

Milton E. Tignor, Jr. (Buddy), Ph.D.

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ACADEMIC HISTORY

- Ph.D. 1997 Horticultural Science.** University of Florida. *Dissertation Title: Irrigation, Nutrition, and Evaluation of Advanced Breeding Lines to Improve Freeze Hardiness of Citrus.*
- M.S. 1992 Horticultural Science.** Virginia Polytechnic Institute and State University. *Thesis Title: The Effects of Exogenous Application of Abscissic Acid and α,α -Dipyridyl on Cold Acclimation and Physical Characteristics of Pisum sativum 'Alaska' Seedlings.*
- B.S. 1990 Horticultural Science.** Virginia Polytechnic Institute and State University.

PROFESSIONAL EXPERIENCE

March 2000-present: Assistant Professor of Horticulture. Plant and Soil Science Department. University of Vermont. (70% General Fund Appointment / 30% Agricultural Experiment Station; 9 month-full time appointment): Primary research responsibility is fresh vegetable production. Teaching responsibilities will include principles of plant science, vegetable crops, and greenhouse and nursery production.

March 1998-February 2000: Assistant Professor and Undergraduate Coordinator in the Department of Horticultural Sciences at the University of Florida. (70% Teaching / 30% Research); Primary research responsibility was citrus. Teaching responsibilities included citrus, subtropical and tropical fruits.

July 1997- March 1998: Postdoctoral Researcher for the School of Forest Resources and Conservation at the University of Florida, Gainesville. Worked for the DGIFT Consortium hunting for resistance genes to Pitch canker in Pines. Taught a portion of one course for the department.

August 1993-August 1997: Graduate Teaching Assistant for Dr. Fred Davies at the University of Florida, Gainesville. Aided in teaching two citrus courses.

September 1990-September 1992: Graduate Teaching Assistant for Dr. Alex Niemera at Virginia Polytechnic Institute and State University, Blacksburg, VA. Taught Woody Plant Materials Identification Laboratory.

Courses Taught:

PSS 011 Principles of Plant Science	FRC 3252 Tropical and Subtropical Fruits
PSS 124 Vegetable 'Fruit Crops'	FRC 3212 Introduction to Citrus Culture
PSS 126 Vegetable 'Root' Crops	FRC 4905 The Wonderful World of Citrus
PSS 127 Greenhouse Operations and Management	ORH 4932 South Florida Flora and Ecosystems
PSS 195 Postharvest Physiology	FRC 3342C Tree Biology (co-taught)
PSS 197 Principles of Plant Science Laboratory	HORT 3325 Woody Landscape Plants I (Lab only)
PSS 301 Plant Science Colloquium	HORT 3326 Woody Landscape Plants II (Lab only)

STUDENT ACADEMIC ADVISEMENT

UVM: Currently, I advise 18 undergraduate students (8 PSS majors, 4 SLH majors, and 2 UFLH majors and 2 PSS minors) and 1 graduate student. I also serve as a committee member or chairperson for 4 additional graduate students. I request meetings with undergraduates at least once a semester and always make time in my schedule for additional advising appointments. Participate regularly, including summers, in Admitted Student Visitations where prospective students are given tours of PSS facilities and course information. I also meet with my graduate students weekly and work with them to carefully manage their research and academic efforts.

UF: 53 students enrolled in undergraduate courses. I had responsibility for the students in the Horticultural Sciences Major. In addition, 342 students have contacted the program about potentially joining the student body and over half of those came in for counseling sessions. As a branch campus providing upper-division courses we advised students at all levels from high school and community college to transfer students from other 4-year institutions.

STUDENT RESEARCH ADVISEMENT

GRADUATE STUDENTS:

Advisor

Sandra Menasha. 2002-2004. M.S. PSS. Optimizing transplant plug size and media selection to maximize sweet corn profits for New England growers.

Nathaniel Sands. 2001-2003. M.S. PSS. Evaluating genotypes and compost amendment strategies to improve solanaceous crop yield. *Completed.* Currently, Nate is running his own landscape business and is an adjunct faculty member at Vermont Technical College teaching soils.

Meredith Dunker. 2000. PSS. M.S. *Resigned* to explore other academic opportunities. She completed a M.Ed. and now works in New York City as a Biology/Agriculture High School Teacher.

Committee Member (* served as chairperson)

Kwabena Osei.* 2003-2005. CEE. M.S. Modeling flow in subsurface constructed wetlands.

Thomas DiPietro. 2002-2004. PSS. M.S. Effects of aeration on the root architecture of emergent wetland plants utilized for remediation of agriculturally impacted wastewater.

Adam Wheeler. 2002-2004. PSS. M.S. Novel grafting technique to improve the salt tolerance of sugar maple.

Augusta Krahl.* 2001-2004. NFS. M.S. Food Safety and Regulation: Development of an online multimedia course. *Completed.*

David Whitney.* 2000-2002. CEE. M.S. The effect of aeration on the treatment of organic and nitrogen compounds in a laboratory-scale constructed wetland system. *Completed.*

Andrea Porter.* 1999-2001. CEE. M.S. Processes affecting the fate of nonylphenol during wastewater treatment. *Completed.*

Other

Appointed to the Graduate Faculty in the Department of Plant and Soil Sciences (UVM). 2000.

Appointed to Graduate Faculty in the Department of Horticultural Sciences. 1999.

UNDERGRADUATE STUDENTS:

Daniel Elmowitz. 2003. Development of a rapid plant screening technique for subsurface constructed wetlands. HELIX funded project.

Sarah-Rose Cameron. 2003. Teaching Internship with Brown's River Middle School covered Floriculture in South America to supplement the student's geography module.

Jennifer Davison. 2002. Worked on teaching behaviorally challenged teenagers gardening.

Yarrow Collins. 2002. A comparison of locally produced potting mixes and their effectiveness with pepper and tomato germination and seedling stages. (co-advised with Harper and Starrett)

Christopher Baker. 2002. Effects of media sterilization and fertilizer origin on whitefly and thrips populations in a glasshouse.

Joseph Ibrahim. 2002. Effects of organic soil and compost on greenhouse tomato growth and C:N media ratio.

Daniel Fitzsimons. 2001-2002. Irrigation scheduling effects on frequency of Blossom-end Rot of greenhouse tomato.

Lhakpa Tsering and Thudop Dorjee. 2000-2001. Intervale Community Supported Agriculture Internship. *Review of sustainable agriculture practices to be taken back to Tibetan resettlements in Northern India.* Sponsored by the UVM Center for Sustainable Agriculture.

Steffanie Borst. 2000-2001. The Market Garden at Shelburne Farms. Project on postharvest storage quality of carrots. Sponsored by the UVM Center for Sustainable Agriculture.

Julia K. Moore. 2000. Summer 2000 Internship with Common Ground. *Covered field practices and economics.* Sponsored by the UVM Center for Sustainable Agriculture.

STUDENT EXTRACURRICULAR ADVISEMENT

Co-advisor. Common Ground Student Run Horticulture Farm. 2000-present. Serve as resource for approximately 15 students that are heavily involved in the organic production of vegetables on a student managed farm at the Horticulture Research and Education Center in South Burlington. For many students this is their first and only hands-on agricultural production experience during their undergraduate careers. Students operate the farm as a CSA and donate all remaining food to either the Salvation Army Food Shelf or the Chittenden County Emergency Food Shelf (approx. 6000 lbs, 19,000 lbs, and 16,000 lbs in 2000, 2001, and 2002 respectively). Gave tours of the student run farm to distinguished visitors including Ross A. Virginia, Ph.D. (Professor, Dartmouth) Ron Sonoda, Ph.D. (Professor Emeritus, UF), Tulio Goncalves de Melo (Agronomist, EMBRAPA, Brazil), and Duangpom Suwanagul, Ph.D. (Assistant Professor, Kasetsart University; Bangkok, Thailand). Developed new tractor safety training session for undergraduate students with assistance from David Heleba.

RECRUITMENT

The teaching program at the Indian River Research and Education Center was established in 1998. Therefore, approximately 10% of my appointment was spent on recruiting activities. I managed the initial \$30,000 media campaign and made numerous public appearances promoting the teaching program.

FORMAL EDUCATION STUDIES

Completed graduate level courses in Educational Sociology, University and College Teaching, and Learning Psychology and a semester-long teaching workshop as a Ph.D. candidate at the University of Florida.

CONTINUED EDUCATION TRAINING

Writing and Drawing to Improve Comprehension (CTL Workshop with CEE faculty). May 12th, 2003.

Writing and Learning Across the Curriculum (CTL Workshop). January 6th-7th, 2003.

11th Northeast Regional Teaching Workshop. September 26-28th, 2002. Amherst, Mass.

UVM President's Leadership Series. May 20th-June 5th, 2002. (nominated participant)

New England Vegetable and Berry Growers Association Conference. December 11th-13th, 2001. Sturbridge, MA.

Vermont Vegetable and Berry Growers Board of Directors' Meeting. December 6th, 2001. Barre, VT.

Northeastern Regional Workshop on USDA-CSREES Competitive Grants Program. October 18th, 2001. Syracuse, New York.

Helping Yourself to Tenure (Faculty Mentoring Program Workshop). April 13th, 2001.

Show Me the Money: How to find internal funding for faculty efforts at UVM. (Faculty Mentoring Program Workshop). March 29th, 2001.

Demonstration of the New PBS Videodatabase (CTL Workshop). November 3, 2000

Dinner Conversations About Teaching (CTL Workshop). October 24, 2000
 Northeast Regional Teaching Workshop. October 5-7, 2000 North Brunswick, NJ.
 Professional Development Tour of Organic Farms. September 14, 2000.
 Orientation to Teaching Resources on the UVM Campus and the Center for Teaching and Learning.
 August 24, 2000.
 CALS Advising Workshop for New Faculty. August 23, 2000.
 Critical Thinking for the New Century Workshop. May 17-18, 2000. University of Vermont.
 WEBCT Workshop March 20, 21st, 2000. University of Vermont.
 Southern Teaching Improvement Symposium. October 1999.
 Teaching and Learning Online Workshop. 1998. University Center for Excellence In Teaching at UF

PUBLICATIONS

(refereed)

- Tignor, M.E., S.B. Wilson, and P.C. Wilson. 2002. Development of an undergraduate plant science course promoting environmental awareness, native flora and critical thinking skills. *NACTA J.* 46(1):26-32.
- Davis, J.M., H. WU, M.E. Tignor. 1999. Inducible defense responses: mechanisms of general aggressor perception are conserved in plants. *Institute National de la Recherche Agronomique (INRA)*.
- Tignor, M.E., F.S. Davies, and W.B. Sherman. 1998. Freezing tolerance and growth characteristics of USDA intergeneric citrus hybrids 'US 119' and selection 17-11. *HortScience*. 33(4):744-748.
- Tignor, M.E., F.S. Davies, W.B. Sherman, and J.M. Davis. 1997. Rapid freeze acclimation of *Poncirus trifoliata* seedlings exposed to 10C and long days. *HortScience*. 32:854-857.

(In review)

- Whitney, D. N. Hayden,, W. Hession, and M. Tignor. 2003. Effects of supplemental aeration on dairy wastewater treatment efficiency in laboratory-scale subsurface flow constructed wetlands. *J. Eco. Eng.*

(scientific proceedings)

- Whitney, D., N.J. Hayden, W.C. Hession, and M. Tignor. 2002. Developing a constructed wetland center at the University of Vermont. In: *Wetlands and Remediation II: Proceedings of the Second International Conference on Wetlands and Remediation*. Eds. Nehring and Brauning. Battelle Press. Columbus, OH.
- Tignor, M.E. and S.B. Wilson. 1999. Sowing the seeds of a new horticulture sciences teaching program. *Proc. Fla. State Hort. Soc.* 112:255-260.
- Tignor, M.E., F.S. Davies, and W.B. Sherman. 1998. Irrigation and nutrient application frequency effects on freeze hardiness and growth of 'Hamlin' orange trees in Florida. *Proc. Fla. State Hort. Soc.* 111:121-125. Also presented at meeting.
- Davies, F.S., M.E. Tignor, and L. Mathers. 1996. Irrigation and fertilization of young interset 'Hamlin' orange trees in Florida. *Proc. Fla. State Hort. Soc.* 109:77-80. Also presented at meeting.

(book chapters)

Tignor, M.E. 2003. Chapter 3: Laboratory exercise "holistic thought process for the design of a mist/fog/cutting/seed propagation facilities." To be published in: Plant Propagation Concepts And Laboratory Exercises. By CRC Press. (*Submitted* to editors Preece, Beyl, and Trigiano on 8/1/2003).

EXTENSION PUBLICATIONS

Tignor, M.E. 2001. Roses are red, Some of our potatoes were blue, we grew some weird tomatoes this summer and so should you!. Friends of the Horticulture Farm Newsletter. November/December.

Tignor, M.E. 2001. Vegetable Medley: and update. Friends of the Horticulture Farm Newsletter. September/October 2001.

Tignor, M.E. and M. Dunker. 2000. Vegetable Medley. Friends of the Horticulture Farm Newsletter. July

Appelton, B., M.E. Tignor, R. Sorenson. 1992. Selecting trees to minimize yardwaste. The Virginia Gardener Newsletter. 11(9):1.

RESEARCH COMMUNICATIONS

Sands, N., D. Heleba, and M. Tignor. 2002. Effects of a single addition of compost on potato yields when nitrogen and plant available water are not limiting. Proceedings of XXVIth International Horticultural Congress:105.

Sands, N., D. Heleba, and M. Tignor. 2002. Marketable yield evaluation of eleven heirloom tomato varieties. Proceedings of XXVIth International Horticultural Congress:535-536.

Tignor, M. 2002. Heirloom tomato variety trials: findings and reflections from year 2. Presented at Vermont Vegetable and Berry Grower's Association Annual Meeting. February 19th, 2002.

Sands, N. and M. Tignor. 2002. Effect of a single compost amendment at three different rates on yield and water use by potato. Presented at Vermont Vegetable and Berry Grower's Association Annual Meeting. February 19th, 2002.

Tignor, M. 2002. Implementation of subsurface constructed wetlands to treat dairy farm stormwater runoff at the University of Vermont. PSS Seminar Series. November 13th.

Hayden, N. W.C. Hession, M. Tignor, and D. Whitney. 2001. Developing a constructed wetland at the University of Vermont. Wetlands & Remediation: Second International Conference. Burlington, VT (September 5-6).

Dunker, M., D. Heleba, N. Sands, and M.E. Tignor. 2001. Preliminary evaluation of five heirloom tomato cultivars for fresh market production in New England. American Society of Horticultural Sciences Annual Meeting. HortScience. 36(3):537.

Wilson, S.B., P.C. Wilson, and M.E. Tignor. 2001. Germination of potentially invasive ornamental plants under varying conditions. American Society of Horticultural Sciences Annual Meeting. HortScience. 36(3):556.

- Wilson, S.B., P.C. Wilson, and M.E. Tignor. 2001. Assessment of germination, nutrient uptake and photosynthetic efficiency for evaluating the potential invasiveness of *Ruellia brittoniana*. 2001 Annual Meeting of the Florida State Horticultural Society. Hutchinson, Island, FL. (June 10-June 12). Presentation of paper in proceedings.
- Tignor, M.E. 2001. The rebirth of vegetable crops teaching and research at UVM. 2001 Vermont Vegetable and Berry Growers Association Annual Meeting. Rutland, VT. (February 13).
- Tignor, M.E. and P.J. Stoffella. 2000. Computer root image analysis of citrus rootstock seedlings. *HortScience*. 35(3):499.
- Davis, J., G. Blakeslee, M. Tignor, S. Luce, L. La Russa, and C. Michler. 1998. An approach to identify slash pine genes associated with tolerance to pitch canker disease. *Proc. IMPACT*. Monterey. Asilomar, CA. (Nov. 31-Dec. 2).
- Tignor, M.E., J.M. Davis, F.S. Davies, and W.B. Sherman. 1996. Changes in freezing tolerance, water potential, and gene expression of *Poncirus trifoliata* 'Rubidoux' seedlings exposed to acclimating low temperatures and long days. *HortScience*. 31(4):580.
- Tignor, M.E. and C.A. Weber. 1996. Effects of hydrating, boiling, acid scarification, and seed coat removal on emergence of *Citrus* sp., *Poncirus trifoliata*, and citrange seeds. *HortScience*. 31(4):633.
- Davies, F.S., M.E. Tignor*, and L.A. Mathers. 1996. Irrigation and fertilization of young interset 'Hamlin' orange trees in Florida. FSHS. Proceedings supplement 109:21.
- Tignor, M.E., F.S. Davies, and W.B. Sherman. 1995. Irrigation scheduling, nutrient application frequency, and freezing acclimation of 'Hamlin' orange trees in Florida. *HortScience*. 30:848.
- Tignor, M.E., F.S. Davies, and W.B. Sherman. 1995. Freezing tolerance of citrus hybrids USDA 17-11 and USDA 119 as compared to 'Hamlin' orange and Satsuma mandarin. *HortScience*. 30:795.
- Tignor, M.E. and R.L. Weiser. 1992. Responses of 'Alaska' pea seedlings to freezing stresses after the addition of α,α dipyrilidil, an extensin hydroxylation inhibitor. *Plant Physiology*. 99(1):127.
- Tignor, M.E. and R.L. Weiser. 1992. The effects of the interaction between light and exogenous abscisic acid on cold acclimation of 'Alaska' pea seedlings. *HortScience*. 27:685.
- Tignor, M.E. and R.L. Weiser. 1991. Response of 'Alaska' pea seedlings to freezing and chilling stresses after the exogenous application of abscisic acid. *HortScience*. 26:737.

TEACHING COMMUNICATIONS

- Stover, E., Tignor, M., Timmer, P. Overview of citrus culture. Invited Presentation to the Bermuda Fruit Growers' Association, June, 2002, Hamilton, Bermuda.
- Tignor, M. 2002. Technology for Teaching. Part of the 2002 CTL Lunchtime faculty workshop series.

- Tignor, M. 2002. Presented constructed wetlands project background to Don Ross' Soil Water Pollution class.
- Tignor, M.E. and M. Starrett. 2001. Using WebCT as a 'traditional' course supplement to enhance student learning, test competency efficiently, and obtain comprehensive student evaluations. *HortScience*. 36(3):447.
- Sands, N. W.S. Harper, and M.E. Tignor. 2001. Using a student managed vegetable farm as an alternative learning experience to benefit students and the local community. *HortScience*. 36(3):513.
- Tignor, M.E., N. Sands, D. Heleba, and Adam Wheeler. 2001. Vegetable Teaching and Research at the University of Vermont & Heirloom Vegetable Demonstration Garden Review. Friends of the Horticulture Farm. 6-7:30 pm. September 13.
- Tignor, M.E. 2001. PSS Teaching Program Review. Presented to Jericho Underhill Parks District Board of Directors. July 18th.
- Tignor, M.E. 2001. Heirloom vegetable treasures. 2001 Vermont Flower Show. Burlington, VT. (March 2-4).
- Tignor, M.E. 2001. Heirloom vegetables: An amalgam of nostalgia and horticulture. 2001 Friends of the Horticulture Farm Seminar Series. So. Burlington, VT. (February 22).
- Tignor, M.E. 2001. GMO news and information: separating the wheat from the chaff. Commercial Field and Forage Pesticide Applicators Training. Randolph, VT (January 17).
- Tignor, M.E. 2001. Communicating to students with syllabi and using WebCT as a course supplement. Lessons from Seventy-Five Years of Teaching Experience. CALS Teaching Workshop hosted by participants in the 2000 Northeast Regional Teaching Conference (T. Patterson, G. Olivetti, J. Petrillo, and J. Leonard)(January 12).
- Tignor, M.E. 2001. Maximizing lecture time and learning by using the Internet as a student resource and evaluation tool. Orientation to teaching resources on the UVM Campus and The Center for Teaching and Learning. August 24, 2000.
- Tignor, M.E. 2000. Plant Growth Factors Relevant to Phytoremediation. Invited Guest Lecture (2 hours). CE 256 Biological Processes for Water and Wastewater Treatment. November 27th.
- Wilson, S.B., Tignor, M.E. and E.M. Lamb. 1999. Sowing the seeds of a new horticultural sciences teaching program. *Proc. Fla. State Hort. Soc.*
- Tignor, M.E. and E.M. Lamb. 1999. De Novo synthesis of a horticulture teaching program. *HortScience*. 34(3):519.

MISCELLANEOUS REPORTS, SEMINAR SERIES, and CREATIVE WORKS

- Wilson, S.B. (editor), M.Thetford, D.G. Clark, F.T. Davies, B. Dehgan, G.A. Giacomelli, M.E. Kane, K.A. Klock-Moore, S.M. Scheiber, R.K. Schoellhorn, M.E. Tignor, W.A. Vendrame, and J.F. Williamson.

2002. Principles and Practices of Plant Propagation CD (PLS 3221/5221), Institute of Food and Agricultural Sciences, University of Florida.
- Tignor, M. 2002. Faculty participant in interviews used in the development of a new web resource for New Faculty at the University of Vermont. <http://ctl.uvm.edu/nfo/tignor.html>
- Tignor, M. 2002. Development of an On-Line Modular Review Covering Basic Plant Science Principles. Final Report Submitted to the Center for Teaching and Learning.
- Tignor, M.E., S. Thornsberry, D. Tucker, and M. Ritenour. 1999. Citrus Training Session. Heron's Glen: Fort Myers, FL. 174 pp. Completed using Microsoft PowerPoint
- Thornsberry, S. and M.E. Tignor. 1999. "Grapefruit on the Go":10 minute animated PowerPoint presentation; covering grapefruit export worldwide; presented to the public at the 1999 Grapefruit Festival. Fort Pierce, FL.
- Tignor, M.E. 1999. Beginning HTML Skills. Presented to faculty and staff. Fort Pierce, FL.
- Tignor, M.E. and L.G. Albrigo. 1999. Citrus Teaching Programs. Statewide Overview Document Presented to the Vice President and Deans for the College of Agriculture. 5 pp.

ACKNOWLEDGEMENTS FOR ASSISTANCE:

- Klock-Moore, K.A., Fitzpatrick, G.E. and R.K. Schoelhorn. 2000. Development of a bachelor of science degree program in horticulture at the University of Florida for place-bound students. HortTechnology. 10(2):390-393.
- Jackson, L. and F.S. Davies. 1999. Citrus Growing in Florida. University of Florida Press:Gainesville. 299 pgs.

PENDING PROPOSALS

- Tignor, M. 2003. Long-term compost amendment study for Vegetable Production Research Education and Outreach. SARE (\$136,000) pre-proposal approved (only 60 of 210 research pre-proposals selected).

FUNDED PROPOSALS

- Tignor, M., G. Giacomelli, T. Irani, M. McMahon, S. Wilson. 2003. Multimedia instrument for worldwide greenhouse education. USDA Higher Education Challenge Grant. Multi-state proposal: UVM (lead institution, University of Arizona, Ohio State University, and the University of Florida. (\$247,563).
- Tignor, M. 2003. Dairy manure compost effects on root architecture and growth of vegetables. Competitive USDA Hatch Funds. (\$20,000).
- Hession, W.C., M. Tignor, and N. Hayden. 2002. Demonstration/Research Constructed Wetland to Treat Dairy Wastes. Lake Champlain Basin Project. (\$58,000).

- Tignor, M.E. 2001. Heirloom Vegetable Garden for Public and Grower Education: *Renewal*. The Friends of the Horticulture Farm. (\$600).
- Tignor, M.E. 2001. Development of an on-line modular review covering basic plant science principles. Instructional Incentive Grants (Center for Teaching and Learning). (\$4,700) requested.
- Tignor, M.E. 2000-2003. Optimization of irrigation efficiency in the Vermont vegetable industry. Competitive Hatch Funds. (\$48,000).
- Tignor, M.E. 2001. Heirloom Vegetable Garden for Public and Grower Education. The Friends of the Horticulture Farm. (\$1,325).
- Wilson, S.B., Wilson, P.C., and M.E. Tignor. 2000-2001. Development Of Screening Protocols for Evaluating the Potential Invasiveness of New Ornamental Species to the Florida Landscape. Florida Department of Environmental Protection. (\$24,264.86) see website I created and maintained for the project: <http://www.uvm.edu/~pass/tignor/IPWeb/index.htm>
- Tignor, M.E. Minigrant For The Improvement of Instruction. 1999. College of Agriculture. University of Florida. (\$2,460)
- Tignor, M.E. and M. Ritenour. 1998-2000. Development of a Central Internet Resource For Citrus Information. Florida Citrus Production Research Advisory Council. (\$7,500). See website I helped to create (work in progress): <http://www.fcprac.ifas.ufl.edu>
- Boman, B. and M. E. Tignor. 1998-2000. Detecting and Managing Water Stress in Flatwoods Citrus. Florida Citrus Production Research Advisory Council (\$34,000)
- Tignor, M. E. and R. L. Weiser. 1991. Testing the effectiveness of cryoban in eliciting cold acclimation of peas. Submitted to and funded by Great Lakes Chemical Corporation and QO Chemicals. (\$5,300).

PROPOSALS SUBMITTED (not funded)

- Hession, W.C., T. Lewis, D. Rizzo, and M. Tignor. 2003. Correlation of wastewater treatment efficiency, Plant-Root Architecture, and Microbial Ecology to Measurement of Subsurface Flow Constructed Wetland Redox Potential. NSF. (356,961).
- Whitney, D., S. Wallace, W.C. Hession, and M. Tignor. 2003. Optimization model for aerated subsurface flow constructed wetlands. NSF (\$100,000)
- Hession, W.C., T. Lewis, D. Rizzo, and M. Tignor. 2003. Correlation of wastewater treatment efficiency, plant root architecture, and microbial ecology to measurement of subsurface flow constructed wetland redox potential. NSF (\$356,961)
- Tignor, M.E. 2002-2004. Effects of Organic Soil Management Practices on Microbial Populations and Vegetable Growth Development and Yield. USDA. NRI. Managed Ecosystems Seed Grant. (\$74,722)

- Tignor, M.E. and W. Jokela. 2003. An alternative treatment solution for a main~~stream~~ problem: further characterization and demonstration of a subsurface constructed wetlands treatment of barnyard water runoff and milkhouse waste. VIRECA *pre-proposal*. Review relatively favorable, but too heavy on research and not enough direct extension application, not enough research had been conducted to correct this.
- Hayden, N.J., and M.E. Tignor. 2001-2004. Holistic approach to understanding rhizosphere enhanced degradation using TNT and Naphthalene as model contaminants. Submitted September 17th to DoDEpscor. (\$301,526)
- Hayden, N.J., M.E. Tignor, C.M. Reynolds, and D. Ringelberg. 2001-2004. Holistic approach to understanding rhizosphere enhanced degradation using nonylphenoethoxylate and naphthalene as model contaminants. 2001-START-C1; USEPA, DOD, DOE. \$449,456 requested.
- Olivetti, G., M.Tignor, and P. Lintilhac. 2001-2003. Holistic approach to integrate basic and applied plant science into a dynamic agricultural curriculum. Higher Education Challenge Grant. USDA/CSREES. \$99,175.
- Grubinger, V.P., Schneider, K.A., and M.E. Tignor. 2000. Assessing and reducing microbial contamination in Vermont vegetables. Vermont Integrated Research and Extension Competitive Awards. (\$59,420.04). VIRECA funds.
- Tignor, M.E. 1999. Bioindication and Bioremediation of Copper and Excess Nitrate from Citrus Groves. St. Lucie River Issue Team. (\$250,000) FL Legislature.
- Tignor, M.E., Wilson, P.C., and S.B. Wilson. 1999. Development of a Water Purification System for Ornamental Production Nurseries. Horticultural Research Institute. (\$14,000). HRI Funds.
- Wilson, S.B., Wilson, P.C. and M.E. Tignor. 1999. Framework for Investigation the Potential Invasiveness of New Ornamental Plant Species Before Introduction Into the Landscape. Horticultural Research Institute. (\$7,280) HRI Funds.
- Tignor, M.E., Wilson, C., Wilson, S. and C. O'Brien. 1999. Bioindication and Bioremediation of Agrochemicals from Agricultural and Urban Areas. Legislative Delegation. (\$500,000)
- Ritenour, M. and Tignor, M.E. 1999. Developing Management Tools To Limit 'Sheepnosing' in Citrus. Florida Citrus Production Research Advisory Council. (\$15,000) FCPRAC.
- Tignor, M.E., Stover, E., Castle, W., Garnsey, S., Bowman, K. and J. Chaparro. 1999. Is Your 'Swingle' Citrumelo Rootstock Really 'Swingle' Citrumelo?. Florida Citrus Production Research Advisory Council (\$15,000). FCPRAC.

FUNDED GRADUATE STUDENT PROPOSALS – I encourage all of my graduate students to submit proposals while in my program. Even when monetarily small, awards boost student confidence. Regardless of success, the students understand the necessity of competitive funding for research.

DiPietro, T.J. 2003. The effects of aeration and dairy milkhouse rinsate on the growth and development of wetland plants. Society of Wetland Scientists (\$500).

Menasha, S. 2003. Effects of plug cell size and root substrate on sweet corn transplant production. Vermont Vegetable and Berry Growers Association. (\$500).

EXTENSION ACTIVITIES

Presentation of constructed wetlands information and tour for the Agri-Mark Young Cooperator site visit. February 13th, 2003.

Tignor, M. 2003. Principles of Irrigation. 2003 Farm Show Program. January 29th, Barre, VT.

Participated in State Farm Insurance Co. Public Bicycle Safety Training for children. May 19th, 2002.

Tour of Horticulture Research Center. 2002. Given to Wake Robin Nature Club. September 9th.

Presentation of Common Ground at CALS Alumni and Friends Dinner. May 11th, 2002.

Genetically Engineered Crop Plants: Scientific Gift to Mankind or Trojan Horse?. February, 26th, 2002. Wake Robin Community, VT.

Pumpkin Presentation. Browns River Middle School. October .2001.

Hosted NOFA-VT Twilight Meeting to review the Vegetable Research and Teaching Activities at the HRC. September 13th, 2001

Surveyed Vermont Vegetable and Berry Grower's Board of Directors to determine most pertinent Research Directions. 2001

Participated in the Vermont Vegetable and Berry Grower's Annual Meeting in Rutland, VT. 2001

Participated in the Vermont Commercial Pesticide Applicator's Workshop in Randolph, VT. 2001

Participation in the Grapefruit Economic Workshop. 1998.

Participation in the Grapefruit Economics Workshop. 1999.

AgriScience Fair judge for the State of Florida FFA Convention. Junior Division 1998.

AgriScience Fair judge for the State of Florida FFA Convention. Senior Division. 1998.

Indian River Lagoon Envirothon St. Lucie County Coordinator. 1999.

Indian River Lagoon Envirothon Educational Committee (Chair). 1999. produced CD ROM of the resource guide for teachers and students.

Indian River County Environmental Educators. 1999.

Reviewer for the Journal for the American Society of Horticultural Science and HortTechnology.

AWARDS

2002. NACTA and UVM Teaching Award of Merit.

1999. Received \$3000 one-time bonus for service to the Indian River Research and Education Center.

1999. Received \$3000 meritorious increase to base salary.

1996. Received the Hughes Memorial Scholarship (UF)

1995. Received the Edgar and Elizabeth Holcomb Award (UF)

1994. Received the Spyke Memorial Scholarship (UF)

1989. Received the August Teske Memorial Scholarship (VPI & SU)

PROFESSIONAL MEMBERSHIPS PAST AND PRESENT.

Member of the American Society for Horticultural Science since 1990-present

Member of the Florida Society for Horticultural Science since 1994-1999.

Member of the American Association for the Advancement of Science since 1993-1999

Member of the American Society of Plant Physiologists 1992-1993.

Member of Pi Alpha Xi honor society from 1988-1992.

UNIVERSITY GOVERNANCE

Committee Service

(UVM) PSS Chair Search. 2002-2003.

(UVM) Botany Faculty Member Search. 2002.

(UVM) CALS Honor Committee. 2000-present

(UVM) CALS Information Technology Committee. 2000-20001

(UVM) CALS Scholarship Review Committee. 2000-present

(UVM) PSS Horticultural Research Center Advisory Committee. 2000-2001.

(UVM) PSS Search and Screen Committee for Master Gardener Coordinator. April 2000.

(UVM) PSS Curriculum Committee. April 2000-present

(UVM) PSS Technology Committee. 2000-2001.

(UVM) PSS Committee to Examine Botany Department Name Change. March 2000.

(UF) Horticultural Sciences Department Curriculum Committee. 1999-2000

(UF) Task Force On Preparing Students For The New Millennium. 1999-2000 College of Agriculture

(UF) Search and Screen Committee. 1999. for Assistant Professor, Soil and Water Science

(UF) Computer Committee (chair). 1999-2000. Indian River Research and Education Center (chair)

(UF) New Building Committee. 1999-2001. Indian River Research and Education Center

(UF) Seminar Committee. 1999. Indian River Research and Education Center

(UF) Publications Review Committee. 1999. Indian River Research and Education Center

(UF) IRRREC Citrus Budwood Committee. 1998-1999. Indian River Research and Education Center

(UF) Physical Expansion of the New Teaching Program

1998. Managed the Design, Purchase, and Delivery of New 4000 ft² Teaching Greenhouse Facility (\$50,000)

1998. Purchased in excess of \$35,000 dollars worth of computer equipment for the new teaching program.

1998-2000. Managing the Development of 2.5 acres for a new citrus and ornamentals variety collection

1998-2000. Providing major input to UF/IFAS Facilities Planning and Operations, Hunton Pryor Brady Maso architects, and Biltmore construction on the design of our new 3.8 million dollar teaching facility (part of service to the New Building Committee)

INFORMATION TECHNOLOGY

Course Supplements Designed on WebCT

PSS 011 Principles of Plant Science.

PSS 124 Vegetable Fruit Crops.

PSS 126 Vegetable Root Crops.

PSS 127 Greenhouse Operations and Management.

PSS 196 Postharvest Physiology PSS 301 Plant Science Colloquium.

Tignor Faculty Web Pages. <http://www.uvm.edu/~pass/tignor/index.html>

FRC 3252 Tropical and Subtropical Fruits.

ORH 4932 South Florida Flora and Ecosystems. <http://irrecenvhort.ifas.ufl.edu/SFFE/index.htm>

Evaluating the Potential Invasiveness of New Ornamental Species in FL.

<http://www.uvm.edu/~pass/tignor/IPWeb/index.html>

Fun with freshwater mussels: educational website. Assisted C.A. O'Brien with development.

<http://www.uvm.edu/~pass/tignor/mussels/index.htm>

Citrus Internet Resource Pages. <http://www.fcprac.ifas.ufl.edu/> (until spring of 2000)

Designed and maintained the Indian River Research and Education Center's first Website.

<http://www.irrec.ifas.ufl.edu> until March 2000

Software Experience:

MS Office 2003 – advanced user Word, PowerPoint, Excel, Outlook

WebCT Vista – experienced course supplement designer

Macromedia Dreamweaver and Fireworks