

Date: January 19, 2016

Name: **Timothy S. Griffin, Ph.D.**

Current: Associate Professor
Director, Agriculture Food and Environment Program
Friedman School of Nutrition Science and Policy
Tufts University

Address: 150 Harrison Avenue, Room 125
Boston, MA 02111

Phone: 617-636-3613

E-mail: Timothy.Griffin@tufts.edu

Education:

Graduate Education

Ph.D. 1990 **Michigan State University**, East Lansing, MI
Major: Crop and Soil Science
Topic: Nitrogen Cycling, Economics, and Pathogens in Legume-Potato Rotations

M.S. 1986 **University of Nebraska**, Lincoln, NE
Major: Agronomy
Topic: Use of Seed Treatments in Native Grass Establishment

Undergraduate Education

B.S. 1984 **University of Nebraska**, Lincoln, NE
Major: Forage and Range Management

Post-Doctoral Training:

Michigan State University (1990-1991) Supervisors: Dr. Joe T. Ritchie and Dr. Oran B. Hesterman

Research Focus: Crop simulation modeling (potato), and impact of alfalfa maturity on ruminant protein degradation

Licensure and Certification:

Certified Crop Advisor (American Society of Agronomy) 1996-Present

Work Experience:

- 2015-Present **Faculty Affiliate**, Center for International Environmental and Resource Policy
Fletcher School of Law and Diplomacy, Tufts University
- 2012-Present Faculty **Co-Director**, Tufts Institute for the Environment (TIE)
Tufts University
- 2009-Present **Director**, Agriculture Food and Environment Program
Friedman School of Nutrition Science and Policy, Tufts University
- 2008-Present **Associate Professor**
Friedman School of Nutrition Science and Policy, Tufts University
- 2000-2008 **Research Agronomist and Lead Scientist**
USDA-ARS New England Plant Soil and Water Lab, Orono ME
- 1997-2000 **Associate Extension Professor, Sustainable Agriculture Specialist**
University of Maine Cooperative Extension Service
- 1999-2000 **Associate Professor, Sustainable Cropping Systems**
Maine Agricultural and Forestry Experiment Station
- 1998-1999 **Visiting Research Scientist** (sabbatical leave from Univ. of Maine)
USDA-ARS, New England Plant Soil and Water Lab
- 1992-1997 **Assistant Extension Professor, Sustainable Agriculture Specialist**
University of Maine Cooperative Extension Service
- 1990-1991 **Post-Doctoral Research Associate**
Department of Crop and Soil Sciences, Michigan State University
- 1987-1990 **Graduate Research Assistant and Instructor**
Department of Crop and Soil Science, Michigan State University
- 1985-1986 **Graduate Research and Teaching Assistant**
Department of Agronomy, University of Nebraska
- 1984 **Undergraduate Teaching Assistant**
Department of Agronomy, University of Nebraska

Awards and Honors:

Excellence in Technology Transfer Award
Federal Laboratory Consortium for Technology Transfer (January 2008)

Technology Transfer Award – Mid-Atlantic Region
Federal Laboratory Consortium for Technology Transfer (January 2007)

Northeast Extension Directors Award of Excellence Team Member
USDA National Institute of Food and Agriculture (January 2007)

USDA-ARS Professional Activities Award for National SARE Conference: “The New American Farm” (March 2008)

Northeast Extension Directors Award of Excellence Team Member
USDA National Institute of Food and Agriculture (January 2004)

Sustainable Agriculture Faculty Award
University of Maine (1994)

Academic Service

Tufts University (2008-present):

2015-Present Chair, Search Committee – Sustainability, Food Systems and Climate Change – Friedman School of Nutrition Science and Policy
2015-Present Co-Chair, Search Committee – Bridge Professor, Water, Health and Security – Friedman and Fletcher Schools
2013-2014 Search Committee for Dean, Friedman School of Nutrition Science and Policy
2012-2013 Strategic Plan (T10) Committee for Impact on Society
2012-2015 Thematic Area Working Group for Water
2012-2013 Tufts Sustainability Council
2011-2012 Faculty Representative, Board of Trustees Academic Affairs Committee
2010-2013 Selection Committee, Dow Sustainability Award
2009-2010 Human Resource Benefits Advisory Committee
2009-Present Steering Committee for the Water: Systems Science and Society (WSSS) program

Friedman School of Nutrition Science and Policy, Tufts University (2008-present):

2012 Two (2) invited presentations to Tufts alumni (Atlanta GA and Chicago IL)
2010 Faculty search committee chair (resulted in hire of Dr. Sean Cash)
2010 Friedman Symposium planning committee chair
2010 Student funding task force member

- 2009 Faculty search committee member (resulted in hire of Dr. Christian Peters)
- 2009-Present Admissions committee for M.S. and Ph.D. programs in food and nutrition policy
- 2009-Present Six (6) invited presentations to the Friedman School Board of Advisors

Summary of service activity with USDA-ARS (2000-2008):

Served as lead scientist to develop and implement project on Nutrient Cycling and Utilization on Organic Dairy Farms; served on search committees resulting in hiring of five (5) USDA scientists and four (4) USDA technical support staff.

Summary of service activity with the University of Maine (1992-2000):

Member of ten (10) faculty search committees in Cooperative Extension. Served as search committee chair for agricultural economics specialist (1994) and Extension Director (1996). Member of four (4) search committees for faculty in Agricultural Experiment Station and Plant, Soil, and Environmental Sciences department. Served on Extension Plan of Work Task Force (1995-1996). Extension representative on University of Maine Faculty Senate (1997-2000); Research and Public Service committee of Faculty Senate, 1997-1998, 1999-2000. Institutional Review Board for Protection of Human Subjects (1993-1996).

National and Regional Service

- 2014-2015 Special advisor to the Dietary Guidelines for Americans Committee (DGAC) Subcommittee 5, Food Safety and Sustainability
U.S. Departments of Agriculture and Health and Human Services
- 2015 (Current) Northeast IPM Center – Advisory Board Member
- 2015 (Current) Member of Advisory Committee, Wolfes Neck Farm Organic Dairy Farm Incubator (Freeport, ME)
- 2014 (Current) Member, Study Committee on Genetically Engineered Crops: Past Experiences and Future Prospects
National Research Council, National Academies of Science
- 2014 Project Advisor, Massachusetts State Food System Plan
- 2013-Present Member, National Advisory Committee, Growing Food Connections project
SUNY-Buffalo and the American Planning Association, Buffalo NY
- 2013 Expert participant, Agriculture Scenario Design Charrette for the Northeast Regional Earth System Modeling (NE-RESM) project, New York NY (May)

- 2011 Briefing for USDA Deputy Secretary Kathleen Merrigan and staff on local and regional food systems, Washington DC (January)
- 2010 Presentation to New England Agricultural Commissioners and the Blue Ribbon Commission on Land Conservation, Concord NH (January).
- 2009-2010 Member of Advisory Committee and Sub-Committees on agriculture and health for implementation of the Massachusetts Global Warming Solutions Act (GWSA)
- 2009 Presentation for USDA Sustainable Agriculture Research and Education (SARE) Northeast Region Administrative Council, Manchester NH (July)
- 2008-2009 Lead author for agriculture section of *Maine's Climate Future: an Initial Assessment*, prepared at request of Governor of Maine John E. Baldacci
- 2003-2008 Participant in four national stakeholder and program planning meetings for USDA-ARS National Programs, including Integrated Agricultural Systems, Utilization of Agricultural Byproducts and Wastes, and Organic Agriculture, and member of the writing team for national action plans in Integrated Agricultural Systems and Organic Agriculture programs
- 2002-2004 Liaison to USDA Sustainable Agriculture Research and Education (SARE) program alumni, and advisory committees for national SARE conferences in 2004 (Burlington VT) and 2008 (Kansas City MO)
- 1998-2001 Member of the Northeast Region Administrative Council for Sustainable Agriculture Research and Education (SARE), including chair of design team to evaluate the region's funding framework and chair of implementation team for all USDA-SARE funding in the Northeast region
- 1997-1999 Member of the Executive Committee for Northeast Region Sustainable Agriculture Research and Education (SARE) Professional Development Programs
- 1998-2000 Member of the Northeast Pasture Research and Extension Consortium, including Public Sector Vice Chair (1999-2000), and Public Sector Chair (2000)
- 1995-2000 Member of the Program Coordinators Group for Northeast Region Sustainable Agriculture Research and Education (SARE) Professional Development Programs

Training of Graduate Students:

Current Ph.D. Trainees, Friedman School of Nutrition Science and Policy, Tufts University

Nicole Tichenor	Dissertation committee chair
Emily Piltch	Dissertation committee chair
Gregory Sixt	Dissertation committee chair
Graham Jeffries	Dissertation committee chair
Stacey Blondin	Dissertation committee member
Naglaa El-Abbadi	Dissertation committee member

Current Ph.D. Trainees, Department of Civil and Environmental Engineering, Tufts University

Kate Woodward	Dissertation committee member
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Current Ph.D. Trainees, Department of Natural Resources and the Environment, University of NH

Amanda Beal	Dissertation committee member
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Past Ph.D. Trainees, Friedman School of Nutrition Science and Policy, Tufts University

Zachary Conrad	Aligning US agricultural land use with national public health nutrition goals: An assessment of monitoring metrics, dietary variety, and farmland capacity (Dissertation committee chair)
Jamie Picardy	Beyond direct marketing: evaluating Massachusetts's capacity to supply niche pork to retail grocers (Dissertation committee member)
Jennifer Obadia	Viability of Massachusetts farmers' markets and their role in increasing access to fresh produce for WIC participants (Dissertation committee member, graduated 2011)
Melissa Bailey	Livestock production and water quality: interest groups, investments, and implementation of USDA's Environmental Quality Incentives Program (Dissertation committee member, graduated 2010)

Past Ph.D. Trainees, Department of Plant, Soil and Environmental Sciences, University of Maine

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| Lauren Kolb | Alternative weed management strategies for organic cereals: enhanced crop-weed interference, and physical weed control (Dissertation committee member, graduated 2011) |
| Heidi Waldrip | Forms, distribution and potential availability of phosphorus from poultry manure (Dissertation committee member, graduated 2011) |
| Ellen B. Mallory | Crop/livestock integration effects on soil quality, crop production, and soil nitrogen dynamics (Dissertation committee chair, graduated 2007) |
| Aaron Hoshide | Re-integrating crops and livestock in Maine: an economic analysis of the potential for and profitability of integrated agricultural production (Dissertation committee member, graduated 2005) |

M.S. Thesis Committees, Department of Civil and Environmental Engineering, Tufts University

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| David Roman | Multivariate models of watershed suspended sediment loads for the Eastern United States (Thesis committee member, graduated 2011) |
| Eric Vaughn | Prioritizing water infrastructure under conditions of agricultural uncertainty in the West Bank, Palestine (Thesis committee member, graduated 2010) |

M.S. Thesis Committees, Dept of Plant, Soil and Environmental Sciences, University of Maine

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| Allison Piper | Root length affects soluble carbon and phosphorus in a rotational cropping system (Thesis committee member, graduated 2005) |
| Erin Haramoto | The effects of Brassica cover crops on weed dynamics (Thesis committee member, graduated 2004) |
| Jeremy Plotkin | Nitrogen contributions from green manures in potato production (Thesis committee member, graduated 2000) |
| Matthew Montgomery | Release of phosphorus from biosolids (Thesis committee member, graduated 2000) |

- Angsana Tokitikla Rotation crop root density and effects on subsequent potato crop
(Thesis committee member, graduated 2000)
- Adam Davis Effect of organic nitrogen sources and delayed fertilizer application
on crop-weed interference (Thesis committee member, graduated
1999)
- Eric Giberson Yield, quality, and species composition of forage from mixed
grassland under different nutrient management regimes (Thesis
committee chair, graduated 1999)
- Andrew Carpenter An evaluation of pulp sludge as a component of manufactured topsoils
(Thesis committee member, graduated 1998)
- Caragh Fitzgerald Soil phosphorus in Aroostook county (Maine) potato cropping
systems: organic matter effects and residual phosphorus
contributions (Thesis committee member, graduated 1998)
- George Van Vlaanderen A producer-based evaluation of corn nitrogen tests for the
Northeast (Thesis committee chair, graduated 1997)
- Mark Hutchinson Effects of liquid dairy manure application timing on corn yield and
soil solution nitrate concentration (Thesis committee member,
graduated 1997)
- Diana George Chapin A comparison of weed control, yield, and economic effectiveness of
alternative weed management strategies in the field grown specialty
cut flower *Gomphrena globosa* L. 'Woodcreek Pink' (Thesis
committee chair, graduated 1996)
- Liquan Zhang Field management effects on potato growth, tuber nutritional values
and processing qualities (Thesis committee chair, graduated 1995)
- Pablo Torres-Lima Nitrogen fertility regimes and weeds affecting bean (*Phaseolus vulgaris*
L.) performance: a two-year experiment (Thesis committee chair,
graduated 1994)

Tufts University – Academic advising

In addition to the dissertation, thesis and teaching responsibilities described elsewhere, I have served as academic advisor for 50 M.S. and 5 Ph.D. students, primarily in the Agriculture, Food and Environment program.

Tufts University – Regularly Scheduled Classes

NUTR 215 Fundamentals of U.S. Agriculture (Fall semester, 2008-present)

This course surveys the historical and contemporary science, policy and culture underlying U.S. agriculture, focusing on past and current structure of farms and the food system, major policy decisions and their impact on current issues.

NUTR 233 Agricultural Science and Policy I (co-taught with Dr. Christian Peters; previously co-taught with Dr. Kathleen Merrigan; Spring semester, 2009-present)

This course addresses the primary inputs for agricultural production: soil, water, nutrients, and genetic resources, with assignments to develop skills using data in policy debates through a science brief, an oral exam, and group presentations.

NUTR 333 Agricultural Science and Policy II (co-taught with Dr. Christian Peters; previously co-taught with Dr. Kathleen Merrigan as NUTR 213; Fall semester, 2008-present)

This course completes the Friedman School's three-semester sequence in agricultural systems, addressing pest management, animal production systems, bioenergy and climate change, and food systems. Assignments develop advanced skills in applying agricultural science to policy analysis through a policy memorandum, an oral exam, an op-ed, and group presentations.

NUTR 241 Food for All: Ecology, Technology, and Sustainability (Tufts University Seminar, co-taught with Dr. Colin Orians, Biology Department; Spring semester, 2013 and 2015).

This seminar serves upper level undergraduates and graduate students from across Tufts University. Using contrasting crops grown in developing and industrialized countries as case studies, the course evaluates: (1) how ecological knowledge makes food production more sustainable; (2) what existing and emerging approaches can, in the face of climate change, contribute to a reliable supply of nutritious food; and (3)

the political and economic drivers that shape who has access to these technologies. This includes exploration of stakeholder-specific perspectives (growers, advocacy groups, industry, governmental agencies), as well as development important communication skills for negotiating these different perspectives.

NUTC 261 Sustainability on the Farm (online course for certificate program at Friedman School; first offering in Fall, 2014).

In this first part of a three-course series, the primary costs and benefits of agricultural production will be analyzed, along with a profile of current conventional and alternative approaches to food production in the U.S. Students will examine the policy response to environmental and conservation concerns, focusing on the balance between meeting increased demand while mitigating environmental and social costs.

Tufts University - Occasional Classes / Directed Studies:

A feature of the Friedman School curriculum is the use of individualized directed studies, designated as NUTR 297 (1st year M.S. students), NUTR 397 (2nd year M.S. students), and NUTR 497 (for Ph.D. students). I have supervised 84 such courses since 2008, with a total enrollment of 156 students. Course content ranges from student-initiated investigation of a specific issue to development and delivery of research requested by an outside organization. The following examples involve groups of students who I convened for the purpose described below.

- 2013 *Regional food systems.* This was the educational component of a USDA-funded interdisciplinary research project. Five (5) students developed and submitted a USDA grant proposal to survey Northeast farmers on marketing and production opportunities within the context of regional food systems, along with a special tabulation of U.S. Census of Agriculture data in collaboration with USDA.
- 2013 *Water for Food.* Five (5) students from Friedman and Fletcher schools focused on agricultural water use and irrigation technology, including case studies from industrialized and developing countries.
- 2012 *Regional food systems.* This was also the educational component of a USDA-funded interdisciplinary research project. Five (5) students formulated research questions, prepared a proposal, and conducted the proposed research, on topics ranging from the use of technology to facilitate the involvement of small- to medium-scale farms in regional supply chains to documenting the magnitude of yield gaps for major crops in the Northeast regions.

- 2010 *Science and policy of agricultural biotechnology*. Structured as a journal discussion seminar, each student gave at least two presentations of peer-reviewed research in this topic area, and facilitated discussion.
- 2009 *Water and agriculture*. Structured as a journal discussion seminar, each student gave at least two presentations of peer-reviewed research in this topic area, and facilitated discussion.

University of Maine

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| Spring 2000 | INT450 | Capstone course for Sustainable Agriculture program |
| Spring 1995 | AES440 | Advanced Forage Crop Management |

Michigan State University

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| Fall 1988 | CSS340 | Forage Crop Production and Management |
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University of Nebraska

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| 1984-1986 | AGR240 | Forage Crop Production and Management, Laboratory |
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Membership and Service in Professional Societies:

- American Society of Agronomy (1985-Present)
 - Selection committee for the Werner L. Nelson Award (2003-08)
 - Committee on Organic and Sustainable Agriculture (2006-2009)
 - Northeast Branch Awards Committee (1996-1998, 2000)
 - Certified Crop Advisor Program (1996-2000)

Crop Science Society of America (1990-2000)

Soil Science Society of America (1985-Present)

Served as reviewer for following publications:

- Agricultural Systems*
- Agronomy Journal*
- American Journal of Potato Research*
- Biology and Fertility of Soils*
- Bioscience*
- Communications in Soil Science and Plant Nutrition*
- Crop Science*
- Ecological Letters*
- Geoderma*
- Journal of Environmental Quality*

Journal of Plant Science and Nutrition
Journal of Soil and Water Conservation
Plant and Soil
PLoS One
Potato Research
Renewable Agriculture and Food Systems
Soil Science
Soil Science Society of America Journal

Sponsored Research Funding:

Current Research Support:

Grant Title: Climate Effects on Tea Quality and Socio-Economic Responses
Funding Agency: National Science Foundation – Coupled Human and Natural Systems (CHN)
Amount: \$931,000
Period: November, 2013 – October, 2017
Role(s): Investigator

Grant Title: Enhancing Food Security of Underserved Populations in the Northeast through Sustainable Regional Food Systems.
Funding Agency: U.S. Department of Agriculture – Agriculture and Food Research Initiative (AFRI) – Global Food Security
Amount: \$4,998,000
Period: March, 2011 – February, 2017
Role(s): Co-Principal Investigator; Executive Committee member

Grant Title: Water Across Boundaries: Integration of Science, Engineering, and Diplomacy
Funding Agency: National Science Foundation – Integrated Graduate Education and Research Training (IGERT)
Amount: \$2,645,377
Period: July, 2010 – June, 2017
Role(s): Co-Principal Investigator; Executive Committee member
(Note: Joined this project after it was funded)

Recent Research Support:

Grant Title: Assessing Regional Food System Infrastructure and Land Use Planning in the Northeastern U.S.
Funding Agency: U.S. Department of Agriculture – Agricultural Research Service (Specific Cooperative Agreement)
Amount: \$30,000
Period: October, 2009 – September, 2010
Role(s): Principal Investigator

Grant Title: Implementation of Pastureland Conservation Practices on Organic Dairy Farms
Funding Agency: U.S. Department of Agriculture – Agricultural Research Service (Specific Cooperative Agreement)
Amount: \$40,000
Period: October, 2009 – September, 2011
Role(s): Principal Investigator

Grant Title: Developing a Picture of School Food Service in Massachusetts, Maine and New Hampshire: A Case Study of Successful Outliers
Funding Agency: Harvard Pilgrim Health Care Foundation
Amount: \$130,000
Period: 2010-1011
Role(s): Co-Principal Investigator

Grant Title: Training Leaders to Understand and Integrate Agricultural, Food, and Environmental Sciences and Policy
Funding Agency: U.S. Department of Agriculture – National Needs Fellows Program
Amount: \$140,000
Period: January, 2008 – December, 2012
Role(s): Principal Investigator
(Note: Assumed role as PI after departure of Dr. Merrigan)

Grant Title: Linking Agriculture Food and Environment: an Interdisciplinary Approach to Graduate Education
Funding Agency: U.S. Department of Agriculture – National Needs Fellows Program
Amount: \$180,000
Period: December, 2006 – August, 2011
Role(s): Principal Investigator
(Note: Assumed role as PI after departure of Dr. Merrigan)

Bibliography:

Peer-Reviewed Journal Publications:

1. **Griffin, T.**, Z. Conrad, C. Peters, R. Ridberg, and E.T. Perry. 2014. The regional self-sufficiency of the Northeast food system. *Renewable Agriculture and Food Systems*. DOI:10.1017/S1742170514000027
2. Peters, C., J.A. Picardy, A. Darrouzet-Nardi, and **T.S. Griffin**. 2014. Feed conversions, ration compositions, and land use efficiencies of major livestock products in U.S. agricultural systems. *Agricultural Systems*. DOI: 10.1016/j.agsy.2014.06.005
3. Ahmed, S., C. Orians, **T.S. Griffin**, S. Buckley, U. Unachukwu, A.E. Stratton, J. R. Stepp, A. Robbat, S. Cash, and E. Kennelly. (2014). Effects of water availability and pest pressures on tea (*Camellia sinensis*) growth and functional quality. *AoB Plants*. doi: 10.1093/aobpla/plt054 (1)
4. Ahmed, S., J.R. Stepp, C. Orians, **T. Griffin**, A. Robbat, S. Cash, D. Small, X. Dayuan, L. Chunlin, E. Kennelly, U. Unachukwu, and S. Buckley. 2014. Climate change effects on tea (*Camellia sinensis*) functional quality validate indigenous farmer perceptions in tropical southwestern China. *PLoS One*. (Accepted for publication).
5. Waldrip, H.M., Z. He, and **T.S. Griffin**. 2012. Effects of organic dairy manure on soil phosphatase activity, available soil phosphorus, and growth of sorghum-sudangrass. *Soil Science*. 177:629-637. (5)
6. Sachek, J.M., E.H. Morgan, P. Wilde, **T.S. Griffin**, E. Nahar, and C.D. Economos. 2012. Key strategies for improving school food service: A case study of three New England food service innovators. *Journal of Child Nutrition and Management*. 36:xx-yy
7. Fortuna, A.-M., C.W. Honeycutt, G. Vandemark, **T.S. Griffin**, R.P. Larkin, Z. He, B.J. Wienhold, K.R. Sistani, S.L. Albrecht, B.L. Woodbury, H.A. Torbert, J.M. Powell, R.K. Hubbard, R.A. Eigenberg, R.J. Wright, J.R. Alldredge, and J.B. Harsh. 2012. Links among nitrification, nitrifier communities, and edaphic properties in contrasting soils receiving dairy slurry. *Journal of Environmental Quality*. 41:262-272. (10)
8. Hoshide, A.K., J.M. Halloran, R.J. Kersbergen, **T.S. Griffin**, S.L. DeFauw, B.J. LaGasse, and S. Jain. 2012. Effects of stored feed cropping systems and farm size on the profitability of Maine organic dairy farm simulations. *Journal of Dairy Science*. 94:5710-5723. (4)
9. Larkin, Robert P., C. Wayne Honeycutt, **Timothy S. Griffin**, O. Modesto Olanya, John M. Halloran, and Zhongqi He. 2011. Effects of different potato cropping system approaches and water management on soilborne diseases and soil microbial communities. *Phytopathology*. 101:58-67. (31)

10. Larkin, Robert P., **Timothy S. Griffin**, and C. Wayne Honeycutt. 2011. Rotation and cover crop effects on soilborne potato diseases, tuber yield, and soil microbial communities. *Plant Disease*. 104:1491-1502. (27)
11. He, Zhongqi , C. Wayne Honeycutt, **Timothy S. Griffin**, Robert P. Larkin, Modesto Olanya and John M. Halloran. 2010. Increases of soil phosphatase and urease activities in potato fields by cropping rotation practices. *Journal of Food Agriculture and Environment*. 8:1112-1117. (7)
12. **Griffin, T.S.** 2010. Linking agriculture and nutrition. *Public Health Nutrition*. 13:1941-1944. (1)
13. Mallory, E.B., **T.S. Griffin**, and G.A. Porter. 2010. Seasonal nitrogen availability from current and past applications of manure. *Nutrient Cycling in Agroecosystems*. 88:351-360. (6)
14. **Griffin, T.S.**, and C.W. Honeycutt. 2009. Effectiveness and efficacy of conservation options after potato harvest. *Journal of Environmental Quality*. 38:1627-1635. (3)
15. **Griffin, T.S.**, R.P. Larkin, and C.W. Honeycutt. 2009. Delayed tillage and cover crops effects in potato systems. *American Journal of Potato Research* 86:79-86. (11)
16. He, Z. C. Wayne Honeycutt, **Timothy S. Griffin**, Barbara J. Cade-Menun, Perry J. Pellechia and Zhengxia Dou. 2009. Phosphorus forms in conventional and organic dairy manure identified by solution and solid state P-31 NMR spectroscopy. *Journal of Environmental Quality*. 39:1909-1918. (20)
17. Harry H. Schomberg,, Sirio Wietholter, **Timothy S. Griffin**, D. Wayne Reeves, Miguel L. Cabrera, Dwight S. Fisher, Dinku M. Endale, Jeff M. Novak, Kip S. Balkcom, Randy L. Raper, Newell R. Kitchen, Martin A. Locke, Kenneth N. Potter, Robert C. Schwartz, Clinton C. Truman and Don D. Tyler. 2009. Assessing indices for predicting potential nitrogen mineralization in soils under different management systems. *Soil Science Society of America Journal*. 73:1575-1586. (34)
18. Olanya, O. Modesto, C. Wayne Honeycutt, Robert P. Larkin, **Timothy S. Griffin**, Zhongqi He, and John M. Halloran. 2009. The effect of cropping systems and irrigation management on development of potato early blight. *Journal of General Plant Pathology*. 75:267-275. (10)
19. **Griffin, T.S.**, C.W. Honeycutt, S.L. Albrecht, K.R. Sistani, H.A. Torbert, B.J. Wienhold, B.L. Woodbury, R.K. Hubbard, and J.M. Powell. 2008. Nationally- coordinated evaluation of soil nitrogen mineralization rate using a standardized aerobic incubation protocol. *Communications in Soil Science and Plant Analysis* 39:257-268. (6)

20. Hutchinson, M., and **T.S. Griffin**. 2008. Evaluation of fiber content relative to other measures of compost stability. *Compost Science and Utilization* 15: 6-11. (6)
21. Starr, G.C., D. Rowland, **T.S. Griffin**, and O.M. Olanya. 2008. Soil water in relation to irrigation, water uptake and potato yield in a humid climate. *Agricultural Water Management* 95:292-300. (18)
22. **Griffin, T.S.** 2007. Estimates of gross transformation rates of dairy manure N using ^{15}N pool dilution. *Communications in Soil Science and Plant Analysis* 38: 1451-1465. (6)
23. **Griffin, T.S.**, and M. Hutchinson. 2007. Compost maturity effects on nitrogen and carbon mineralization and plant growth. *Compost Science and Utilization* 13:228-236. (16)
24. Mallory, E.B., and **T.S. Griffin**. 2007. Impacts of soil amendment history on nitrogen availability from manure and fertilizer. *Soil Science Society of America Journal* 71: 964-973. (35)
25. Olanya, O.M., G.C. Starr, C.W. Honeycutt, **T.S. Griffin**, and D.H. Lambert. 2007. Microclimate and potential for late blight development in irrigated potato. *Crop Protection* 26:1412-1421. (12)
26. He, Z., A.M. Fortuna, Z.N. Senwo, I.A. Tazisong, C.W. Honeycutt, and **T.S. Griffin**. 2006. Hydrochloric fractions in Hedley fractionation may contain inorganic and organic phosphates. *Soil Science Society of America Journal* 70:893-899. (36)
27. He, Z., **T.S. Griffin**, and C.W. Honeycutt. 2006. Soil phosphorus dynamics in response to dairy manure and inorganic fertilizer applications. *Soil Science* 171:598-609. (18)
28. Heckman, J. R. W. Jokela, T. Morris, D.B. Beegle, J.T. Sims, F.J. Coale, S. Herbert, **T. Griffin**, B. Hoskins, J. Jemison, W.M. Sullivan, D. Bhumbra, G. Estes, and W.S. Reid. 2006. Soil test calibration for predicting corn response to phosphorus in the Northeast USA. *Agronomy Journal* 98:280-288. (23)
29. Larkin, R.P., and **T.S. Griffin**. 2006. Control of soilborne diseases of potato using Brassica green manures. *Crop Protection* 25: 1067-1077. (144)
30. Piper, A., M.S. Erich, G.A. Porter, and **T.S. Griffin**. 2006. Root growth effects on soluble C and P in manured and non-manured soils. *Plant and Soil* 283:353-366. (3)
31. He, Z., **T.S. Griffin**, and C.W. Honeycutt. 2006. Soil phosphorus dynamics in response to dairy manure and inorganic fertilizer applications. *Soil Science* 171:598-609. (18)
32. Halloran, J.M., **T.S. Griffin**, and C.W. Honeycutt. 2005. An economic analysis of potential rotation crops for Maine potato cropping systems. *American Journal of Potato Research* 82:155-162. (9)

33. Ohno, T., **T.S. Griffin**, M. Liebman, and G.A. Porter. 2005. Chemical characterization of the soil phosphorus and organic matter in different cropping systems in Maine, USA. *Agriculture, Ecosystems, and the Environment* 105:625-634. (21)
34. Larkin, R.P., C.W. Honeycutt, and **T.S. Griffin**. 2005. Effect of swine and dairy manure amendments on microbial communities in three soils as influenced by environmental conditions. *Biology and Fertility of Soils* 43:51-61. (42)
35. Honeycutt, C.W., **T.S. Griffin**, B.J. Wienhold, B. Eghball, S.L. Albrecht, J.M. Powell, B.L. Woodbury, K.R. Sistani, R.K. Hubbard, Z. He, R.A. Eigenburg, R.J. Wright, and M.D. Jawson. 2005. Protocols for nationally coordinated laboratory and field research on manure nitrogen mineralization. *Communications in Soil Science and Plant Analysis* 36:2807-2822. (18)
36. **Griffin, T.S.**, Z. He, and C.W. Honeycutt. 2005. Manure composition effects net transformations of nitrogen from dairy manures. *Plant and Soil* 273:29-38. (38)
37. Honeycutt, C.W., **T.S. Griffin**, and Z. He. 2005. Manure nitrogen availability: Dairy manure in Northeast and Central U.S. soils. *Biological Agriculture & Horticulture* 23:199-214. (15)
38. **Griffin, T.S.**, and G.A. Porter. 2004. Altering soil carbon and nitrogen stocks in intensively tilled two-year rotations. *Biology and Fertility of Soils* 39:366-374 (38)
39. He, Z., **T.S. Griffin**, and C.W. Honeycutt. 2004. Phosphorus distribution in dairy manures. *Journal of Environmental Quality* 33:1528-1534. (66)
40. He, Z., **T.S. Griffin**, and C.W. Honeycutt. 2004. Evaluation of soil phosphorus transformations by sequential fractionation and phosphatase hydrolysis. *Soil Science* 169:515-527. (39)
41. He, Z., **T.S. Griffin**, and C.W. Honeycutt. 2004. Enzymatic hydrolysis of organic phosphorus in swine manure and soil. *Journal of Environmental Quality* 33:367-372. (63)
42. Montgomery, M.B., T. Ohno, **T.S. Griffin**, C.W. Honeycutt, and I.J. Fernandez. 2004. Phosphorus mineralization and availability in soil amended with biosolids and animal manures. *Biological Agriculture & Horticulture* 22:321-334. (4)
43. **Griffin, T.S.**, C.W. Honeycutt, and Z. He. 2003. Changes in soil phosphorus from manure application. *Soil Science Society of America Journal*. 67:645-653. (99)
44. Liao, C., C.W. Honeycutt, **T.S. Griffin**, and J.M. Jemison. 2003. Occurrence of gastrointestinal pathogens in soil of potato field treated with liquid dairy manure. *Food, Agriculture, and Environment* 2:224-228. (2)

45. He, Z., C.W. Honeycutt, and **T.S. Griffin**. 2003. Enzymatic hydrolysis of organic phosphorus in extracts and resuspensions of swine manure and cattle manure. *Biology and Fertility of Soils* 38:78-83. (18)
46. He, Z., C.W. Honeycutt, and **T.S. Griffin**. 2003. Comparative investigation of sequentially extracted P fractions in a sandy loam soil and a swine manure. *Communications in Soil Science and Plant Analysis*. 34:1729-1742. (31)
47. **Griffin, T.**, E. Giberson, and M. Wiedenhoef. 2002. Yield response of mixed grassland swards and nutrient cycling under different nutrient management regimes. *Grass and Forage Science*. 57:268-278. (22)
48. **Griffin, T.S.**, C.W. Honeycutt, and Z. He. 2002. Effects of temperature, soil water status, and soil type on swine slurry nitrogen transformations. *Biology and Fertility of Soils*. 36: 442-446. (48)
49. Cassida, K.A. **T.S. Griffin**, J. Rodriguez, S.C. Patching, O.B. Hesterman, and S.R. Rust. 2000. Protein degradability and forage quality in maturing alfalfa, red clover, and birdsfoot trefoil. *Crop Science* 40:209-215. (49)
50. **Griffin, T.S.**, and C.W. Honeycutt. 2000. Predicting nitrogen availability from livestock manures using growing degree days. *Soil Science Society of America Journal* 64: 1876-1882. (75)
51. **Griffin, T.**, M. Liebman, and J. Jemison Jr. 2000. Cover crops for sweet corn production in a short season environment. *Agronomy Journal* 92:144-151. (63)
52. Halgerson, J.L. C.C. Sheaffer, O.B. Hesterman, **T.S. Griffin**, M.D. Stern, and G.W. Randall. 1995. Prediction of ruminal protein degradability of forages using near infrared reflectance spectroscopy. *Agronomy Journal* 87:1227-1231. (21)
53. **Griffin, T.S.**, K.A. Cassida, O.B. Hesterman, and S.R. Rust. 1994. Alfalfa maturity and cultivar effects on chemical and *in situ* estimates of protein degradability. *Crop Science* 34:1654-1661. (24)
54. Hesterman, O.B., **T.S. Griffin**, G.H. Harris, P.T. Williams, and D.R. Christenson. 1993. Nitrogen production by forage legumes seeded into small grains and response of a subsequent corn crop. *Journal of Production Agriculture* 5:340-348. (62)
55. **Griffin, T.S.**, and O.B. Hesterman. 1991. Response of potato to legume and fertilizer nitrogen sources. *Agronomy Journal* 83:1004-1012. (41)
56. Bahler, C.C., L.E. Moser, **T.S. Griffin**, and K.P. Vogel. 1990. Warm-season grass establishment as affected by post-planting atrazine application. *Journal of Range Management* 43:421-424. (5)

57. **Griffin, Timothy S.**, Lowell E. Moser, and Alex R. Martin. 1988. Influence of antidotes on forage grass seedling response to metolachlor and butylate. *Weed Science* 36:202-206. (Cited 9 times)

Book Chapters and Reports:

1. Honeycutt, C.W., J. F. Hunt, **T. S. Griffin**, Z. He and R. P. Larkin. 2013. Determinants and Processes of Manure Nitrogen Availability. pp. 201-224 in *Environmental Chemistry of Animal Manure* (Z. He, editor). Nova Science Publishers, Inc. Hauppauge NY.
2. Moomaw, W., **T. Griffin**, K. Kurczak, J. Lomax 2012. "The Critical Role of Global Food Consumption Patterns in Achieving Sustainable Food Systems and Food for All, A UNEP Discussion Paper", United Nations Environment Programme, Division of Technology, Industry and Economics, Paris, France.
3. Franzluebbers, A., J. Steiner, D. Karlan, **T. Griffin**, J. Singer, and D. Tanaka. 2012. Rainfed farming systems in the US. pp. 511-560 in P. Tow et al (ed.). *Rainfed Farming Systems*. Springer Netherlands.
4. Honeycutt, C.W., J.F. Hunt, **T.S. Griffin**, and Z. He. 2011. Determinants and processes of manure nitrogen availability. p. 201–224 in: Z. He, editor, *Environmental Chemistry of Animal Manure*. Nova Science Publishers, Hauppauge, NY.
5. Steiner, J, and **T.S. Griffin**. 2009. World Food Availability and the Natural Land Resources Base. Prepared for Strategic Multi-Layer Assessment (SMA) and the US Army Corps of Engineers, R&D Directorate.
6. **Griffin, T.S.** 2008. Nitrogen availability. pp. 616-646 in J.S. Schepers and W.R. Raun (eds.), *Nitrogen in Agricultural Soils*. Agronomy Monograph 49. American Society of Agronomy, Madison WI. (cited 39 times)
7. **Griffin, T.S.** 2004. Mineralization of manure organic nitrogen. In *Proceedings of First Annual Ontario N Conference*. Ontario Ministry of Agriculture and Forestry, Guelph, Ontario Canada.
8. Singh, U., R.B. Matthews, **T.S. Griffin**, J.T. Ritchie, L.A. Hunt, and R. Goennaga. 1998. Modeling growth and development of root and tuber crops. pp. 129-159 in G.Y. Tsuji, G. Hoogenboom, and P.K. Thornton (eds.). *Understanding options for Agricultural production*. Kluwer Academic Publishers, Dordrecht, The Netherlands.
9. Ritchie, J.T., **T.S. Griffin**, and B.S. Johnson. 1996. SUBSTOR: A functional model of potato growth, development, and yield. pp. 401-435 in: P. Kobat, B. Marshall, B.J. van der Broek, J. Vos, and H. von Keulen (eds). *Modelling and parameterization of soil-plant-atmosphere system*. Wageningen Press, Wageningen, The Netherlands.

10. **Griffin, Timothy S.**, Bradley S. Johnson, and Joe T. Ritchie. 1993. A simulation model for potato growth and development: SUBSTOR-Potato Version 2.0. *IBSNAT Research Report 02, University of Hawaii*. (Cited 29 times)
11. Hesterman, O.B., G.H. Harris, and **T.S. Griffin**. 1989. Quantifying the nitrogen-supplying capacity of legumes to non-legumes in crop rotations using N-15. pp. 127-128 in Proc. XVI International Grassland Congress. Nice, France. Oct. 4-11, 1989.

Theses:

1. **Griffin, Timothy Scott**. 1990. Legume-potato rotations: nitrogen management, economics, and pathogens. Dissertation for the Degree of Ph.D. Department of Crop and Soil Sciences, Michigan State University. East Lansing, MI.
2. **Griffin, Timothy S.** 1986. Forage grass establishment using herbicide antidotes. Thesis for the Degree of Masters of Science. Department of Agronomy, University of Nebraska-Lincoln. Lincoln, NE.

Invited presentations – academic and research (2008-present):

1. **Griffin, T.** 2014. Regional food systems: a view from the Northeast. Invited seminar at the Kellogg Biological Station, Michigan State University. (March 21, 2014; Hickory Corners MI).
2. **Griffin, T.** 2014. Greenhouse gas emissions from potato systems. Invited departmental seminar, Crop and Soil Sciences department, Michigan State University. (March 20, 2014; East Lansing MI).
3. **Griffin, T.** 2014. Soil management and greenhouse gas emissions in high-value production systems. Invited presentation at Farming for Maine’s Future. (February 24, 2014; Lewiston ME)
4. **Griffin, T.** 2013. Agriculture and water. Invited panelist at the MIT Water Summit. (December 12, 2013; Cambridge MA)
5. **Griffin, T.S.** 2013. Thinking regionally. Invited seminar, Department of Public Policy, Northeastern University. (November 18, 2013; Boston MA)
6. Jeffries G.R., **T.S. Griffin**, H. Etemadnia, and S. Goetz . 2013. Spatial industry clustering of U.S. food supply chains: 1980-2010. (The Future of Food and Nutrition: Tufts Graduate Student Research Conference; April 2013, Boston MA).
7. Jeffries, G.R., J.P. Resop, D.H. Fleisher, **T.S. Griffin**. 2013. The influence of spatial meteorology data resolution on yield estimates from a process-level crop simulation model. Spatial Statistics 2013. (4-7 June 2013, The Ohio State University, Columbus OH).
8. **Griffin, T.S.**, C.J. Peters, D.H. Fleisher, S.L. DeFauw, and J.R. Resop. 2013. Development of an regional aggregated crop yield index. Presentation at International Meeting of the Tri-Societies (Agronomy, Crop Science, and Soil Science). (November 6, 2013; Tampa FL).
9. **Griffin, T.S.** 2013. Food systems landscape. Invited panelist, American Association of Landscape Architects. (November 15, 2013; Boston MA).
10. **Griffin, T.** 2012. Climate change impacts down on the farm. Invited seminar at the University of Maine. (November 8, 2012; Orono, ME).
11. **Griffin, T.** 2012. Sustainable food systems: opportunities and challenges for an interdisciplinary approach. Invited keynote presentation at workshop on interdisciplinary research and outreach, University of Georgia. (November 1, 2012; Athens, GA).
12. **Griffin, T.** 2012. The Northeast Food System. Invited presentation to Deans and Directors of Land-grant Colleges of Agriculture. (September 22, 2012; Portsmouth, NH).

13. **Griffin, T.**, C. Peters, Z. Conrad, and R. Ridberg. 2012. The Northeast food system: Balance of production and consumption. Presentation at: Agriculture and Human Values. (June 25, 2012; Manhattan, New York).
14. **Griffin, T.** 2012. The Northeast food system: current capacity and future potential. Invited seminar at University of Maine. (April 11, 2012; Orono, ME).
15. **Griffin, T.** 2012. The Northeast food system: current capacity and future potential. Invited seminar at Boston College. (April 3, 2012; Newton, MA).
16. **Griffin, T.** 2012. Regional food systems in the NE United States: Status, possibilities, and food security. Invited seminar at University of Georgia. (March, 21, 2012; Athens, GA).
17. **Griffin, T.** 2012. The Northeast Food System: Current Capacity and Future Potential. Tufts University/Friedman School, invited seminar. (Boston, MA; February 29, 2012).
18. **Griffin, T.** 2012. Northeastern University Food and Society – the Urban Perspective series, invited seminar. (Boston, MA; January 25, 2012).
19. **Griffin, T.** 2011. The Food System of the Northeast. Arnold School of Public Health, University of South Carolina, invited seminar presenter. (Columbia, SC; August 26, 2011).
20. **Griffin, T.** 2011. Planning for the food system. American Planning Association, invited panel participant. (April 11, 2011; Boston MA).
21. **Griffin, T.** 2011. The Northeast Food System. Northeastern University Eating and the Environment series, invited presentation. (Boston, MA; November 28, 2011)
22. **Griffin, T.** 2010. Regional Food in the Northeast. Invited seminar, Penn State University. (September 24, 2010; College Park PA).
23. **Griffin, T.** 2010. Water and Agriculture. Tufts University Water: Systems, Science and Society (WSSS) Symposium - Invited Panel member. (May 1, 2010; Medford MA)
24. **Griffin, T.** 2010. Achieving Sustainability and Health and Wellness: Policy Considerations. Invited presentation, American Society of Nutrition/Experimental Biology. (April 26, 2010; Anaheim CA).
25. **Griffin, T.** 2010. Sustainability of the New England Dairy Industry. MIT Sustainability Summit. Invited presenter and moderator. (April 23, 2010; Cambridge MA)
26. **Griffin, T.** 2010. Water use and sovereignty. Invited panel member, Suffolk University (February, 2010; Boston MA).

27. **Griffin, T.** 2010. The Future of Farmland and Food. Invited presentation, Working Lands Alliance, Yale School of Forestry. (April, 2010, New Haven CT).
28. **Griffin, T.S.**, C.W. Honeycutt, and L. Sikora. 2009. Crop, amendment, and system effects on greenhouse gas emission in a cool climate. Invited Presentation to Symposium: Soil Carbon and Greenhouse Gas Dynamics in Agricultural Lands. American Society of Agronomy-Soil Science Society of America International Meeting. (November 2009; Pittsburgh PA).
29. **Griffin, T.S.**, C.W. Honeycutt, and R. Kersbergen. Yield potential of alternative cropping systems for organic dairy farms. American Society of Agronomy-Soil Science Society of America International Meeting. (November 2009; Pittsburgh PA).
30. He, Z., Honeycutt, C.W., **Griffin, T.S.**, Olanya, O.M., Larkin, R.P., Halloran, J.M. 2009. Comparison of three soil P tests and their relationship with potato yield.” American Society of Agronomy-Soil Science Society of America International Meeting. (November 2009; Pittsburgh PA).
31. He, Z., Honeycutt, C.W., **Griffin, T.S.**, Olanya, O.M., Larkin, R.P., Halloran, J.M. 2009. Soil phosphatase and urease activities impacted by cropping systems and water management. American Society of Agronomy-Soil Science Society of America International Meeting. (November 2009; Pittsburgh PA).
32. **Griffin, T.**, and J. Steiner. 2009. Philadelphia and Booneville: 1,294 mile Peri-Urban-Rural Interface - Not as Different as They May Seem. Joint invited seminar presentation to Cornell Center for Sustainable Future. (September, 2009; Ithaca NY).
33. **Griffin, T.** 2009. Organic dairy production systems. Invited seminar at the University of New Hampshire (January 2009; Durham NH).

Invited presentations – public outreach (2008-present):

1. **Griffin, T.** 2013. Northeast supply chains. Invited panelist, Let’s Talk About Food. (October 3, 2013; Boston MA)
2. **Griffin, T.** 2013. Maine’s role in creating a sustainable regional food system. Invited keynote presentation at the Maine Food Summit. (December 6, 2013; Orono ME)
3. **Griffin, T.** 2012. Museum of Science Let’s Talk about Food Series, invited panel participant. The Farm Bill and New England Farmers. (Boston, MA; January 29, 2012).
4. **Griffin, T.** 2011. Public discussion of Farm Bill Basics, invited presenter. (Cambridge, MA; August 9, 2011).

5. **Griffin, T.** 2011. Northeast Association of State Departments of Agriculture, invited presentation. "Enhancing Food Security in the Northeast with Regional Food Systems Research." (Jay Peak, VT; June 7, 2011).
6. **Griffin, T.** 2011. Public screening of documentary "Ingredients," invited panel member. (Cambridge, MA; June 7, 2011)
7. **Griffin, T.** 2010. Food Systems Research. Invited convener for working session, Northeast Sustainable Agriculture Working Group Conference (November 10-11, 2010; Albany NY)
8. **Griffin, T.** 2010. Sustainability and Food Security. Invited panel presentation at Museum of Science (October 8, 2010; Boston MA).
9. **Griffin, T.** 2010. Food System Futures. Invited Keynote at Food Justice Conference (February 20, 2011; Eugene OR)
10. **Griffin, T.** 2009. The Industrialization of Agriculture. Invited presentation and panel member, Museum of Science (November, 2009; Boston MA).
11. **Griffin, T.** 2009. Research on Regional Food Systems. Coordinator and convener at "It Takes a Region" conference, Northeast Sustainable Agriculture Working Group. (November 2009; Albany NY).
12. **Griffin, T.** 2009 Agriculture and Climate Change. Invited presentation to Advanced Science program, Manchester-by-the-Sea High School. (December 2009; Manchester-by-the-Sea, MA).
13. **Griffin, T.** 2009. Agriculture and Climate Change. Invited presentation at Brookline High School Climate Action Day. (October 2009; Brookline MA)