in Professional and Scholarly Societies

Entomology Society of America (past)

Teaching/Training

GLP Inspection of Field Studies, Organization of Economic Cooperation and Development
1994

Research Interests. After 9 years in research I was invited to join the management team of the Entomology Research Division of ARS led by the late E. F. Knipling. For 40 years I have been involved in the management of ARS research programs with the last 33 years primarily focused on the IR-4 program.

Publications

Career total of 44 + 1 patent

IR-4 LEADERSHIP

Project Management Committee (PMC):

Dr. Jerry J. Baron, IR-4 Project Headquarters – IR-4 Project Executive Director
Dr. Douglas Buhler, Michigan State University – Administrative Advisor, North Central Region
Dr. Mary Duryea, University of Florida - Administrative Advisor, Southern Region
Dr. Robert Hollingworth, Michigan State University – Regional Director, North Central Region
Dr. Monte Johnson, USDA-CSREES
Mr. Rocky Lundy, Mint Industry Research Council – Commodity Liaison Committee Chair
Dr. Maurice Marshall, University of Florida - Regional Director, Southern Region & PMC Chair
Dr. Marion Miller, University of California, Davis - Regional Director, Western Region
Dr. Michael Parrella, University of California, Davis - Administrative Advisor, Western Region
Dr. Mark Robson, Rutgers University - Administrative Advisor, Northeast Region
Dr. Sally Schneider, USDA-ARS - Administrative Advisor, ARS
Dr. Paul Schwartz, Jr. USDA-ARS – Director Minor Use Program
Dr. David Soderlund, Cornell University - Regional Director, Northeast Region

IR-4 Commodity Liaison Committee (CLC).

Dr. Michael Aerts, Florida Fruit and Vegetable Association
Mr. Mark Arney, Nat'l Watermelon Promotion Board
Mr. Kirk Baumann, Ginseng Board of Wisconsin
Dr. Lori Berger, California Specialty Crops Council
Dr. Michael Bledsoe, Village Farms, L.P.
Dr. A. Richard Bonanno, Bonanno Farm Trust
Mr. Bruce Buurma, Buurma Farms Inc.
Mr. James R. Cranney, California Citrus Quality Council
Dr. Thomas G. Davenport, National Grape Cooperative
Dr. Brian R. Flood, Del Monte USA
Mrs. Ann E. George, Washington Hop Commission
Mr. Hank Giclas, Western Growers Association
Mr. John Keeling, National Potato Council
Mr. Phil Korson, Cherry Marketing Institute
Mr. Rocky Lundy, Mint Industry Research Council
Mr. Eric Maurer, Cheminova, Inc.
Mr. Reed Olszack, Tropical Fruit Growers of South Florida Inc.
Ms. Laura Phelps, American Mushroom Institute
Mr. Ray Ratto, Ratto Brothers
Ms. Lin Schmale, Society of American Florists
Mr. Todd Scholz, USA Dry Pea & Lentil Council
Dr. Alan Schreiber, Agriculture Development Group, Inc.
Dr. Marc Tefteau, American Nursery and Landscape Assoc.
Mr. Dave Trink, MBG Marketing

IR-4 Project Headquarters (HQ)

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Ms. Tammy W. Barkalow – Assistant Director, Quality Assurance
Mr. Bill Barney – Manager, Crop Grouping
Dr. Jerry J. Baron – Executive Director
Dr. Michael P. Braverman – Manager, Biopesticides and Organic Support Program
Ms. Uta Burke – Administrative Support
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Ms. Sherri Nagahiro – Business Manager
Ms. Sherri Novack – Manager, Communications and Outreach
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Ms. Karen Sims – Administrative Support
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Ms. Rebecca Sisco, University of California, Davis – Western Region

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Additional Technical Staff

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State and Federal IR-4 Liaisons Representatives

Northcentral Region

Dr. K. Al-Khatib	KS (Food Crops)
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Dr.	D.	Yarborough	ME

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