

**CURRICULUM VITA OF JOHN P. REGANOLD**

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APPOINTMENT: Regents Professor of Soil Science & Agroecology

FACULTY SPECIALIZATION: Soil Quality and Sustainable Agriculture

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EDUCATION: B.A. German 1971 University of California, Berkeley  
 M.S. Soil Science 1974 University of California, Berkeley  
 Ph.D. Soil Science 1980 University of California, Davis

PROFESSIONAL EXPERIENCE:

1971-1974 Research Assistant, University of California, Berkeley  
 1974-1980 Soil Scientist, U.S.D.A. Soil Conservation Service, Santa Cruz, San Luis Obispo, and Davis, California  
 1975-1976 Soils Instructor, Cabrillo College, Aptos, California  
 1977, 1978, 1980 Soils Instructor (Summer Session), Univ. of California, Davis & Berkeley  
 1980-1983 Environmental Engineer, Utah International Inc., San Francisco, California  
 1983-now Regents Professor of Soil Science (as of 7/2006); Professor (as of 7/1994); Associate Professor (as of 7/1989); Assistant Professor (8/1983), Washington State University; appointment 60% teaching/40% research (8/1983 to 12/2001) and 55% research/45% teaching since 1/2002.  
 2006-now Director of the WSU AFS Organic Agriculture Systems Major  
 2009-now Director of the WSU Certificate in Organic Agriculture Program

SCHOLARLY INTERESTS AND EXPERTISE:

1. Analyzing the sustainability and agroecology of farming systems, including biodynamic, conventional, integrated, no-till, organic, and perennial-grain farming systems; sustainability indicators measured include soil health, crop quality, financial performance, environmental quality, and social responsibility;
2. Analyzing soil quality metrics and land-use classification systems;
3. Analyzing and developing metrics for global food production systems and prime agricultural lands; and
4. Fostering critical thinking and problem solving abilities with undergraduate and graduate students in the classroom and during advising sessions.

SCHOLARLY AWARDS AND RECOGNITIONS:

Associate Editor, *Journal of Life Sciences and Natural Resources Education*, 1986 to 1992

Contributing Editor, *Gourmet* magazine, 2004-2009

Board of Advisors, *Scientific American*, 2009-2016

R.M. Wade Foundation Award for Excellence in Teaching in the College of Agricultural, Human, and Natural Resource Sciences, Washington State University, 1988

President's (Sahlin) Faculty Excellence Award for Instruction, Washington State University, 1990

Junior Faculty Excellence Award in Research in the College of Agriculture and Home Economics, Washington State University, 1994

Nominated for the 1994 Australia Prize, Department of Industry, Technology and Commerce, Canberra, Australia

Distinguished Faculty Address Award, Washington State University, 2006

Regents Professor of Soil Science, Washington State University, 2006-now

Member, National Academy of Sciences 21<sup>st</sup> Century Agricultural Systems Committee, 2007-2010

Member, AGree Food Policy Research Committee, 2011-now

Science Research Award, The Organic Center, 2011

Elected to the Washington State Academy of Sciences in 2012

Invited TEDx talk at Washington State University on 26 April 2014

Natural Resources Defense Council and Berkeley Food Institute Growing Green Award: Sustainable Food and Farm Educator, 2014

American Society of Agronomy Organic Achievement Award, 2014

Eminent Faculty Award, Washington State University, 2015

VISITING SCIENTISTS AND INNOVATORS:

Chuck Benbrook, Agroecologist, The Organic Center, Sandpoint, ID, 2004 and 2005

Mike Benziger, Benziger Family Winery, Glen Ellen, CA, 2015

Denise Breyley, Local Forager, Whole Foods Market Pacific Northwest, Seattle, WA, 2013-2015

Chuck Eggert, CEO, Pacific Foods, Tualatin, OR, 2009

Jerry Glover, Agroecologist, The Land Institute, Salina, Kansas, 2004 and 2005

David Huggins, Asst. Professor, Dept. of Soil Science, University of Minnesota, St. Paul, 1993  
 Wes Jackson, President, The Land Institute, Salina, Kansas, 1998  
 John Kiefer, Environmental Engineer, Utah International Inc., San Francisco, CA, 1984  
 Sasha Kramer, Agroecologist, Stanford University, Stanford, CA, 2003.  
 Carlo Leifert, Director, TESCO Centre for Organic Agriculture and Professor of Ecological  
 Agriculture, University of Newcastle, Newcastle-on Tyne, England, 2016  
 James Lockhart, Lecturer, Department of Agricultural and Horticultural Systems Management,  
 Massey University, Palmerston North, New Zealand, 1991  
 Alec McErlich, Head of Research, Small Planet Foods, Sedro Wooley, Washington, 2002  
 Don McFarland, President, Biological Farmers of Australia, Sidney, New South Wales, 1994  
 Ian Merwin, Assoc. Professor, Dept. of Horticulture, Cornell University, Ithaca, New York, 2000  
 Harold Mooney, Professor, Department of Biological Sciences, Stanford University, Stanford,  
 CA, 2005  
 Alan Palmer, Senior Lecturer, Department of Soil Science, Massey University, Palmerston  
 North, New Zealand, 1996 and 2003  
 James Parr, Soil Scientist, USDA Agricultural Research Service, Beltsville, Maryland, 1990  
 Jim Richardson, Science Photographer, National Geographic, Washington, DC, 2007.  
 Joe Rogoff, President, Whole Foods Market Pacific Northwest Region, Seattle, WA, 2013  
 Walter Robb, Co-CEO, Whole Foods Market, Austin, TX, 2012  
 Paul Saffigna, Associate Professor, Program in Environmental Sciences, Griffith University,  
 Brisbane, Queensland, Australia. 1995  
 Bob Scowcroft, Exec. Director, Organic Farming Research Foundation, Santa Cruz, CA, 2004  
 Sieglinda Snapp, Professor, W.K. Kellogg Biological Station, Department of Plant, Soil and  
 Microbial Sciences, Michigan State University, 2009  
 Steve Temple, Professor, Dept. Agronomy & Range Sci., Univ. of Calif., Davis, 1999  
 Alan York, Viticulture Consultant, Wholistic Estate Management, Hopland, CA, 2000, 2004.

#### INTERNATIONAL COLLABORATIONS:

J. Bay-Petersen, Food and Fertilizer Technology Center, Suwon, SOUTH KOREA  
 Stéphane Bellon, INRA, Avignon, FRANCE  
 Trent Bunderson, Total LandCare, Lilongwe, MALAWI  
 Ken Cassman, ISPC of the CGIAR, University of Nebraska, Lincoln, NEBRASKA  
 Robert Costanza, The Australian National University, Acton, AUSTRALIA  
 Cindy Cox, International Food Policy Research Institute, Washington, D.C., USA  
 Miguel Elissalt and Jose Guillisasti, Emilliana Vineyards, Casablanca, CHILE  
 Alvaro Espinoza, Antiyal Vineyards and Winery, Paine, CHILE  
 Tom Forge, Agriculture and Agri-Food Canada, Agassiz, British Columbia, CANADA  
 Bruno Gérard, CIMMYT, Mexico City, MEXICO  
 Hans Herren, Millenium Institute, Arlington, VA, USA  
 Marco Jacometti, Lincoln University, Lincoln, NEW ZEALAND  
 Zwide Jere, Total LandCare, Lilongwe, MALAWI  
 Johnny Johnston, Rothamsted Experiment Station, Rothamsted, UNITED KINGDOM  
 Paul Kristiansen, University of New England, Armidale, New South Wales, AUSTRALIA  
 Michael Lee, Rothamsted Research North Wyke and Univ. of Bristol, UNITED KINGDOM  
 James Lockhart, Massey University, Palmerston North, NEW ZEALAND

Heidi Lumpkin, Asian Vegetable Research & Development Center, TAIWAN  
 Patrick Madden, World Sustainable Agriculture Association, Tokyo, JAPAN  
 Paul Mäder, Research Institute of Organic Agriculture, Frick, SWITZERLAND  
 Alan Palmer, Massey University, Palmerston North, NEW ZEALAND  
 Kyung-Ae Park, Korea Foundation Chair, University of British Columbia, BC, CANADA  
 James Parr, Indian Society of Agronomy, New Delhi, INDIA  
 John Porter, University of Copenhagen, DENMARK  
 Jules Pretty, University of Essex, Colchester, UNITED KINGDOM  
 Ignacio Romagosa, University of Lleida, Lerida, SPAIN  
 Paul Saffigna, Griffith University, Brisbane, Queensland, AUSTRALIA  
 Harpinder Sandhu, Flinders University, Adelaide, SA, AUSTRALIA  
 Acram Taji, University of New England, Armidale, New South Wales, AUSTRALIA  
 Christian Thierfelder, CIMMYT, Harare, ZIMBABWE  
 Steve Wratten, Lincoln University, Lincoln, NEW ZEALAND

#### PROFESSIONAL LEAVES:

- 1990-1991 12-month sabbatical at Massey University, Palmerston North, New Zealand; conducted research measuring soil quality and financial performance of biodynamic and conventional farms.
- 1997-1998 12-month sabbatical at University of Hawaii at Manoa, Honolulu; co-wrote textbook, *Natural Resource Conservation* (published in 1998), and studied tropical soils and farming systems.
- 2003-2004 12-month sabbatical at Fetzer Vineyards, Hopland, California, and University of California at Davis, California; began work on co-edited book, *Organic Agriculture: A Global Perspective* (published in 2006), and conducted agroecological research on research plots at McNab Ranch near Hopland, CA.
- 2009-2010 12-month sabbatical at The Land Institute, Salina, Kansas, and at Sustainable Systems Design, Inc., Evergreen, CO; conducted research with (i) perennial grain systems and (ii) metrics for monitoring global farming systems, and revised my textbook, *Natural Resource Conservation: Management for a Sustainable Future* (published in 2010).

#### PUBLICATIONS:

##### *Books and Edited Books*

- Owen, O.S., D.D. Chiras, and J.P. Reganold. 1998. *Natural Resource Conservation: Management for a Sustainable Future, 7th edition*. Prentice Hall, Upper Saddle River, New Jersey. 594 pp.
- Chiras, D.D., J.P. Reganold, and O.S. Owen. 2002. *Natural Resource Conservation: Management for a Sustainable Future, 8th edition*. Prentice Hall, Upper Saddle River, New Jersey. 640 pp.

3. Chiras, D.D. and J.P. Reganold. 2005. *Natural Resource Conservation: Management for a Sustainable Future, 9th edition*. Prentice Hall, Upper Saddle River, New Jersey. 644 pp.
4. Kristiansen, P., A. Taji, and J. Reganold (eds.). 2006. *Organic Agriculture: A Global Perspective*. CSIRO Publishing, Collingwood, Victoria, Australia. 449 pp.
5. Chiras, D.D. and J.P. Reganold. 2010. *Natural Resource Conservation: Management for a Sustainable Future, 10th edition*. Prentice Hall, Upper Saddle River, New Jersey. 659 pp.
6. Committee on Twenty-First Century Systems Agriculture (J.L. Kornegay, R.R. Harwood, S.S. Batie, D. Bucks, C.B. Flora, J. Hanson, D. Jackson-Smith, W. Jury, D. Meyer, J.P. Reganold, A. Schumacher, Jr., H. Sehmsdorf, C. Shennan, L.A. Thrupp, and P. Willis). 2010. *Toward Sustainable Agricultural Systems in the 21st Century*. National Research Council, The National Academies Press, Washington, D.C. 570 pp.

#### *Refereed Journal and Magazine Articles*

7. Reganold, J.P. and M.J. Singer. 1979. Defining prime farmland by three different land classification systems. *Journal of Soil and Water Conservation* 34:172-176.
8. Reganold, J.P. and M.J. Singer. 1984. Comparing farm production input/output ratios using two land classification systems. *Journal of Soil and Water Conservation*.39:47-53.
9. Reganold, J.P. and J.B. Harsh. 1985. Expressing cation exchange capacity in milliequivalents per 100 grams and SI units. *Journal of Agronomic Education* 14:84-90.
10. Rozenbaum, S.J. and J.P. Reganold. 1986. State farmland preservation programs within the upper Mississippi River Basin: A comparison. *Landscape Planning* 12:315-336.
11. Reganold, J.P. 1986. The Land Capability Classification System. *Northwest Land Use Review* 2:11-13.
12. Reganold, J.P. 1986. Prime agricultural land protection: The Washington State experience. *Journal of Soil and Water Conservation* 41:89-92.
13. Reganold, J.P. and G.R. Christensen. 1986. Boundary Review Boards: A legislative approach to manage growth conflicts in the urban fringe in Washington State. *Landscape and Urban Planning* 13:183-197.
14. Reganold, J.P. 1986. Evaluating two different introductory soils texts by comparing student exam and homework scores. *Journal of Agronomic Education* 15:107-110.
15. Reganold, J.P., L.F. Elliott and Y.L. Unger. 1987. Long-term effects of organic and conventional farming on soil erosion. *Nature* 330:370-372.
16. Jennings, M.D. and J.P. Reganold. 1988. Policy and reality of environmentally sensitive areas in Whitman County, Washington, USA. *Environmental Management* 12:369-380.
17. Christensen, G.R., W.W. Budd, J.P. Reganold and F.R. Steiner. 1988. Farmland protection in Washington State: An analysis. *Journal of Soil and Water Conservation* 43:411-415.
18. Reganold, J.P. 1988. Comparison of soil properties as influenced by organic and conventional farming systems. *American Journal of Alternative Agriculture* 3:144-155.
19. Reganold, J.P. and J.F. Parr. 1988. IFOAM conference focuses on agricultural alternatives and nutritional self-sufficiency for developing countries. *American Journal of Alternative Agriculture* 3:186.
20. Huyck, L.M. and J.P. Reganold. 1989. Environmental policies and issues surrounding Holden Mine tailings: A case study of an orphaned mine. *Environmental Impact Assessment Review* 9:97-123.

21. Jennings, M.D. and J.P. Reganold. 1989. Local government policies toward environmentally sensitive areas in British Columbia, Canada; Washington and Oregon, USA. *Environmental Management* 13:443-453.
22. Reganold, J. 1989. Farming's organic future. *New Scientist* 122(10 June):49-52.
23. Reganold, J.P., R.I. Papendick and J.F. Parr. 1990. Sustainable agriculture. *Scientific American* 262(June):112-120.
24. Reganold, J.P. 1990. Organic and conventional farming: What's the difference? *Acres Australia: The Journal of Sustainable Agriculture* 4:30-33.
25. Reganold, J.P., R.I. Papendick, and J.F. Parr. 1990. Sustainable agriculture, the living soil. *Journal of Chiropractic* 27:61-67.
26. Jennings, M.D. and J.P. Reganold. 1991. Hierarchy and subsidy-stress as a theoretical basis for managing environmentally sensitive areas. *Landscape and Urban Planning* 21:31-45.
27. Jennings, M.D. and J.P. Reganold. 1991. A theoretical basis for managing environmentally sensitive areas. *Environmental Conservation* 18:211-218.
28. Mulla, D.J., L.M. Huyck and J.P. Reganold. 1992. Temporal variation in aggregate stability on conventional and alternative farms. *Soil Science Society of America Journal* 56:1620-1625.
29. Reganold, J.P., A.S. Palmer, J.C. Lockhart, and A.N. Macgregor. 1993. Soil quality and financial performance of biodynamic and conventional farms in New Zealand. *Science* 260:344-349.
30. Reganold, J.P. 1994. Statistical analyses of soil quality. *Science* 264:282-283.
31. Crowe, E.A., A.J. Busacca, J.P. Reganold, and B.A. Zamora. 1994. Vegetation zones and soil characteristics in vernal pools in the Channeled Scabland of eastern Washington. *Great Basin Naturalist* 54:234-247.
32. Reganold, J.P. 1995. Soil quality and farm profitability of biodynamic and conventional farming systems: A review. *American Journal of Alternative Agriculture* 10:36-45.
33. Reganold, J.P. and A.S. Palmer. 1995. Significance of gravimetric and volumetric measurements of soil quality under biodynamic, conventional, and continuous grass management. *Journal of Soil and Water Conservation* 50:298-305.
34. Klein, L.R. and J.P. Reganold. 1997. Agricultural changes and farmland protection in western Washington. *Journal of Soil and Water Conservation* 52:6-12.
35. Carpenter-Boggs, L., A.C. Kennedy, and J.P. Reganold. 1998. Use of phospholipid fatty acids and carbon source utilization patterns to track microbial community succession in developing compost. *Applied and Environmental Microbiology* 64:4062-4064.
36. Carpenter-Boggs, L., J.P. Reganold, and A.C. Kennedy. 2000. Effects of biodynamic preparations on compost development. *Biological Agriculture and Horticulture* 17:313-328.
37. Glover, J.D., J.P. Reganold, and P.K. Andrews. 2000. Systematic method for rating soil quality of conventional, organic, and integrated apple orchards in Washington State. *Agriculture, Ecosystems & Environment* 80:29-45.
38. Carpenter-Boggs, L., J.P. Reganold, and A.C. Kennedy. 2000. Biodynamic preparations: Short-term effects on crops, soils, and weed populations. *American Journal of Alternative Agriculture* 15:110-118.
39. Carpenter-Boggs, L., A.C. Kennedy, and J.P. Reganold. 2000. Organic and biodynamic management: Effects on soil biology. *Soil Science Society of American Journal* 64:1651-1659.

40. Glover, J.D., P.K. Andrews, and J.P. Reganold. 2000. Applying a soil quality index to conventional, integrated, and organic apple production systems. *Acta Horticulture* 525:217-228.
41. Reganold, J.P., J.D. Glover, P.K. Andrews, and H.R. Hinman. 2001. Sustainability of three apple production systems. *Nature* 410:926-930.
42. Reganold, J.P., J.D. Glover, P.K. Andrews, and H.R. Hinman. 2001. Melicoltura convenzionale, integrata o biologica? Una scelta difficile. *Fruitticoltura* 63:33-36.
43. Andrews, P.K., J.K. Fellman, J.D. Glover, and J.P. Reganold. 2001. Soil and plant mineral nutrition and fruit quality under organic, conventional, and integrated apple production systems in Washington State, USA. *Acta Horticulturae* 564:291-298.
44. Mazzola, M., P.K. Andrews, J.P. Reganold, and C. Andre Levesque. 2002. Frequency, virulence and metalaxyl sensitivity of *Pythium* spp. isolated from apple roots under conventional and organic production systems. *Plant Disease* 86:669-675.
45. Andrews, P.K. and J.P. Reganold. 2004. Research networking to evaluate the sustainability of horticultural production systems. *Acta Horticulturae* 638:359-368.
46. Peck, G.M., C. Richter, P.K. Andrews, and J.P. Reganold. 2005. Internationalization of the organic fruit market: The case of Washington State's organic apple exports to the European Union. *Renewable Agriculture and Food Systems* 20:101-112.
47. Reeve, J.R., L. Carpenter-Boggs, J.P. Reganold, A.L. York, G. McGourty, and L.P. McCloskey. 2005. Soil and winegrape quality in biodynamic and organically managed vineyards. *American Journal of Enology and Viticulture* 56:367-376.
48. Peck, G.M., P.K. Andrews, J.P. Reganold, and J.K. Fellman. 2006. Apple orchard productivity and fruit quality under organic, conventional, and integrated management. *HortScience* 41:99-107.
49. Kramer, S.B., J.P. Reganold, J.D. Glover, B.J.M. Bohannan, and H.A. Mooney. 2006. Reduced nitrate leaching and enhanced denitrifier activity and efficiency in organically fertilized soils. *Proceedings of the National Academy of Sciences USA* 103:4522-4527.
50. Reganold, J. 2006. Sustainability of organic, conventional, and integrated apple orchards. *Crop Management*. doi:10.1094/CM-2006-0921-16-PS
51. Glover, J.D., C.M. Cox, and J.P. Reganold. 2007. Future farming: A return to roots? *Scientific American* 297(Aug):82-89.
52. Huggins, D.R. and J.P. Reganold. 2008. No-till: The quiet revolution. *Scientific American* 299(July):70-77.
53. Hoagland, L., L. Carpenter-Boggs, J.P. Reganold, and M. Mazzola. 2008. Role of native soil biology in Brassicaceous seed meal-induced weed suppression. *Soil Biology and Biochemistry* 40:1689-1697.
54. Hoagland, L., L. Carpenter-Boggs, D. Granatstein, M. Mazzola, J. Smith, F. Peryea, and J.P. Reganold. 2008. Orchard floor management effects on nitrogen fertility and biological soil activity in a newly established organic apple orchard. *Biology and Fertility of Soils* 45:11-18.
55. Reeve, J.R., J.L. Smith, L. Carpenter-Boggs, and J.P. Reganold. 2008. Soil-based cycling and differential uptake of amino acids by three species of strawberry (*Fragaria* spp.) plants. *Soil Biology and Biochemistry* 40:2547-2552.
56. Huggins, D.R. and J.P. Reganold. 2008. No-till farming: Justifiable herbicide? *Scientific American* 299(Nov):12.

57. Reeve, J.R., J.L. Smith, L. Carpenter-Boggs, and J.P. Reganold. 2009. Glycine, nitrate and ammonium uptake by classic and modern wheat varieties in a short-term microcosm study. *Biology and Fertility of Soils* 45:723-732.
58. Ross, C.F., K.M. Weller, R. B. Blue, and J.P. Reganold. 2009. Difference testing of Merlot produced from biodynamically and organically grown wine grapes. *Journal of Wine Research* 20:85-94.
59. Glover, J.D. and J.P. Reganold. 2010. Perennial grains: Food security for the future. *Issues in Science and Technology* 26(Winter):41-47.
60. Reeve, J.R., L. Carpenter-Boggs, J.P. Reganold, A. York, and W.F. Brinton. 2010. Influence of biodynamic preparations on compost development and resultant compost extracts on wheat seedling growth. *Bioresource Technology* 101:5658-5666.
61. TerAvest, D., J.L. Smith, L. Carpenter-Boggs, L. Hoagland, D. Granatstein, and J.P. Reganold. 2010. Influence of orchard floor management and compost application timing on nitrogen partitioning in apple trees. *HortScience* 45:637-642.
62. Reeve, J.R., C.W. Schadt, L. Carpenter-Boggs, S. Kang, J. Zhou, and J.P. Reganold. 2010. Effects of soil type and farm management on soil ecological functional genes and microbial activities. *ISME Journal* 4:1099-1107.
63. Glover, J.D., J.P. Reganold, L.W. Bell, J. Borevitz, E.C. Brummer, E.S. Buckler, C.M. Cox, T.S. Cox, T.E. Crews, S.W. Culman, L.R. DeHaan, D. Eriksson, B.S. Gill, J. Holland, F. Hu, B.S. Hulke, A.M.H. Ibrahim, W. Jackson, S.S. Jones, S.C. Murray, A.H. Paterson, E. Ploschuk, E.J. Sacks, S. Snapp, D. Tao, D.L. Van Tassel, L.J. Wade, D.L. Wyse, and Y. Xu. 2010. Increased food and ecosystem security via perennial grains. *Science* 328:1638-1639.
64. Reganold, J. 2010. The next revolution in farming. *Scientific American* 303(Sept):97.
65. Sachs, J., R. Remans, S. Smukler, L. Winowiecki, S.J. Andelman, K.G. Cassman, D. Castle, R. DeFries, G. Denning, J. Fanzo, L.E. Jackson, R. Leemans, J. Lehmann, J.C. Milder, S. Naeem, G. Nziguheba, C.A. Palm, P.L. Pingali, J.P. Reganold, D.D. Richter, S.J. Scherr, J. Sircely, C. Sullivan, T.P. Tomich, and P.A. Sanchez. 2010. Monitoring the world's agriculture. *Nature* 466:558-560.
66. Reganold, J.P., P.K. Andrews, J.R. Reeve, L. Carpenter-Boggs, C.W. Schadt, J.R. Alldredge, C.F. Ross, N.M. Davies, and J. Zhou. 2010. Fruit and soil quality of organic and conventional strawberry agroecosystems. *PLOS ONE* 5(9): e12346. doi:10.1371/journal.pone.0012346
67. Glover, J.D., J.P. Reganold, L.W. Bell, J. Borevitz, E.C. Brummer, E.S. Buckler, C.M. Cox, T.S. Cox, T.E. Crews, S.W. Culman, L.R. DeHaan, D. Eriksson, B.S. Gill, J. Holland, F. Hu, B.S. Hulke, A.M.H. Ibrahim, W. Jackson, S.S. Jones, S.C. Murray, A.H. Paterson, E. Ploschuk, E.J. Sacks, S. Snapp, D. Tao, D.L. Van Tassel, L.J. Wade, D.L. Wyse, and Y. Xu. 2010. Perennial questions of hydrology and climate. *Science* 330:33-34.
68. Reganold, J.P. 2011. Planting the seeds for perennials. *Wheat Life* 54(Jan):60-62.
69. Reganold, J.P., D. Jackson-Smith, S.S. Batie, R.R. Harwood, J.L. Kornegay, D. Bucks, C.B. Flora, J.C. Hanson, W.A. Jury, D. Meyer, A. Schumacher, Jr., H. Sehmsdorf, C. Shennan, L.A. Thrupp, and P. Willis. 2011. Transforming U.S. agriculture. *Science* 332:670-671.
70. TerAvest, D., J.L. Smith, L. Carpenter-Boggs, D. Granatstein, L. Hoagland, and J.P. Reganold. 2011. Soil carbon pools, nitrogen supply, and tree performance under several groundcovers and compost rates in a newly planted apple orchard. *HortScience* 46:1687-1694.
71. Sachs, J., R. Remans, S. Smukler, L. Winowiecki, S.J. Andelman, K.G. Cassman, D. Castle,



- R. DeFries, G. Denning, J. Fanzo, L.E. Jackson, R. Leemans, J. Lehmann, J.C. Milder, S. Naeem, G. Nziguheba, C.A. Palm, P.L. Pingali, J.P. Reganold, D.D. Richter, S.J. Scherr, J. Sircely, C. Sullivan, T.P. Tomich, and P.A. Sanchez. 2012. Effective monitoring of agriculture: A response. *Journal of Environmental Monitoring* 14:738-742.
72. Reganold, J.P. 2012. The fruits of organic farming. *Nature* 485:176-177.
73. Glover, J.D., J.P. Reganold, and C.M. Cox. 2012. Plant perennials to save Africa's soils. *Nature* 489:359-361.
74. Cuthbertson, D., P.K. Andrews, J.P. Reganold, N.M. Davies, and B.M. Lange. 2012. Utility of metabolomics toward assessing the metabolic basis of quality traits in apple fruit with an emphasis on antioxidants. *Journal of Agricultural and Food Chemistry* 60:8552-8560.
75. Reganold, J.P. 2013. Comparing organic and conventional farming systems: metrics and research approaches. *Crop Management* doi:10.1094/CM-2013-0429-01-RS.
76. Klein, L.R., W.G. Hendrix, J.B. Kaytes, V.I. Lohr, R.D. Saylor, M.E. Swanson, W.J. Elliot, and J.P. Reganold. 2015. Linking ecology and aesthetics in sustainable agricultural landscapes: Lessons from the Palouse region of Washington, U.S.A. *Landscape and Urban Planning*. 134:195-209.
77. Sandhu, H., S. Wratten, R. Constanza, J. Pretty, J.R. Porter, and J. Reganold. 2015. Significance and value of non-traded ecosystem services on farmland. *PeerJ* 3:e762 doi.org.10.7717/peerj.762.
78. Crowder, D.W. and J.P. Reganold. 2015. Financial competitiveness of organic agriculture on a global scale. *Proceedings of the National Academy of Sciences USA* 112:7611-7616.
79. TerAvest, D., L. Carpenter-Boggs, C. Thierfelder, and J.P. Reganold. 2015. Crop production and soil water management in conservation agriculture, no-till, and conventional tillage systems in Malawi. *Agriculture, Ecosystems and Environment* 212:285-296.
80. Reganold, J.P. and J.M. Wachter. 2016. Organic agriculture in the 21<sup>st</sup> century. *Nature Plants*. 2:e15221. doi: 10.1038/NPLANTS.2015.221
81. Morrow, J.G., D.R. Huggins, L.A. Carpenter-Boggs, and J.P. Reganold. 2016. Evaluating measures to assess soil health in long-term agroecosystem trials. *Soil Science Society of*
82. Reganold, J.P. and J.D. Glover. 2016. A cure for Africa's soil. *Scientific American*. 314(May):66-69.
83. Sandhu, H., S. Wratten, J.R. Porter, R. Constanza, J.N. Pretty, and J.P. Reganold. 2016. Mainstreaming ecosystem services into future farming. *Solutions*. 7(2): 40-47.
84. Reganold, J.P. and J.M. Wachter. 2016. Reply to 'Are the claimed benefits of organic agriculture justified?' *Nature Plants*. 2:e16100. doi: 10.1038/NPLANTS.2016.100
85. Reganold, J.P. and J.M. Wachter. 2016. Reply to 'Organic farming and deforestation'. *Nature Plants*. 2:e16101. doi: 10.1038/NPLANTS.2016.101
86. Morrow J.G., D.R. Huggins, and J.P. Reganold. 2017. Climate change predicted to negatively influence surface soil organic matter of dryland cropping systems in the inland Pacific Northwest, USA. *Frontiers in Ecology and Evolution*. doi: 10.3389/fevo.2017.00010
87. Brown, T. T., C. M. Lee, C. E. Kruger, J. P. Reganold, and D. R. Huggins. 2017. Comparison of Greenhouse Gas Offset Quantification Protocols for Nitrogen Management in Dryland Wheat Cropping Systems of the Pacific Northwest. *Frontiers in Ecology and Evolution*. In press.
88. Kaur H., D.R. Huggins, R.A. Rupp, J.T. Abatzoglou, C.O. Stöckle, and J.P. Reganold. 2017. Agro-ecological Class Stability Decreases in Response to Climate Change Projections for the

Pacific Northwest, USA. *Frontiers in Ecology and Evolution*. In review.

*Refereed Chapters in Books and Encyclopedias*

89. Reganold, J.P., R.I. Papendick, and J.F. Parr. 1990. Sustainable agriculture in the United States: An overview. In R.P. Singh (ed.) *Sustainable Agriculture: Issues, Perspectives and Prospects in Semi Arid Tropics, Vol. 1*. Indian Society of Agronomy, New Delhi. pp. 444-459.
90. Reganold, J. P., R. I. Papendick, and J. F. Parr. 1992. Agricultural soil and crop practices: Sustainable agriculture. *McGraw-Hill Encyclopedia of Science and Technology*, 7th edition. Vol. 1, pp. 208-209.
91. Reganold, J. P., R. I. Papendick, and J. F. Parr. 1992. Sustainable agriculture in the United States. In P. Conford (ed.) *A Future for the Land: Organic Practice from a Global Perspective*. Green Books Ltd, Bideford, UK. pp. 91-101.
92. Reganold, J. P. 1993. Effects of alternative and conventional farming systems on agricultural sustainability. In J. Bay-Petersen (ed.) *Sustainable Agriculture for the Asian and Pacific Region*. Food & Fertilizer Technology Center, Taipei, Taiwan. pp. 1-5.
93. Reganold, J. P. 1995. Soil quality and farm profitability studies of biodynamic and conventional farming systems. In H. F. Cook and H. C. Lee (eds.) *Soil Management in Sustainable Agriculture*. Wye College Press, Wye, UK. pp. 1-11.
94. Klein, L. R. and J. P. Reganold. 1998. Western Washington state: Urbanization, agricultural changes, and farmland protection. In R. K. Olson and T. A. Lyson (eds.) *Under the Blade: The Conversion of Agricultural Landscapes*. Westview Press, Boulder, CO. pp. 410-420.
95. McGourty, G.T. and J.P. Reganold. 2004. Managing vineyard soil organic matter with cover crops. In P. Christensen and D. Smart (eds) *Soil Environment and Vine Mineral Nutrition*. American Society for Enology and Viticulture, Davis, CA. pp. 145-151.
96. Kristiansen, P., A. Taji, and J. Reganold. 2006. Organic agriculture: opportunities and challenges. In P. Kristiansen, A. Taji, and J. Reganold (eds.) *Organic Agriculture: A Global Perspective*. CSIRO Publishing, Collingwood, Victoria, Australia. pp. 421-441.
97. Reganold, J.P. 2007. Organic agriculture as a form of sustainable agriculture. In R.M. Goodman (ed) *Encyclopedia of Plant and Crop Science*. Marcel Dekker, Inc., New York, NY. pp. 846-849.
98. Reganold, J.P., P.K. Andrews, J.R. Reeve, L. Carpenter-Boggs, C.W. Schadt, J.R. Alldredge, C.F. Ross, N.M. Davies, and J. Zhou. 2013. Organic vs. conventional strawberry agroecosystem. In D. Rooney (ed.) *Sustainable Soil Management*. CRC Press, Boca Raton, Florida. pp. 185-215.
99. Wachter, J.M., and J.P. Reganold. 2014. Organic agricultural production: plants. In N.K. Van Alfen (ed) *Encyclopedia of Agriculture and Food Systems, Vol. 4*. Elsevier, San Diego, CA. pp. 265-286.
100. Reganold, J.P. 2014. Perennial grain systems: a sustainable response to future food security challenges. In C. Batello, L. Wade, S. Cox, N. Pogna, A. Bozzini, and J. Choptiany (eds) *Perennial Crops for Food Security*. FAO, Rome, Italy. pp. 256-265.
101. Reganold, J.P., and J.M. Wachter. 2014. Organic agriculture. In Y. Wang (ed) *Encyclopedia of Natural Resources, Vol. 1*. Taylor & Francis, New York, NY. pp. 1-6.
102. Kaur, H., D. Huggins, R. Rupp, J. Abatzoglou, C. Stockle, and J. Reganold. 2015. Bioclimatic-driven future shifts in dryland agroecological classes. pp 10-11. In K. Borrelli,

D. Daley Laursen, S. Eigenbrode, B. Mahler, and R. Pepper (eds.) *Regional Approaches to Climate Change for Pacific Northwest Agriculture, Climate Science Northwest Farmers Can Use* (REACCH Annual Report, Year 4). University of Idaho, Moscow. pp. 10-11.

#### *Extension Bulletins*

103. Glover, J., H. Hinman, J. Reganold, and P. Andrews. 2002. *A cost and return analysis of conventional vs. integrated vs. organic apple production systems*. Washington State University Research Bulletin XB1041, Pullman.
104. Reganold, J.P. 2003. Soils and their management in organic viticulture. *Organic Winegrowing Short Course*, UC Davis Cooperative Extension, Hopland, CA, Ch. 3, pp. 1-11.
105. TerAvest, D., J. Reganold, and C. Thierfelder. 2014. *Diversification of maize-based conservation agriculture: crop yields and residue production*. Total LandCare and Washington State University Extension Bulletin 1/3, Total LandCare, Malawi.
106. TerAvest, D., J. Reganold, and C. Thierfelder. 2014. *Diversification of maize-based conservation agriculture: soil-water relations*. Total LandCare and Washington State University Extension Bulletin 2/3, Total LandCare, Malawi.
107. TerAvest, D., J. Reganold, and C. Thierfelder. 2014. *Diversification of maize-based conservation agriculture: economic impacts on smallholder households*. Total LandCare and Washington State University Extension Bulletin 3/3, Total LandCare, Lilongwe, Malawi.

#### *Proceedings and Posters*

108. Reganold, J. P. and M. J. Singer. 1978. *Defining prime agricultural land in California*. Environmental Quality Series No. 29. Institute of Government Affairs, Institute of Ecology, and UCD Kellogg Program, University of California, Davis. 45 pp.
109. Williams, R. D., W. J. Ruzzo and J. P. Reganold. 1983. Soil and overburden research needs. *Proceedings of the Conference on Soil and Overburden Requirements for Successful Revegetation*. Denver, Colorado. pp. 165-178.
110. Reganold, J. P. 1990. Long term effects of organic and conventional farming on soil productivity. In A. Djigma, E. Nikiema, D. Lairon, and P. Ott (eds.) *Agricultural Alternatives and Nutritional Self-Sufficiency*. Proceedings of the IFOAM Seventh International Scientific Conference, Tholey-Theley, Germany. pp. 232-243.
111. Reganold, J. P. 1990. Long-term effects of organic and conventional farming on soil productivity. *The International Conference on Agriculture for the 21st Century: Towards a Sustainable Agriculture for the Pacific Rim Nations*. Pacific Culture Center and MOA Foundation, Maui, Hawaii. p. 32.
112. Reganold, J. P. 1991. Long-term effects of organic and conventional farming on soil productivity. *The International Conference on Agriculture for the 21st Century: Presentations*. MOA Foundation, New York, New York. pp. 38-43.
113. Reganold, J. P. 1992. Effects of alternative and conventional farming systems on agricultural sustainability. In *Sustainable Agriculture for the Asian and Pacific Region Proceedings*. Food & Fertilizer Technology Center, Taipei, Taiwan. pp. 1-1 to 1-16.
114. Reganold, J. P. 1993. Effects of biodynamic and conventional farming on soil quality in New Zealand. *Proceedings of a Conference on Nature Farming for a Sustainable*

- Agriculture (Third International Kyusei Nature Conference Proceedings)*, Santa Barbara, California. pp. 65-69.
115. Reganold, J. P. 1993. Comparison of soil quality and financial performance of biodynamic and conventional farms in New Zealand. In C. Ingels (ed.) *Proceedings Sustainable Soil Management Symposium*. University of California, Davis. p.47.
  116. Reganold, J. P. 1994. Soil quality and farm profitability of biodynamic and conventional farms in New Zealand. *International Symposium: Environmental Agriculture towards 2000 Proceedings*. Griffith University, Queensland, Australia. p. 29.
  117. Reganold, J. P. 1996. Effects of biodynamic and conventional farming on soil quality in New Zealand. In J. F. Parr, S. B. Hornick, and M. E. Simpson (eds.) *Third International Conference on Kyusei Nature Farming*. USDA, Washington, DC. pp. 75-79.
  118. Reganold, J. 1996. On-farm analysis of soils, crop performance and profitability of organic, integrated and conventional apple production systems. *Organic Farming Research Foundation Research Report*. <<http://www.ofrf.org/research/grants/farm-analysis-soils-crop-performance-and-profitability-organic-integrated-and>>.
  119. Reganold, J. P. 1997. Alternative agriculture can be sustainable. *Crop Production Week 1997 General Session Proceedings*. Saskatoon, Saskatchewan.
  120. Reganold, J. P., J. D. Glover, and P. K. Andrews. 2000. Soil quality, crop yield, and orchard profitability of organic, conventional, and integrated apple production systems. In T. Alfoldi, W. Lockeretz, and U. Niggli (eds.) *The World Grows Organic*. Proceedings of the 13th Intern. IFOAM Scientific Conference, VDF Hochschulverlag AG, Zurich, Switzerland. pp. 250-253.
  121. Andrews, P.K., J.D. Glover and J.P. Reganold. 2001. Horticultural performance, soil quality, and orchard profitability of integrated, organic, and conventional apple production systems. In: J. Avilla and F. Polesny (eds.). *Proceedings of the 5th International Conference on Integrated Fruit Production*. IOBC/WPRS Bulletin 24(5):393-400.
  122. Carpenter-Boggs, L., J. Reeve, and J.P. Reganold. 2002. Biodynamic compost preparations speed composting and increase nitrogen. In C. Miles, D. Granatstein, and A. Stone (eds) *Cultivating Biological Connections, Proceedings of the Northwest Symposium on Organic and Biologically Intensive Farming: Advances in Research and Education*, Yakima, WA. p. 2.
  123. Andrews, P.K., J.P. Reganold, H.R. Hinman, and J.D. Glover. 2002. Horticultural performance, soil quality, and orchard profitability of organic, integrated, and conventional apple production systems. *Good Fruit* <<http://www.goodfruit.com/subscriber/research/andrews/andrews.html>>.
  124. Peck, G.M., J.D. Glover, P.K. Andrews, J.P. Reganold, and H.R. Hinman. 2002. Sustainability of three apple production systems: organic, conventional, and integrated. Past results, present research, and future objectives. In C. Miles, D. Granatstein, and A. Stone (eds) *Cultivating Biological Connections, Proceedings of the Northwest Symposium on Organic and Biologically Intensive Farming: Advances in Research and Education*, Yakima, WA. p. 7.
  125. Reganold, J. P. 2002. Sustainability of organic, conventional, and integrated apple production systems. *Ecological Farming Conference*, Monterey, CA. p. 22.
  126. Huggins, D., J. P. Reganold, and L. Carpenter-Boggs. 2002. Organic agroecosystem trials: Strategies for low-disturbance dryland cropping systems. *Northwest Symposium on Organic and Biologically Intensive Farming: Advances in Research and Education*, Yakima, WA.

127. Andrews, P.K. and J.P. Reganold. 2002. Research networking to evaluate the sustainability of horticultural production systems. *On-Site Program XXVIth International Horticultural Congress and Exhibition, International Society for Horticultural Science*, p. 292.
128. Reganold, J.P. 2003. Healthy soils for a sustainable viticulture. *American Society of Enology and Viticulture Proceedings*, Reno, Nevada.
129. Andrews, P. K. and Reganold, J. P. 2003. Assessing pesticide impacts of orchard production systems in Washington State: A case study. *Proceedings of the 2<sup>nd</sup> National Organic Tree Fruit Research Symposium*. Grand Junction, CO. pp. 68-72.
130. Reganold, J. 2003. Is there a role for pesticide-free crops? Cultivating Collaborations: Health and Safety in Western Agriculture. *Proceedings of the Pacific Northwest Agricultural Safety and Health Center*, University of Washington, Seattle. p. 15.
131. Andrews, P.K., J.P. Reganold, H.R. Hinman, and J.D. Glover. 2004. Horticultural performance, soil quality, and orchard profitability of integrated, organic, and conventional apple production systems. *Proceedings of the 2002 Oregon Horticultural Society*. Online at <[http://www.oregonhorticulturalsociety.org/newsletter/newsletter.php?article=84&month=&section=12&n\\_id=5&rank=3](http://www.oregonhorticulturalsociety.org/newsletter/newsletter.php?article=84&month=&section=12&n_id=5&rank=3)>.
132. Niewweija, S.M., D.R. Huggins, and J.P. Reganold. 2004. Sustainable organic agroecosystems: Exploring low disturbance dryland cropping systems on the Palouse. In: W. Snyder and C. Miles (eds.). *Making the bugs work for you: Biological control in organic agriculture. Symposium proceedings*. WSU Center for Sustaining Agriculture and Natural Resources, Puyallup, WA. p. 54.
133. Peck, K.C., J. Reganold, and C. Perillo. 2004. Organic agriculture classes at Washington State University. In: C. Miles, D. Granatstein, A. Stone, and P. Miller (eds.). *Ecological and Organic Farm Management Workshop Proceedings*. Washington State University Center for Sustaining Agriculture and Natural Resources, Pullman, WA. p. 3.
134. Reeve, J.R., L. Carpenter-Boggs, J.P. Reganold, A.L. York, and G. McGourty. 2005. Soil and winegrape quality in a biodynamically and organically managed vineyard. In U. Köpke, U. Niggli, D. Neuhoff, P. Cornish, W. Lockeretz, and H. Willer (eds.) *Researching Sustainable Systems*. Proceedings of the 8th International Conference on Organic Viticulture, Institute of Organic Agriculture, Bonn, Germany.
135. Reeve, J.R., J.L. Smith, L. Carpenter-Boggs, and J.P. Reganold. 2005. Plant uptake of soluble organic molecules as N source In U. Köpke, U. Niggli, D. Neuhoff, P. Cornish, W. Lockeretz, and H. Willer (eds.) *Researching Sustainable Systems*. Proceedings of the First Scientific Conference of the International Society of Organic Agriculture Research (ISO FAR), Institute of Organic Agriculture, Bonn, Germany. pp. 44-47.
136. York, A, J. Reganold, and A. Busacca. 2006. *Biodynamics in the vineyard*. Field trip guidebook, Terroir 2006 Conference, University of California, Davis.
137. Andrews, P., N. Davies, and J. Reganold. 2006. Farming for fruit quality and health. *Farming for Food Quality Symposium*. Washington State University, Vancouver, WA. p.2.
138. Hoagland, L., L. Carpenter-Boggs, D. Granatstein, M. Mazzola, F. Peryea, J. Smith, J. Reganold. 2007. Nitrogen cycling and partitioning under alternative organic orchard floor management strategies. *Western Nutrient Management Conference 2007 Proceedings*. Salt Lake City, UT. pp. 117-123.
139. Hoagland, L.A., L. Carpenter-Boggs, D.M. Granatstein, J.L. Smith, J.P. Reganold, M.R. Wiman, D. TerAvest. 2007. Balancing N supply and weed control in newly established organic orchards. Washington State Horticultural Association Annual Meetings. Poster

140. Cuthbertson D.J., J.A. Yáñez, C.M. Remsberg, K. Vega-Villa, J.K. Takemoto, Y. Ohgami, M. Collier, P.K. Andrews, J.P. Reganold, N.M. Davies, and B.M. Lange. 2008. High throughput profiling of fruits for phytochemicals related to human health. Annual Meeting of the Phytochemical Society of North America. Poster
141. TerAvest, D., J. Reganold, L. Carpenter-Boggs, and J. Smith. 2008. Effects of ground cover management strategies on yield and nitrogen supply in organic apple production systems. BIOAg Symposium 2008, WSU Center for Sustaining Agriculture and Natural Resources, Pullman, WA. Poster
142. Cuthbertson, D.J., B.M. Lange, P. Andrews, J. Reganold, and N. Davies. 2008. High throughput metabolomic profiling of health-promoting phytochemicals in three sweet cherry varieties. Washington State Horticultural Association Annual Meetings, Yakima, WA. Poster
143. Bramwell, S.G., L. Carpenter-Boggs, D.R. Huggins, and J.P. Reganold. 2008. Challenges and benefits of integrating livestock and organic grain production in the Inland Northwest, U.S. Scientific Conference of the 8<sup>th</sup> European Summer Academy on Organic Farming, Lednice na Moravě, Czech Republic.
144. Carpenter-Boggs, L., J.P. Reganold, J.R. Reeve, and P.K. Andrews. 2011. Organic management improves soil health and strawberry nutritive value. *Western Nutrient Management Conference 2011 Proceedings*. Reno, Nevada. 9:73-76.
145. Reganold, J.P. 2011. Future role and challenges of organic agriculture in global food production. *IFOAM International Conference Proceedings*. Gyeonggi Paldang, South Korea.
146. Mooney, L., J. Kaytes, J. Reganold, and B. Jaeckel. 2012. Designing the new WSU Organic Farm. *WSU Showcase Abstracts*. Pullman, WA. Poster
147. Reganold, J.P. 2013. Perennial crops: a sustainable response to future food security challenges. *Proceedings of FAO International Conference on "Perennial Crops for Food Security"*. Rome, Italy.
148. Reganold, J. 2014. Smart soil: transforming American agriculture one class at a time. *Huffington Post*. <[http://m.huffpost.com/us/entry/5316132?utm\\_hp\\_ref=green](http://m.huffpost.com/us/entry/5316132?utm_hp_ref=green)>.
149. Reganold, J. 2014. Smart soil: transforming American agriculture one class at a time. *Farmers Hot Line*. 40(June):26-27. <[www.farmershotline.com](http://www.farmershotline.com)>.
150. Reganold, J. 2016. Organic is key to help feed the world. *UCS Science Network*. 3 Feb 2016. <<http://blog.ucsusa.org/science-blogger/organic-agriculture-is-key-to-helping-feed-the-world-sustainably>>.
151. Reganold, J. 2016. Organic is key to help feed the world. *PCC Sound Consumer*. June issue. <<http://www.pccnaturalmarkets.com/sc/1606/organic-key-to-help-feed-world.html>>.
152. Reganold, J. 2016. Can we feed 10 billion people on organic farming alone? Op-Ed, The Guardian. 14 Aug 2016, <https://www.theguardian.com/sustainable-business/2016/aug/14/organic-farming-agriculture-world-hunger>.
153. Appleby, A. and J. Reganold. 2017. Efficacy and economic viability of organic herbicides on a young, high-density apple orchard. Showcase for Undergraduate Research and Creative Activities (SURCA), WSU, Pullman, WA. Poster (Winner of the 2017 Crimson Award).

#### *Technical Reports and Science Bulletins*

154. Reganold, J. P. 1980. *The relationship of farm production inputs and outputs to land classification systems*. Ph.D. Dissertation. University of California, Davis. 189 pp.

155. Bowman, R. H., D. C. Estrada, J. P. Reganold, C. S. Beutler, T. D. Thorson and L. W. Williams. 1980. *Soil Survey of Santa Cruz County, California*. USDA Soil Conservation Service in cooperation with U.C. Agricultural Experiment Station. U.S. Government Printing Office, Washington, DC. 148 pp. plus 10 maps.
156. Reganold, J. P., W. J. Ruzzo and D. H. Hunter. 1981. Reclamation plan: General requirements. *Permit Application to Conduct Surface Coal Mining Operations for Navajo Mine*. Utah International Inc., San Francisco, CA. Vol. 1, Chap. 26, pp. 1-33.
157. Williams, R. D. and J. P. Reganold. 1981. Soil resources information. *Permit Application to conduct Surface Coal Mining Operations for Navajo Mine*. Utah International Inc., San Francisco, CA. Vol. 1, Chap.18, pp. 1-51.
158. Reganold, J. P., W. J. Ruzzo and D. H. Hunter. 1982. Reclamation plan. *Permit Application to Conduct Surface Coal Mining Operations for Alton Mine*. Utah International Inc., San Francisco, CA. Vol. 3, 85 pp.
159. Reganold, J. P., L. F. Elliott and Y. L. Unger. 1988. Long-term effects of organic and conventional farming on soil erosion. *IFOAM Bulletin for Organic Agriculture*. No. 4, pp. 3-5.
160. Andrews, P. K. and J. P. Reganold. 1999. Replant disease and nitrogen use in organic, integrated, and conventional apple production systems. *Horticulture/Pathology Apple Research Review for the Washington State Tree Fruit Research Commission (WSTFRC)*. WSTFRC, White Salmon, WA. pp. 37-40.
161. Andrews, P. K., J. P. Reganold, H. R. Hinman, and J. D. Glover. 2002. Horticultural Performance, Soil Quality, and Orchard Profitability of Organic, Integrated, and Conventional Apple Production Systems. *Good Fruit Grower* (May 1) 53(9):28.

### *Abstracts*

162. Reganold, J. P. and M. J. Singer. 1977. A comparison of three land classification systems: Storie Index, USDA Capability Classification, and USDA-LIM. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI. p. 130.
163. Reganold, J. P. and M. J. Singer. 1979. Relationship of farm production inputs/outputs to land classification systems. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI. p. 209.
164. Reganold, J. P. and M. J. Singer. 1982. Farm production input/output ratios compared to two land classification systems. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI. p. 238.
165. Reganold, J. P. 1986. Evaluating two different introductory soils texts by comparing student exam and homework scores. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI. p. 3.
166. Huyck, L. M., D. J. Mulla and J. P. Reganold. 1989. Effect of landscape position and time on aggregate stability of an organic vs. conventional farm. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI. p. 282.
167. Reganold, J. P., R. I. Papendick and J. F. Parr. 1990. Sustainable agriculture: An overview. *International Symposium on Natural Resources Management for a Sustainable Agriculture Abstracts, Vol. II*. Indian Society of Agronomy, New Delhi, India. p. 143.
168. Reganold, J. P. 1993. Effects of biodynamic and conventional farming on soil quality and farm profitability. *3rd Wye International Conference on Sustainable Agriculture Abstracts*. Wye College, University of London, UK. p. 6.

169. Reganold, J. P. 1993. Effects of biodynamic and conventional farming on soil quality. *Third International Conference on Kyusei Nature Farming Abstracts*. Nature Farming Research and Development Foundation, Lompoc, California. p. 41.
170. Reganold, J. P. 1993. Measuring soil quality and farm profitability on alternative and conventional farming systems using a paired-farm approach. *Science and Sustainability: Reshaping Agricultural Research and Education Presentation Abstracts*. Washington State University, Pullman. p. 9.
171. Carpenter-Boggs, L., A. C. Kennedy, and J. P. Reganold. 1995. Development of biodynamic compost. *Soil Ecology Society International Conference Abstracts*. Colorado State University, Fort Collins, CO. p. 34.
172. Glover, J. D., P. K. Andrews, and J. P. Reganold. 1998. Applying a soil quality index to conventional, integrated, and organic apple production systems. *IVth Symposium of the International Society for Horticulture Science (ISHS) on Integrated Fruit Production and the Xth Symposium of the International Organization for Biological and Integrated Control of Noxious Animals and Plants (IOBC) on Integrated Plant Protection in Orchards Abstracts*, Royal Research Station of Gorseme, Sint-Truiden, Belgium.
173. Glover, J. D., P. K. Andrews, and J. P. Reganold. 1999. Soil quality and crop yields of conventional, integrated, and organic apple production systems. *Washington State Horticulture Association Meetings*. Wenatchee, WA.
174. Reeve, J. R., J.P. Reganold, D. Huggins, J. D. Glover, and L. Carpenter-Boggs. 2002. Agroecosystem Research Trials. *Natural Systems Agriculture Fellows Workshop*, The Land Institute, Matfield Green, KS.
175. Moore, J.M., J.D. Glover, S.B. Kramer, J.P. Reganold, and P.K. Andrews. 2003. Enzymatic and microbial indicators for soil and environmental quality. *The International Conference "Enzymes in the Environment: Activity, Ecology and Applications"* (Abstracts), Prague, The Czech Republic.
176. Reeve, J.R., L. Carpenter-Boggs, J.D. Smith, and J.P. Reganold. 2004. Plant uptake of organic molecules as an N source. *Agronomy Abstracts* (#6448). American Society of Agronomy, Madison, WI.
177. McGourty, G., J.R. Reeve, L. Carpenter-Boggs, J.P. Reganold, and A.L. York. 2005. Soil and winegrape quality in biodynamic and organically managed vineyards. *International Workshop on Advances in Grapevine and Wine Research Book of Abstracts*. International Society for Horticultural Science, Venosa, Italy. p. 169.
178. York, A. and J. Reganold. 2006. Biodynamic viticulture: Myth and reality. *Terroir 2006 Conference Abstracts*. University of California, Davis. p. 41.
179. Stowe, M.S., R.T. Koenig, D.R. Huggins, and J.P. Reganold. 2006. Effect of N fertilizer source, rate, placement and application timing on hard red winter wheat yield and N-use efficiency. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI.
180. Hoagland, L., L. Carpenter-Boggs, D. Granatstein, F. Peryea, J. Smith, J. Reganold. 2006. Nitrogen and carbon cycling and partitioning in managed understories of organic apples. *HortScience*. 41:1032.
181. Vega-Villa, K., J. Yanez, C. Xiao, C. Remsberg, Y. Ohgami, M. Collier, J.P. Reganold, P.K. Andrews, and N. Davies. 2007. Identifying the health benefits of fruit consumption. *WSU Showcase Abstracts*. Pullman, WA. Poster
182. Andrews, P., and J. Reganold. 2006. Quality of organically and conventionally grown apples and strawberries. AAAS Annual Meetings, St. Louis, MO. Abstract



183. Ott, K., R. Koenig, C. Miles, J. Reganold, J. Powers, and B. Jaeckel. 2007. Leafy greens as a winter crop in Washington State. *WSU Showcase Abstracts*. Pullman, WA. Poster
184. Ott, K., R. Koenig, C. Miles, J. Reganold, J. Powers, and B. Jaeckel. 2007. Leafy greens as a winter crop in Washington State. *Hortscience*. 42:887 (ASHS Meeting Abstract).
185. Bramwell, S.G., T. Pillai, L. Carpenter-Boggs, D. Huggins, and J. Reganold. 2007. Mixed cereal-livestock crop rotations for Palouse agriculture. *WSU Showcase Abstracts*. Pullman, WA. Poster
186. Andrews P.K., J.P. Reganold, B.M. Lange, and N.M. Davies. 2009. Fruits and vegetables: Responses to soil management. AAAS Annual Meetings, Chicago, IL. Abstract.
187. Ingle, H.L., R. Koenig, J. Reganold, C. Miles, and T. Cerny-Koenig. 2009. The effect of harvest date and photoperiod on yield and NO<sub>3</sub>-N concentrations in organic leafy greens. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI.
188. Reganold, J.P. 2011. Soil health: 25 years of on-farm comparison studies. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI.
189. Kaur, H., D.R. Huggins, R.A Rupp, J. Abazoglou, C.O., Stockle and J. Reganold. 2014. Bioclimatic predictors of agro-ecological classes and projected shifts under climate change. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI.
190. Morrow, J, D.R. Huggins, J. Reganold, L. Carpenter-Boggs, H.P. Collins, H. Gollany, S. Machado, and J.L. Johnson-Maynard. 2014. Climate and management implications for surface soil C and N properties and important soil processes: A soil health perspective. *Agronomy Abstracts*. American Society of Agronomy, Madison, WI.
191. Orpet, R., E.E. Beers, J. Reganold, J. Goldberger, V. Jones, and D. Crowder. 2015. Dynamics of woolly apple aphid (*Erisoma lanigerum*) under organic and conventional orchard management. *Abstract*. Entomological Society of America (Pacific Branch Meeting), Coeur d'Alene, ID.
192. Reganold, J.P., and D.W. Crowder. 2015. Moving agriculture toward sustainability in the 21<sup>st</sup> century. *Abstracts*. American Society of Agronomy and Entomological Society of America, Madison, WI.
193. Reganold, J.P. 2015. Moving agriculture into the 21<sup>st</sup> century. Tilth Producers of Washington Conference Abstracts, Spokane, WA.
194. Hammac, W.A., W.L. Pan, R.T. Koenig, A.-M. Fortuna , B.K. Lamb, and J.P. Reganold. 2016. Cropping system, agroecological zone, and nitrogen-use efficiency on greenhouse gas mitigation for biodiesel feedstock production. *AgroEnviron 2016:10th International Symposium on Agriculture and the Environment Abstracts*, Purdue University, West Lafayette, Indiana.

IMPACT OF MY RESEARCH AND TEACHING ON THE GENERAL PUBLIC (PRESS COVERAGE): (only a sample follows)

*Television and Film Interviews*

1. TV interview with Karina Kelly for the science show *Quantum*, Australian Broadcasting Company, Sydney, Australia, 7/89.
2. TV interview with David Suzuki for the program *The Nature of Things*, Canadian Broadcasting Corporation (CBC), Vancouver, Canada, 7/90.

3. TV interview with Amanda Keller for the Australian science program *Beyond 2000*, Sydney, Australia, 2/92.
4. TV interview with Partha Manerjee for the Science and Technology News Network in New York City, aired by ABC affiliates nationwide, 4/18-19/01.
5. TV interview with Herb Weisbaum, KOMO-TV, Seattle, WA, 9/18/06.
6. Interview with Barbara Sumner Burstyn (Producer) for the film, *How to Save the World*, Barbara Sumner Burstyn, Cloud South Films, Ltd, Hastings, New Zealand, 2006.
7. Interview with Debra Garcia (Director and Producer) for the future film, *The Living Soil*, Lily Films, Mill Valley, California, 2007 & 2008.

### *Radio Interviews*

8. Radio report on National Public Radio's "Morning Edition" with Bob Edwards, 11/25/87.
9. Live radio interview on alternative farming research with Jim Wishner, KWOI public Radio, Ames, Iowa, 12/9/87.
10. Three TV interviews for national news programs in Australia, 9/90.
11. Radio interview with Rob Sivak of "Voice of America", Washington, DC, 4/14/93.
12. Radio interview with Dale Harrison of KWSU (NPR), 4/15/93.
13. Live radio talk show with Pat Schilling of KXLY in Spokane, Washington, 4/23/93.
14. Radio interview with Gary Claus of Northwest Agriculture News Service, 4/28/93.
15. Radio interview with Jacki Bonner of ABC Radio, Canberra, Australia, 6/3/94.
16. Radio interview with Jeb Sharp of NPR weekly program "Living on Earth", Boston, Mass, 6/2/97.
17. Radio interview with Richard Harris of NPR national news program "All Things Considered", 4/19/01.
18. Live radio interview with Mary Lou Finlay of CBC national news program "As It Happens", 4/30/01.
19. Live radio interviews with Dana Bales of BBC "The World Today", with Tara Ogden of BBC "Five Live Breakfast Program", and with Martin Bedford of BBC "Today Program", 5/18 & 19/01.
20. Radio interview with Jim Levins of CBC "Quirks and Quarks", 5/19/01.
21. Radio interview with Rob Sivak of "Voice of America", Washington, DC, 4/20/01.
22. Radio interview with Tom Banse, Northwest Public Radio and Northwest News Network, 5/30/06.
23. Live radio interview with Luis Sierra of "Local Dirt", KDVS-90.3 FM, Davis, CA, 9/28/06.
24. Live radio appearance on *Science Friday* with Ira Flatow, National Public Radio, 9/3/10.
25. Live radio appearance on Michael Olson's *Food Chain Radio* show, 5/14/11.
26. Live radio interview with Joe De Capua on *Voice of America*, 9/24/12.
27. Live radio interview with Julie Rose on *Top of the Mind*, BYU Radio, 6/10/15.

### *Magazine Stories*

28. "Keeping topsoil down on the farm", *Science News*, 12/5/87, 132(23):357.
29. "When are two farms better than one?", *Science World*, 10/20/89, 46(4):13-17.
30. "Organic farming: Golden apples", *The Economist*, 4/21/01, pp. 76-77.
31. "Organic farming yields bounty and taste", *Delicious Living!*, 9/01, p. 14.

32. "Organic farms reap many benefits", *Science*, May 31, 2000, p. 1589.
33. "Stars in their eyes", *Harpers Wine and Spirit Weekly*, 1/17/03, pp. 24-27.
34. "The world in a wineglass: Biodynamics helps vintners find the spirit of their land", *Monterey County Weekly*, 6/9/05, Cover Story.
35. "Myth and reality", *Good Fruit Grower*, May 1, 2006 issue.
36. "Organic fertilizer and nitrogen pollution", *Environment*, May (Vol. 48, Issue 4) 2006, p.5.
37. "WSU offers nation's first organic ag major", *In Good Tilt*, Sept/Oct 2006, p.28.
38. "Washington State University to launch new organic major in Fall 2006", *Growing Connections*, Summer 2006, Cover story.
39. "Organic U", *The New Farm*, www.newfarm.com, accessed 5/27/06.
40. "Growing the Next Generation of Organic Leaders" (a seven-page interview with J. Reganold), *Organic Processing*, pp.49-55.
41. "Growing success", Cover story, *Horizon Air*, August 2007. pp. 10-28.
42. "Our good earth", *National Geographic*, September 2008, pp. 80-107.
43. "Creative ways to energize your career", *Science*, Sept 12, 2008, pp. 1513-1518.
44. "By 2030, perennial grains could revolutionize agriculture, save humanity", *Popular Science*, June 25, 2010, <<http://www.popsci.com/science/article/2010-06/2030-perennial-grains-could-revolutionize-agriculture-save-humanity>>.
45. "Why it might actually pay to be an organic farmer", *Time*, June 1, 2015, <<http://time.com/3902279/organic-farming-environment/>>.
46. "In search of anechoic discussion", *Nature Plants*, March 2, 2016, doi:10.1038/nplants.2016.32
47. "Organic agriculture key to feeding the world sustainably", *Science Daily*, February 3, 2016, <[www.sciencedaily.com/releases/2016/02/160203085855.htm](http://www.sciencedaily.com/releases/2016/02/160203085855.htm)>.
48. "Why Organic Food Might Be Worth the High Price", *Time*, February 4, 2016, <<http://time.com/4206738/organic-food-worth-the-price-study/>>.

#### *Newspaper Articles and News Web Sites*

49. "Organic farming pays off in battle against erosion", *Los Angeles Times*, 11/26/87, front page and pp. 32-33.
50. "The old and new in farming: A comparison yields surprises", *The Boston Globe*, 11/26/87, p. 40.
51. "Organic farming methods win support", *Des Moines Register*, 11/26/87, pp. 65, 105.
52. "Study hails organic farming", *San Francisco Examiner*, 11/29/87, p. A-16.
53. "Organic farming found to improve soil quality", *The Toledo Blade*, 11/29/87.
54. "Chemical farm shows more erosion than organic field", *The Christian Science Monitor*, 12/1/87, p. 19.
55. "Top US researcher to lead seminar speakers", *Eco-Age*, a national farming newspaper in Australia, August 1990, front page.
56. "Organic farming saves more soil", *The Courier-Mail*, Brisbane, Australia, 9/12/90, p. 48,
57. "Dandelions can ruin lawns, but they're great for the soil", *The Wall Street Journal*, 4/16/93, p. A5A.
58. "Study backs unusual farming method", *Los Angeles Times*, 4/16/93.
59. "Biodynamic farming: Sounds weird but some believe in it", *Seattle Times*, 4/16/93 p.E1.
60. "Study praises organic farmers", *Spokesman-Review*, 4/16/93, pp.A16, A18.

61. "Grapes grown with help of cosmos", *The Utah Daily Journal*, 9/8/98.
62. "Organic farming can be profitable", *The New York times*, 4/18/01.
63. "Estudo mostra que organico e mais viavel", *Sao Paulo, Quinta-Feira*, 4/19/01, p. A17.
64. "Washington apple study finds organic growing is best", *The Los Angeles Times*, 4/19/01, pp. A3, A20.
65. "Organic apples shine in scientific study", *The Sacramento Bee*, 4/20/01, Front page, p. 24.
66. "Organic orchard shows potential", *Des Moines Register*, 4/22/01, pp. 1D, 3D.
67. "A boost for organic farming", *The Washington Post*, 4/23/01, p. A07.
68. "Organic apples prove sweet, firm", *The Spokesman-Review*, 5/2/01, p. D1.
69. "Horns of plenty", *The San Francisco Chronicle*, 9/25/03.
70. "Eating well: is organic food provably better?", *New York Times*, 9/26/06.
71. "Beyond organic", *The Yakima Herald-Republic*, 5/26/04.
72. "Whole earth – or totally barmy?", *The Guardian*, 6/15/05.
73. "New study confirms the ecological virtues of organic farming", *Biology News Net*, <[www.biologynews.net/archives/2006/03/07/new\\_study\\_confirms\\_the\\_ecological\\_virtues\\_of\\_organic\\_farming.html](http://www.biologynews.net/archives/2006/03/07/new_study_confirms_the_ecological_virtues_of_organic_farming.html)>, 3/7/06.
74. "New study confirms the ecological virtues of organic farming", *Science Daily*, <[www.sciencedaily.com/news/plants\\_animals/organic/](http://www.sciencedaily.com/news/plants_animals/organic/)>.
75. "UCD plows ahead, but lags on organic ag major", *Sacramento Bee*, 6/10/06, frontpage.
76. "WSU leads way in organic ag", *Moscow-Pullman Daily News*, 6/6/06, frontpage.
77. "Organic ag gets major boost", *Denver Post*, 6/12/06.
78. "Major-ly organic: Washington State offers first organic farming degree", *Boulder Daily Camera*, 6/19/06, p. 4.
79. "Washington State offers organic farming degree", *ABCnews.com*, posted 6/21/06.
80. "Seed of learning planted organically", *Seattle Times*, frontpage, 7/15/06.
81. "Living well: WSU's organic agriculture major takes root", *Seattle Post-Intelligencer*, 8/14/06.
82. "US: organic food keeps growing in popularity", *Fresh Plaza* (Netherlands), [www.freshplaza.com/2006/14aug/2\\_us\\_organic.htm](http://www.freshplaza.com/2006/14aug/2_us_organic.htm), 8/14/06.
83. "Organic U", New Farm, May 12, 2006, <<http://newfarm.org/features/2006/0506/wsu/sullivan.shtml>>.
84. "Dirt under our feet is anything but cheap", *Seattle Post-Intelligencer*, 8/15/07.
85. "The lowdown on topsoil: It's disappearing", *Seattle Post-Intelligencer*, 1/22/08, front page.
86. "Many summer internships are going organic", *New York Times*, 5/24/09, p. A1.
87. "New study weighs in on organic vs. conventional debate", *GRIST* website, 9/2/10, <<http://www.grist.org/article/new-study-weighs-in-on-organicconventional-debate/>>.
88. "Organic food is healthier, tastier, better for the environment: WSU study", *Huffington Post* website, 9/3/10, <<http://www.huffingtonpost.com/searchS/?q=reganold>>.
89. "More proof: Organic matters", *Washington Post*, 9/2/10, <<http://voices.washingtonpost.com/all-we-can-eat/sustainable-food/more-proof-organic-matters.html>>.
90. "Is organic always best", *USA Today*, 12/21/10, pp. 1D-2D.
91. "Soil 'rock star' addresses ground value at Spokane exhibit", *Capital Press*, May 9, 2012, <<http://www.capitalpress.com/content/mw-Reganold-soil-presentation-050812-art>>.
92. "Big, smart and green: a revolutionary vision for modern farming", *Wired*, 10/19/12, <<http://www.wired.com/wiredscience/2012/10/big-smart-green-farming/>>.

93. "WSU professor receives green award for sustainable food and agriculture", *Seattle PI*, 5/15/14, <<http://blog.seattlepi.com/boomerconsumer/2014/05/15/wsuf-professor-receives-green-award-for-sustainable-food-and-agriculture/>>.
94. "Organic: Better for the body and soil", *Northwest Farm and Ranch*, June 30, 2014, p. 8.
95. "Moving agriculture into the 21st century: Dr. John Reganold at TEDxWSU 2014", Published on *YouTube* Jun 3, 2014, <<http://www.youtube.com/watch?v=NGBZZh8Oqyo>>.
96. "Jane Says: Don't Worry About Pesticide Residues in Compost", *Takepart*, 11/19/2014, <<http://www.takepart.com/article/2014/11/19/pesticides-organic-produce-compost>>.
97. "Can organic be profitable? If the price is right, study says", *Seattle Times*, June 1, 2015, <<http://www.seattletimes.com/seattle-news/can-organic-be-profitable-if-the-price-is-right-study-says/>>.
98. "Organic food: Good for you and profitable for farmers", *Healthline*, June 1, 2015, <<http://www.healthline.com/health-news/organic-food-good-for-you-profitable-for-farmers-060115#1>>.
99. "Organic farming isn't just environmentally friendly – it's very good business for farmers", *Washington Post*, June 2, 2015, <<http://www.washingtonpost.com/news/energy-environment/wp/2015/06/02/organic-farming-isnt-just-environmentally-friendly-its-very-good-business-for-farmers/>>.
100. "Landwirtschaft: Bio kann sich für Bauern lohnen", *Der Spiegel*, June 2, 2015, <<http://www.spiegel.de/wissenschaft/natur/bio-lebensmittel-koennen-sich-fuer-bauern-lohnen-a-1036580.html>>.
101. "Organic agriculture is more profitable for farmers, study finds", *Huffington Post*, June 3, 2015, <[http://www.huffingtonpost.com/2015/06/03/organic-agriculture-more-profitable\\_n\\_7497018.html?utm\\_hp\\_ref=healthy-living&ir=Healthy+Living](http://www.huffingtonpost.com/2015/06/03/organic-agriculture-more-profitable_n_7497018.html?utm_hp_ref=healthy-living&ir=Healthy+Living)>.
102. "WSU study: Organic farming good for bank account", *Capital Press*, June 5, 2015, <<http://www.capitalpress.com/Organic/20150605/wsuf-study-organic-farming-good-for-bank-account>>.
103. "Organic farming could feed the world, if only we would let it", *Huffington Post*, June 22, 2016, <[http://www.huffingtonpost.com/entry/organic-farming-potential-study\\_us\\_576ac075e4b065534f487ef2?4s3qzuewq8g9bxzuxr](http://www.huffingtonpost.com/entry/organic-farming-potential-study_us_576ac075e4b065534f487ef2?4s3qzuewq8g9bxzuxr)>.

SELECTED INVITED PRESENTATIONS (only a sample follows of more than 300 given):

1. "Soil and Overburden Research Needs", Conference on Soil and Overburden Requirements for Successful Revegetation, Denver, Colorado, 1983.
2. "Prime Farmland Preservation in Washington State", Seminar, Washington State Conservation Committee, Pullman, WA, 1984.
3. "Agricultural Land Preservation in the U.S.", Seminar, WSU-IARC, Prosser, 1984.
4. "Soil Science: The Major and Career Opportunities", Recruiting presentation to Ellensburg High School students, WSU, 1985.
5. "Defining and Assessing Prime Farmland", Seminar, Program in Environmental Science and Regional Planning, WSU, 1986.
6. "Majoring in Soil Science", WSU/Community College In-Service Workshop for Agricultural Instructors, WSU, 1986.
7. "Soil Science: What is It?", Freshmen Student Orientation Meetings, WSU, 1986.

8. "Defining and Assessing Agricultural Land in the U.S.", Seminar, Department of Agronomy and Soils, WSU, 1986.
9. "Effects of Organic and Conventional Farming on Soil Erosion in the Palouse", Seminar, Department of Agronomy and Soils, WSU, 1987.
10. "Organic and Conventional Farming Systems", Seminar, Spokane County Conservation District, Spokane, WA, 1988.
11. "Environmentally Sensitive Areas: Policy and Reality", Washington State Environmental Health Association Annual Education Conference, Pasco, WA, 1988.
12. "Effects of Organic and Conventional Farming on Soil Productivity in the Palouse", Idaho Society for Energy and Environmental Education Annual Professional Meeting, Moscow, ID, 1988.
13. "Alternative Agriculture in the Palouse", Seminar, WSU Irrigation Research Center, Prosser, 1988.
14. "Alternative Agriculture in the Palouse", Seminar, WSU Agricultural Research Center, Puyallup, 1988.
15. "Conservation and Management of Natural Resources", CAHE Dean's Leadership Conference", WSU, 1989.
16. "Long-Term Effects of Organic and Conventional Farming on Soil Productivity", IFOAM International Scientific Conference, Ouagadougou, Burkina Faso, Africa, 1989.
17. "Use of Teaching Publications in the Classroom", Seminar, College of Agriculture and Home Economics, WSU, 1989.
18. "Long-Term Effects of Organic and Conventional Farming on Soil Productivity", Seminar, Program in Environmental Science and Regional Planning, WSU, 1989.
19. "Organic Farming", Seminar, Whitman County Senior Citizens, Pullman, WA, 1990.
20. "Organic and Conventional Farming Systems: A Comparison", Seminar, University of California, Berkeley, 1990.
21. "Long-Term Effects of Organic and Conventional Farming on Soil Erosion", Annual USDA-STEEP Meetings, Moscow, ID, 1990.
22. "Effects of Organic and Conventional Farming on Soil Productivity", Keynote speaker at the Queensland State Conference of the Biological Farmers of Australia, Dalby, Queensland, Australia, 1990.
23. "Effects of Organic and Conventional Farming on Soil Erosion", Keynote speaker at the New South Wales State Conference of the Biological Farmers of Australia, Orange, New South Wales, Australia, 1990.
24. "Soil Quality on Organic and Conventional Farms", Keynote speaker at the Victoria State Conference of the Biological Farmers of Australia, St. Arnaud, Victoria, Australia, 1990.
25. "Sustainable Agriculture in the United States", Seminar, Faculty of Agriculture & Horticulture at Massey University, Palmerston North, New Zealand, 1990.
26. "Sustainable Agriculture", Committee for Sustainable Agriculture Symposium, Big Sur, CA, 1990
27. "Alternative Farming in the United States", Seminar, The Royal Society of New Zealand, Palmerston North, New Zealand, 1991.
28. "Alternative Farming Research", Seminar, Ministry of Agriculture and Fisheries, Palmerston North, New Zealand, 1991.
29. "Organic Farming Research", Seminar, Faculty of Agriculture and Horticulture at Lincoln University, Lincoln, New Zealand, 1991.

30. "Organic Farming Research in the United States", Seminar, Steiner School of Agriculture, Hastings, New Zealand, 1991.
31. "Organic Agriculture in the World", Panel Discussion, World Sustainable Agriculture Association, Tokyo, Japan, 1991.
32. "Organic Farming Research in the United States and New Zealand", Seminar, Division of Environmental Sciences, Griffith University, Brisbane, Queensland, Australia, 1991.
33. "Agricultural Land Protection in the United States", Seminar, Faculty of Agriculture & Horticulture at Massey University, Palmerston North, New Zealand, 1991.
34. "Effects of Alternative and Conventional Farming Systems on Agricultural Sustainability", Keynote speaker at the Food and Fertilizer Technology Center Conference on Sustainable Agriculture for the Asian and Pacific Region, Suwon, South Korea, 1992.
35. "Organic Farming Research Needs", Inauguration of the Australian Chapter of the World Sustainable Agriculture Association, Griffith University, Brisbane, Queensland, Australia, 1992.
36. "Alternative/Conventional Paired-Farm Comparisons in Australia and New Zealand", Inauguration of the California Chapter of the World Sustainable Agriculture Association, California State University, Pomona, 1992.
37. "Soil Quality and Financial Performance of Biodynamic and Conventional Farms in New Zealand", Seminar, Oregon State University, Corvallis, 1993.
38. "On-Farm Research in the Tropics", Workshop on Long-Term Soil Management Experiments in the Tropics, Columbus, OH, 1993.
39. "Soil Quality and Financial Performance of Biodynamic and Conventional Farms in New Zealand", Ecological Farming Conference, Monterey, CA, 1993.
40. "Soil Quality and Financial Performance of Biodynamic and Conventional Farms in New Zealand", Seminar, Department of Crop and Soil Sciences, WSU, 1993.
41. "Effects of Biodynamic and Conventional Farming on Soil Quality: A Review", Kyusei Nature Farming Conference, Santa Barbara, CA, 1993.
42. "Biodynamic, Organic, and Conventional Farming: A Comparison", Seminar, Better Living Foundation, Moscow, ID, 1993.
43. "Research Methodology for Conducting Paired Farm Comparisons", Sustainable Agriculture Conference, Bellevue, WA, 1993.
44. "Research on Alternative and Conventional Farms: Working with Farmers", Seminar, Australian Farm Tour of the Palouse, WSU, 1993.
45. "Teaching Philosophy in the Classroom", Guest presentation, New Faculty Orientation, WSU, 1993
46. "Comparison of Soil Quality and Farm Profitability of Biodynamic and Conventional Farming Systems", Seminar, Queensland State Department of Agriculture, Brisbane, Australia, 1994.
47. "Soil Quality and Financial Performance of Biodynamic and Conventional Farms in New Zealand", Seminar, Department of Botany, WSU, 1994.
48. "Soil Quality and Financial Performance of Biodynamic and Conventional Farms", Seminar, Department of Plant, Soil, and Entomological Sciences, University of Idaho, 1994.
49. "Soil Quality and Profitability of Biodynamic and Conventional Farms", Seminar, Washington State Cereal Industry Symposium, Walla Walla, WA, 1995.

50. "Crop and Soil Quality of Organic, Integrated, and Conventional Apple Orchard Floor Management Systems", Washington State Horticultural Association 91st Annual Meeting, Wenatchee, WA, 1995.
51. "Organic, Integrated, and Conventional Apple Management Systems", Northwest Tree Fruit Cooperative Extension Agents Annual Meeting, Zillah, WA, 1996.
52. "Dryland Agriculture under Biodynamic, Organic, and Conventional Management in the Palouse", Palouse-Clearwater Institute tour, eastern Washington, 1996.
53. "Organic, Integrated, and Conventional Apple Management Systems", Washington State Organic Growers Conference, Richland, WA, 1997.
54. "Alternative farming systems can be sustainable", Seminar, University of Hawaii at Manoa, Honolulu, HI, 1997.
55. "What Makes a Good Teacher". Seminar, University of Hawaii at Manoa, Honolulu, HI, 1998.
56. "The Sustainability of Alternative and Conventional Farming Systems", Natural Resource Conservation Service, Hawaii, HI, 1998.
57. "What's the Difference between Alternative and Sustainable Agriculture", The Land Institute, Salina, KS, 1999.
58. "Soil Quality and Financial Performance of Biodynamic and Conventional Farms". Eco-Winegrowing Conference, McNab Ranch, Ukiah, CA, 2000.
59. "Soil Quality, Crop Yield, and Orchard Profitability of Organic, Conventional, and Integrated Apple Production Systems", IFOAM International Scientific Conference, Basel, Switzerland, 2000.
60. "Farming Systems", Wine Quality and Agro-Ecology Symposium, McNab Ranch, Ukiah, CA, 2001.
61. "Organic Farming Research Programs", WSU Organic Farming Symposium, Ellensburg, WA, 2001.
62. "Sustainability of Organic, Conventional, and Integrated Apple Production Systems", Seminar, Department of Crop & Soil Sciences, Pullman, WA, 2001.
63. "Integrated or Separate? Biodynamic, Sustainable and Organic Farming Practices", Unified Wine & Grape Symposium, Sacramento, CA, 2002.
64. "Is There Room for Pesticide-Free Foods?", Western Regional Agricultural Health and Safety Conference., Coeur D'Alene, ID, 2002.
65. "Farming Systems Research". Northwest Symposium on Organic and Biologically Intensive Farming Conference, Yakima, WA, 2002.
66. "Can Organic Farming Be Sustainable?", Invited seminar, Cornell University, Ithaca, NY, 2003.
67. "Sustainability of Alternative and Conventional Farming Systems", Leopold Center for Sustainable Agriculture, Iowa State University, Ames, Iowa, 2003.
68. "Sustainability of Biodynamic, Organic, Integrated, and Conventional Farming Systems", National Biodynamic Farming Conference, Ames, Iowa, 2003.
69. "Science behind Organic and Biodynamic Farming Research". Seminar, UC Davis Sustainable Agricultural Research and Education Program, Davis, CA, 2003.
70. "Biodynamics, Organics, and Sustainability", Napa Valley Grape Growers Association, Napa, CA, 2004.
71. "Soil and Winegrape Quality on Biodynamic and Organic Vineyards". Invited seminar, Mendocino County and Sonoma County winegrape growers, Hopland, CA, 2004.



72. "Research in Alternative Winegrape Production Systems", Lake County Winegrape Growers, Ceago Lago Winery, Nice, CA, 2004.
73. "Biodynamic Viticulture and Wines", Invited Presentation, The Walla Walla Institute for Enology and Viticulture, Walla Walla, WA, 2005.
74. "Biodynamics Viticulture and Wines in the United States", Napa Valley Grape Growers Association, Napa, CA, 2005.
75. "Perennial Grain Research at Washington State University", Invited Presentation, The Land Institute Fellowship Program, Matfield Green, Kansas, 2005.
76. "Sustainability of Organic Farming Systems", Invited Speaker, USDA Opportunities and Obstacles for Broader Adoption of Organic Agriculture Conference, Washington, DC, 2005.
77. "Biodynamic Viticulture", Keynote Speaker, Vinea Trust, Walla Walla, WA, 2006.
78. "Organic Agriculture: A New Major at Washington State University", Invited Seminar as part of Issues in Sustainable Agriculture Education, Cornell University, Ithaca, NY, 2006.
79. "Biodynamic Viticulture: Myth and Reality", Invited Presentation, Terroir 2006 Conference, Robert Mondavi Institute for Wine and Food Science, University of California, Davis, 2006.
80. "Getting Back to Basics: Farming's Organic Future", Washington State University Innovators Series, Rainier Club, Seattle, WA, 2006.
81. "Organic Research and Teaching at Washington State University", Keynote Speaker, Organic Farming Research Foundation Luncheon, Natural Products Expo West, Anaheim, CA, 2007.
82. "Soil Quality in Alternative Viticulture Systems", Symposium on Eco-Winegrowing Practices On California's North Coast, Hopland, California, 2007.
83. "Organic's Green Future", Washington State University Innovators Series, The Fairmount San Francisco, San Francisco, CA, 2007.
84. "What Do Studies Comparing Organic and Conventional Farming Tell Us?" Symposium on Organic Viticulture, Santa Cruz, Chile, 2007.
85. "Research Comparing Organic and Conventional Farming Systems", Senators Tester and Luger Briefing, Senate Building, Washington, DC, 2007.
86. "What Do Studies Comparing Organic and Conventional Farming Tell Us?" Seminar series entitled 'Farming for the Future', University of New Hampshire, Durham, 2008.
87. "Organic Viticulture: From Vine to Wine", Washington State University Innovators Series, Walla Walla, WA, 2008.
88. "Organic Research and Education at Washington State University", ARCS Visiting Committee (Seattle Chapter), Pullman, WA, 2008.
89. "What Do Studies Comparing Organic and Conventional Farming Tell Us?", Science & Technology Discovery Series, Technology Alliance, Seattle, WA, 2009.
90. "Metrics Used to Compare and Contrast Farming Systems", Metrics for Assessing Global Agriculture Symposium, The Earth Institute, Columbia University, NY, NY, 2009.
91. "The Soil's Role in Sequestering Carbon", 2009 World Food Prize Symposium: The Borlaug Dialogue on Food, Agriculture, and National Security in a Globalized World, Des Moines, IA, 2009.
92. "The Sustainability of No-Till Agriculture", Sackler Forum of the Royal Society/National Academy of Sciences: How Can Crop Science and Technology Contribute to Feeding Nine Billion People? London, UK, 2009.
93. "Healthy Soils for Sustainable Vineyard Systems", Michigan State Winegrape Growers via telecom at Colorado State University, Fort Collins, 2010.

94. "Discussing *Symphony of the Soil*", University of California, Berkeley, 2010.
95. "Soils and Their Health", Dig It! Symposium, Northwest Museum of Arts and Culture, Spokane, WA, 2011.
96. "Future Role and Challenges of Organic Agriculture in Global Food Production", IFOAM International Scientific Conference, Seoul, South Korea, 2011.
97. "Soil Health: 25 Years of On-Farm Comparison Studies", ASA Meetings, San Antonio, TX, 2011.
98. "Transforming U.S. Agriculture in the 21<sup>st</sup> Century", USDA Agricultural Outlook Forum, Washington, DC, 2012.
99. "Comparing Organic and Conventional Farming Systems: Metrics and Research Approaches", Ecology Seminar Series, Utah State University, Logan, 2013.
100. "Perennial Grain Systems: A Sustainable Response to Future Food Security Challenges", UN Food and Agriculture Organization, Rome, Italy, 2013.
101. "Our Farms, Our Soils, Ourselves: Connecting Ecosystems", 13<sup>th</sup> Annual Sustainable Agriculture and Food Systems Forum, Chicago, Illinois, 2015.
102. "Moving Agriculture into the 21<sup>st</sup> Century", Annual Tilth Producers of Washington Conference, Spokane, Washington, 2015.
103. "Sustainable Agriculture and Food Systems", International Conference on Promoting Sustainable Development in the DPRK, Pyongyang, North Korea, 2016.

RESEARCH AND TEACHING GRANTS AND AWARDS FUNDED:

<b>Principal Investigator(s)</b>	<b>Project Title</b>	<b>Granting Agency</b>	<b>Date Funded</b>	<b>Amount</b>
Reganold, J. P.	Relationship of farm production input/output ratios to land classification systems	USDA Soil Conservation Service	1978-1980	\$19,500
Reganold, J. P.	Lab/computer equipment for land-use research	WSU Agriculture Research Center	1983-1984	\$10,000
Reganold, J. P., Lumpkin, T. A.	Science instruction materials for Soils 201 and Crops 101	WSU Agriculture & Liberal Arts Program	1986	\$258
Reganold, J. P.	Audio/Video aids for soil science instruction	DuPont Corporation	1986	\$2,500
Reganold, J. P.	Measuring farmland conversion through the use of GIS	WSU Office of Grant & Research Development	1986	\$2,000
Reganold, J. P., Steiner, F. R.	Interdisciplinary land-use research unit	WSU Office of Grant & Research Development	1986-1987	\$2,500
Reganold, J. P.	Identifying land-use changes of specific soils using GIS	Washington State Dept. of Agriculture	1986-1987	\$7,200
Reganold, J. P.	Computer analysis of LANDSAT imagery to determine land-use changes	WSU Agriculture Research Center	1986-1987	\$7,500
Huyck, L. M., Reganold, J. P.	Biological and morphological properties of org. vs. conv. farmed soils	WSU Office of Grant & Research Development	1987	\$2,000
Jennings, M. D., Reganold, J. P.	ESA policies in Washington, Oregon, & British Columbia	WSU Office of Grant & Research Development	1988	\$2,000

<b>Principal Investigator(s)</b>	<b>Project Title</b>	<b>Granting Agency</b>	<b>Date Funded</b>	<b>Amount</b>
Bezdicek, D. F., Reganold, J. P.	Sustainable agriculture and agroforestry management	WSU International Prog. Devel. Office	1988-1989	\$6,000
Mulla, D. J., Reganold, J. P.	Measuring aggregate stability in Palouse soils	USDA-STEPP	1988-1989	\$13,981
Reganold, J. P.	Seasonal effects of organic and conventional farming on soil aggregate stability	USDA Agricultural Research Service	1988-1989	\$12,000
Reganold, J. P.	Travel to attend IFOAM Conference in Burkina Faso	WSU Office of Research & Int. Prog. Devel. Office	1988-1989	\$2,100
Crowe, E. A., Reganold, J. P.	Soil & plant ecology in vernal pool systems	WSU Office of Grant & Research Development	1989	\$2,000
Reganold, J. P.	Effects of sustainable and conventional agricultural systems on soil erosion	USDA-STEPP	1989-1991	\$10,457
Reganold, J. P.	Field trips in Soils 301	Verle Kaiser Foundation	1989-1990	\$1,000
Reganold, J. P.	Sustainable agriculture in semi arid tropics of India	USAID	1990	\$4,200
Reganold, J. P.	The effects of sustainable agricultural systems on soil erosion and productivity	USDA-STEPP	1990-1993	\$17,120
Reganold, J. P., Bezdicek, D. F.	Effects of alternative and conv. farming on soil quality	USDA-LISA	1990-1992	\$35,000
Reganold, J. P., Palmer, A. S.	Soil quality & profitability of alternative and conventional farming systems	Prince & Princess of Wales Sci Awd, Royal Society of New Zealand	1990-1991	\$600
Reganold, J. P.	Soil conservation farming field trips in Soils 201 & 301	Verle Kaiser Conserv. Foundation	1990-1994	\$1,000
Reganold, J. P.	Identification of organic and conventional farm pairs in Australia for on-farm studies	Biological Farmers of Australia	1990	\$2,000
Reganold, J. P.	Attend the International Conference on Agriculture for the 21st Century	The MOA Foundation	1990	\$2,000
Reganold, J. P., Palmer, A. S.	Effects of biodynamic and conventional farming on soil productivity	Massey University Fertiliser and Lime Research Centre	1990-1991	\$5,000
Reganold, J. P., Palmer, A. S.	Effects of biodynamic and conventional farming on soil quality and farm profitability	Massey University Research Fund	1991	\$900
Reganold, J. P.	Inauguration of WSAA	The MOA Foundation	1991	\$1,200
Reganold, J. P.	Initiating World Sustainable Agriculture Assoc. (WSAA)	The MOA Foundation	1991	\$3,000
Saffigna, P., Reganold, J. P.	Organic farming systems and biologically sustainable soil	Australia Soil Bureau	1991-1995	\$220,000
Reganold, J. P.	Effects of biodynamic and conventional farming on agricultural sustainability	WSU International Program Development Office	1992	\$2,600

<b>Principal Investigator(s)</b>	<b>Project Title</b>	<b>Granting Agency</b>	<b>Date Funded</b>	<b>Amount</b>
Reganold, J. P., Palmer, A. S.	Soil quality on biodynamic and conventional farms	Massey University Agric. Research Fund	1992	\$600
Reganold, J. P.	Effects of alt. and conv. farming systems on ag. sustainability	Asian Food & Fertilizer Technology Centre	1992	\$3,200
Reganold, J. P.	Inauguration of Australian and Calif. Chapters of WSAA	World Sustainable Agriculture Association	1992	\$2,500
Reganold, J. P.	Soil cons. computer database for undergraduate students	Verle Kaiser Conserv. Foundation	1992-1994	\$2,478
Reganold, J. P., Andrews, P. K.	On-farm analyses of soil/crop quality of 3 apple systems	Organic Farming Research Foundation	1994-1996	\$3,420
Andrews, P. K., Reganold, J. P.	Soil & crop quality of three apple production systems	Washington Tree Fruit Research Commission	1995-1998	\$5,000
Reganold, J. P.	Soil conservation field trip and classroom aids	Verle Kaiser Conserv. Foundation	1995-1996	\$600
Reganold, J. P., Andrews, P. K.	Soil analyses of 3 apple mngt. systems in Zillah	Northwest Food Alliance	1996	\$1,500
Reganold, J. P.	Land use short course	Univ. of Lleida, Spain	1997	\$2,000
Reganold, J. P., Andrews, P. K.	Sustainability of conv., org., & integrated apple systems	USDA NRI Com-petitive Grants Program	1996-1999	\$160,000
Reganold, J. P.	Alternative agriculture can be sustainable.	Saskatchewan Crop Production Alliance	1997	\$2,500
Reganold, J. P., Glover, J.D., Andrews, P. K.	Sustainability of conv., org., & integrated apple systems	USDA NRI Competitive Grants Program	1999-2002	\$185,000
Andrews, P.K., Reganold, J.P.	Enhancing technology transfer of alternative practices into Washington's apple industry	International Marketing Program for Agricultural Commodities and Trade	2000-2002	\$25,000
Reganold, J.P.	Developing org farming classes	WSU-Kellogg 2020	2001-2003	\$10,000
Andrews, P.K., Reganold, J.P.	Enhancing technology transfer of alternative practices into Washington's apple industry	International Marketing Program for Agricultural Commodities and Trade	2001-2003	\$25,000
Reeve, J.R., Reganold, J.P.	Biological Soil Quality of Alternative Ag Systems	The Land Institute	2002	\$6,000
Reganold, J.P.	Organic gardening and farming curriculum	Small Planet Foods and General Mills	2002-2004	\$25,000
Reganold, J. P., Glover, J.D., Andrews, P. K.	Sustainability of three apple production systems	USDA NRI Competitive Grants Program	2002-2007	\$253,000
Reganold, J.P.	Sustainability of organic and biodynamic vineyards	Fetzer Vineyards	2002-2004	\$25,000
Reganold, J.P., Peck, K.P.	Developing WSU Organic Gardening Field Course	WSU-Kellogg 2020	2003	\$5,500
Reganold, J.P.	Biological Soil Quality of Alternative Ag Systems	The Land Institute	2003-2004	\$2,000
Reganold, J.P.	Ph.D. Graduate Assistantship	WSU-CAHE	2003-2005	\$30,000

<b>Principal Investigator(s)</b>	<b>Project Title</b>	<b>Granting Agency</b>	<b>Date Funded</b>	<b>Amount</b>
Reganold, J.P., Andrews, P.K., Carpenter-Boggs, L.	Soil and strawberry quality under organic and conventional management	The Organic Center	2004-2007	\$120,000
Reganold, J.P., Carpenter-Boggs, L., Hoagland, L.	N-use efficiency in organic orchards using living mulch cover crops	Organic Cropping Research Program	2005-2006	\$25,000
Carpenter-Boggs, L., Reganold, J.	No-till livestock/grain rotation for diversified farms	USDA-SARE	2006-2008	\$123,122
Reganold, J.P., Carpenter-Boggs, L., Hoagland, L.	N-use efficiency in organic orchards using living mulch cover crops	Organic Cropping Research Program	2006-2007	\$25,000
Reganold, J.P., Carpenter-Boggs, L.	N supply and partitioning in managed understories of organic apples	Organic Cropping Research Program	2007-2008	\$34,765
Lange, B.M., Reganold, J.P., Andrews, P.K.	High throughput profiling of fruits for phytochemicals related to human health	WSU Agriculture Research Center	2008	\$83,241
Reganold, J.P.	Learning organic agriculture at WSU	WSU-CSANR BIOAg Program	2008-2009	\$15,000
Lange, B.M., Reganold, J.P., Andrews, P.K., N.Davies	High throughput profiling of WA crops for phytochemicals related to human health	WSU Agriculture Research Center	2009	\$34,000
Benbrook, C., Reganold, J., Liebman, M., Huggins, D.	New tools and policies to reduce nitrogen pollution and greenhouse gas emissions	David & Lucile Packard Foundation	2009-2011	\$99,500
Reganold, J.P.	Developing the new WSU Organic Farm	Earthbound Farms	2011-2012	\$30,000
Reganold, J.P., Bernardo, D.	Developing the Eggert Family Organic Farm	Pacific Foods	2012-2020	\$9,450,000
Reganold, J.P., Thierfelder, C., Pannkuk, C.	Sustainable intensification of farming systems in Malawi	USAID-Africa RISING	2012-2013	\$110,000
Reganold, J.P., Carpenter-Boggs, L., Huggins, D.R., et al.	Role of mixed crop/livestock systems in transitioning to dryland organic farming in the Pacific Northwest	USDA-NIFA Organic Transitions	2012-2016	\$695,078
Reganold, J.P., Thierfelder, C., et al.	Sustainable intensification of cereal-based agroecosystems	CGIAR-CIMMYT	2012-2014	\$85,000
TerAvest, D., Reganold, J.P., C. Pannkuk	Borlaug Fellows in Global Food Security Grant Program	USAID/Purdue Univ	2012-2014	\$39,736
Snyder, W., Reganold, J.P., et al.	BAN-PESTS: biodiversity and natural pest suppression	USDA-NIFA Organic Transitions	2013-2017	\$747,955

<b>Principal Investigator(s)</b>	<b>Project Title</b>	<b>Granting Agency</b>	<b>Date Funded</b>	<b>Amount</b>
Reganold, J.P., Thierfelder, C., et al.	Sustainable intensification of maize-based agroecosystems	CGIAR-CIMMYT CRP-MAIZE	2013-2015	\$69,468
Snyder, W., Besser, T., Reganold, J.P.	Biodiversity and the natural suppression of human pathogen	CSANR BIOAg	2014-2015	\$39,193
Reganold, J.P., Benedict, C., Crowder, D., et al.	Introducing organic quinoa production systems in the Palouse	WSU-ARC-ERI and CSANR BIOAg	2014-2015	\$37,900
Crowder, D., J. Reganold, V. Jones, B. Beers	Dynamics of woolly apple aphids on organic and conventional orchards	Washington Tree Fruit Research Commission	2014-2016	\$113,948
Snyder, W., T. Besser, T., Reganold, J., et al.	A natural approach to human-pathogen suppression: can biodiversity fill the gaps	USDA-NIFA Organic Transitions	2014-2017	\$498,235
Crowder, D., Reganold, J., Jones, V., et al.	Evaluating aphid pest mgmt. and soil quality on org. and conv. apple orchards in WA	WSDA Specialty Crop Block Grant Program	2014-2017	\$194,910
Carpenter-Boggs, Adewale C., Reganold, J.	Optimizing cover crop and intercrop N management	Agronomic Science Foundation	2015-2016	\$39,485
Kramer, D., Reganold, J., et al.	MultispeQ sensor for plant and soil measurements in Africa	McKnight Foundation	2014-2016	\$300,000
Reganold, J.P., Benedict, C., Crowder, D., et al.	Introducing organic quinoa production systems in the Palouse	WSU-ARC-ERI and CSANR BIOAg	2015-2016	\$40,136
Murphy, K., S. McGuire, G. Palmer, G. Duncan, J. Reganold, et al.	Nutritional Genomics and Smart Foods	WSU Grand Challenges	2016-2021	\$2,491,430
Murphy, K., D. Crowder, J. Reganold, et al.	Breeding and agronomy of quinoa for organic farming systems	USDA-NIFA Organic Agriculture Research & Extension Initiative	2016-2020	\$1,999,950
Wieme, R. J. Reganold	Introducing Organic Quinoa and Grain Cropping Systems in the Palouse	USDA-NIFA Western SARE	2016-2017	\$24,954
Wieme, R. J. Reganold	Developing organic quinoa and grain cropping systems in the Pacific Northwest	USDA-NIFA Predoctoral Fellowship	2016-2018	\$93,657
Reganold, J.P.	Organic Agriculture Research	CAHNRS Ignite Undergrad Research Internship	2016	\$2,500
Reganold, J.P.	Organic Agriculture Research	CAHNRS Ignite Undergrad Research Internship	2017	\$2,500
			<b>Subtotal</b>	<b>\$18,753,577</b>
Cooperator on 15 additional research grants				<b>\$3,850,000</b>
				<b>TOTAL</b>
				<b>\$22,603,577</b>

TEACHING ACTIVITIES:*WSU Courses Taught*

<u>Course No.</u>	<u>Title</u>	<u>Credit</u>	<u>Semesters Taught</u>	<u>Semester</u>
SoilS 101	Organic Gardening and Farming	3	Sp & F 2002, Every Sp semester post-2002	8 to 20
SoilS 201	Soil: A Living System (Introductory Soil Science)	3	Every semester between F 1983 and F 1990; every F or Sp semester post-1990	48 to 250
SoilS 201X	Introductory Soil Science (Correspondence Course)	3	F 1984 to F 1986	5
SoilS 301	Land Use and Soil Management	3	Every year from 1990 to 2001	15 to 40
CropS 412	Undergraduate Seminar	1	F 1989, 1991, 1993; Sp 1996, 1999, 2003, 2009	6 to 18
SoilS 495	Research Experience	1-3	Every F and Sp since 2006	1 to 2
SoilS 498	Professional Internship	3	Every semester and summer session since 2006	2 to 8
SoilS 499	Independent Study	1-3	Every F or Sp sem since 1984	1 to 2
SoilS 501	Graduate Soils Seminar	1	F 1985, Sp 1986	5
CropS 510/ SoilS 501	CSS Department Seminar	1	F 2016, Sp 2017	12-13
SoilS 503	Advanced Soil Analysis	3	Every F or Sp since 2001	1
SoilS 505	Teaching Practicum	1	Every F and/or S semester since 1983	1 to 2
SoilS 700	M.S. Student Research	3-40	Most semesters since 1984	1 to 3
SoilS 800	Ph.D. Student Research	3-30	Most semesters since 1988	1 to 2

*Short-Courses Taught and Guest Lecturer in Other Courses*

Short course, "Organic Agricultural Systems", Massey University, Palmerston North, New Zealand, 1991.

Short course, "Sustainable Agriculture", University of Idaho Enrichment Program, November and December 1993

Short course, "Sustainable Agriculture and Land Use", University of Lleida, Lerida, Spain, 1996.

One to ten guest lectures in each of the following WSU courses: Crops 101; ESRP 412 and 490; Horticulture 102, 200, 201, and 417; Natural Resource Sciences 303; and Soils 451, 452, and 503.

#### *Graduate Students and Postdoctoral Research Associates*

##### Graduate Students Supervised (Major Advisor)

Scott Rozenbaum. Identifying conversion of agricultural land and specific soils to nonagricultural uses through computer assisted processing of LANDSAT imagery. M.S. (Soil Science), May 1988. Scott went to work as a soil and wetland scientist for the environmental consulting company Shapiro & Associates in Seattle, WA, and now has his own environmental consulting business.

Michael Jennings. Regulation of environmentally sensitive areas by local governments in the Pacific Northwest. M.R.P., August 1988. Mike became coordinator of the National GAP Analysis Program for the U.S. Fish and Wildlife Service, Moscow, ID and now heads research in the Western Region for The Nature Conservancy, University of Idaho, Moscow, ID.

Leisa Huyck. Effects of organic and conventional farming on aggregate stability. M.S. (Environmental Science), August 1989. Leisa got an assistant professorship at Humboldt State University, CA, and now works for the SAREP Program at UC Davis.

Elizabeth Crowe. Relationship of soils and vegetation communities in vernal pools in Washington State. M.S. (Environmental Science), May 1990. Elizabeth went to work as a plant ecologist, USDA Forest Service, Wallowa-Whitman National Forest, OR.

Collete DePhelps. Methodology for conducting on-farm research in Washington State. M.S. (Environmental Science), May 1994. Collete began working in the Center for Sustaining Agriculture and Natural Resources at WSU and now works for the Palouse Clearwater Institute.

Linda Klein. Assessment of farmland conversion to nonfarm uses in western Washington. M.S. (Soil Science), May 1995. Linda formed her own environmental consulting and editing company, LRK Communications, in Pullman, WA.

Lynne Carpenter-Boggs. Development of biodynamic compost and its effects on soil quality. Ph.D. (Soil Science), August 1997 (Co-Chair with Dr. Ann Kennedy). Lynne got a position as a soil scientist with the USDA-ARS in Morris, Minnesota, conducting research in soil microbiology and is now a tenured Associate Professor in the Department of Crop & Soil Sciences, WSU.

Duncan Cox. Effects of compost and fly ash on ridge-top soils in the Palouse. M.S. (Soil Science), December 1997 (Co-Chair with Dr. Dave Bezdicsek). Duncan became a research scientist at the University of Idaho, carrying out no-till research for the STEEP III program.

Jerry Glover. Effects of organic, integrated, and conventional farming on soil and apple quality and farm profitability. Ph.D. (Soil Science), December 2001. Jerry went to work as a soil scientist and agroecologist for The Land Institute and now works as a senior research advisor



- for the Bureau for Food Security with USAID. He was chosen by the journal *Nature* (4 December 2008) as one of the “Five Crop Researchers Who Could Change the World.”
- Jennifer Reeve. Effect of biodynamic and organic vineyards on soil and wine quality. M.S. (Soil Science), December 2003. Jennifer advanced to the Soil Science Ph.D. program.
- Sasha Kramer. Microbial community composition and nitrogen fluxes in organic, integrated, and conventional agroecosystems. Ph.D. (Biology), Stanford University, California, December 2005 (Co-advised with Drs. H. Mooney and B. Bohannan). Sasha went on to help form and run a non-profit organization called Sustainable Organic Integrated Livelihoods or SOIL ([www.oursoil.org](http://www.oursoil.org)).
- Lori Hoagland. Impact of soil biology on nitrogen cycling and weed suppression under newly established organic orchard floor management systems. Ph.D. (Soil Science), May 2007 (Co-Chair with Dr. Lynne Carpenter-Boggs). Lori is an assistant professor in horticulture at Purdue University.
- Jennifer Reeve. Soil quality, microbial community structure, and organic nitrogen uptake in organic and conventional farming systems. Ph.D. (Soil Science), August 2007 (Co-Chair with Dr. Lynne Carpenter-Boggs). Jennifer is now a tenured Associate Professor at Utah State University.
- Dan TerAvest. Tree and soil nitrogen responses to alternative ground cover management strategies in organic apple production. M.S. (Soil Science) December 2009. Dan advanced to the Soil Science Ph.D. program.
- Laurie Mooney. Ecological design of the WSU Organic Smartfarm. M.S. (Landscape Architecture), August 2012 (Co-advised with Jolie Kaytes). Laurie is now working as a landscape architect for Pacific Foods in Tualatin, OR.
- Dan TerAvest. Sustainable intensification of food production systems in Malawi. Ph.D. (Soil Science), May 2015. Dan is now a postdoc at Michigan State University.
- Jonathan Wachter. [NSF-IGERT NSPIRE Fellow]. Role Of mixed crop-livestock systems in transitioning to dryland organic farming in the Pacific Northwest. Ph.D. (Soil Science) May 2017. Jonathan is now a postdoc at WSU.
- Scott Minckler. Sustainable agriculture project. M.S. (Agriculture) May 2018.
- Rachel Wieme. [NSF-IGERT NSPIRE Fellow]. Introducing organic quinoa production systems in the Pacific Northwest. Ph.D. (Soil Science) December 2017 (Co-Chair with Dr. Lynne Carpenter-Boggs).
- Matt Jones. Dung beetles scavenging wildlife feces to suppress pathogenic diseases in diverse agroecosystems. Ph.D. (Entomology). May 2018 (Co-Chair with Dr. William Snyder).
- Robert Butler. Sustainable food production systems in western Washington. M.S. (Agriculture). May 2020 (Co-Chair with Dr. Hying Tao).
- Alexandra Davis. Measuring ecosystem services in different farming systems. Ph.D. (Soil Science). May 2021 (Co-Chair with Dr. Dave Huggins).

#### Graduate Students Advised (Committee Member)

- Gary Christensen. Protecting agricultural lands in Washington State: Concerns, issues, and effectiveness. M.R.P., December 1986.
- Doug Osterman. Will the Conservation Title of the 1985 Farm Bill be an effective policy in controlling soil erosion in an eastern Palouse watershed? M.R.P., December 1987. Doug became a regional planner for the Snohomish County Planning Department, WA.
- Maureen Boling. Washington State general soils map. M.S. (Soils), May 1988.

- Ann Rodman. The effect of slope position, aspect, and cultivation on organic carbon distribution in the Palouse. M.S. (Soils), August 1988.
- Fred Pierson. New method for measuring aggregate stability. Ph.D. (Soils), December 1988.
- Mark Levick. Comparison of soil parameters on biodynamic and conventional farms. Honors (Soils), Massey University, New Zealand, October 1992.
- William Keis. Mapping and modeling potential erosion and slumping during lower granite reservoir drawdowns. M.S. (Environmental Science), August 1995.
- Jeffrey Hopkins-Clark. Comparison of organic, integrated, and conventional farming systems in a commercial apple orchard. M.S. (Horticulture), May 1996.
- Eufemia Marqueses. Soil microbial properties of organic and conventional farms in Australia. Ph.D. (Environmental Science), Griffith University, Australia, December 2000.
- Kelly Cherrey. Laboratory column measurements of colloid transport in sediments from the Hanford DOE site. M.S. (Soils), May 2002.
- Gregory Peck. Apple orchard productivity and fruit quality under organic, conventional, and integrated management. M.S. (Horticulture), May 2004.
- Kevin Murphy. Organic wheat breeding. M.S. (Crop Science), December 2004.
- Kevin Murphy. Evaluation and selection for yield, weed suppression ability, competition traits and mineral nutrient content in organic and low-input wheat breeding systems. Ph.D. (Crop Science), May 2007.
- Matt Stowe. N-use efficiency in direct seed systems. M.S. (Soils), May 2007.
- Kristy Ott. Impacts of winter growing conditions on yield and nitrate accumulation in organically produced leafy greens. M.S. (Soil Science), May 2007.
- Stephen Bramwell. Effects of integrated vegetable-livestock farming on soil quality and energy consumption. M.S. (Soil Science), May 2008.
- Rita Abi-Ghanen. Optimizing biological nitrogen fixation and evaluating Iraqi extension education. Ph.D. (Soil Science), August 2009.
- Haly Ingle. Effects of climate on organically grown lettuces and spinach in hoopouses in northern climates. M.S. (Soil Science), May 2010.
- Lessando Gontijo. Prospects for the biological control of woolly apple aphid *Eriosoma lanigerum* (Homoptera: Aphididae) in Washington State. Ph.D. (Entomology), December 2011.
- Trivendhiran Pillai. Comparative assessment of soil properties and economic return of alternative farming systems. M.S. (Soil Science), May 2013.
- Cornelius Adewale. Farm-friendly tools for assessing nutrient availability and carbon footprint on organic farms. M.S. (Soil Science), December 2013.
- Jason Morrow. Resilience of farming systems to climate change. M.S. (Soil Science), Dec 2014.
- Jaimi Lambert. Effects of farm-to-school and garden-based programs on children's health and academic achievement. M.S. (Agriculture), December 2015.
- Ashley Hammac. Nutrient cycling in Pacific Northwest oilseed production. Ph.D. (Soil Science). December 2015.
- Catherine C. Crosby. Harnessing the microbiome for sustainability. Ph.D. (Soil Science). May 2016.
- Tabitha Brown. Variable rate nitrogen and seeding to improve nitrogen use efficiency. Ph.D. (Soil Science). May 2016.
- Harsimran Kaur. Defining current land use classification and shifts in Agroecological Classes based on bioclimatic variables for REACCH study region (Inland Pacific Northwest region). Ph.D. (Soil Science). August 2017.

- Cornelius Adewale. Estimating ecosystem services of agricultural systems. Ph.D. (Soil Science), December 2017.
- Karol Krey. Links between soil quality, plant chemistry, and pest-insect population growth. Ph.D. (Entomology). August 2017.
- Julianne Kellogg, Breeding quinoa for the Pacific Northwest. M.S. (Crop Science), May 2017.
- Kristofor Ludvigson, Alternative Crops/Organic Quinoa Production Systems. M.S. (Crop Science), August 2017.
- Eli Bloom. Promoting native bee health and pollination services on diversified organic produce farms. Ph.D. (Entomology). May 2018.
- Robert Orpet. Evaluating aphid pest management and soil quality on organic and conventional apple orchards in Washington. Ph.D. (Entomology). May 2018.
- Henry Sintim, Evaluation of soil quality as affected by biodegradable plastic mulches. Ph.D. (Soil Science). May 2018.
- Adel A. B. Almesmari. Effects of compost and compost teas on alternative cropping systems. Ph.D. (Soil Science), May 2019.
- Cedric Habiyaremye. Ph.D. No-till quinoa, millet, and food barley agronomy and variety trials. (Crop Science), May 2020.

#### Postdocs

- Dave Huggins (Soil Science). Comparison of the effects of low-input and conventional farming on soil productivity in the Palouse. August 1990 to December 1991.
- Carolina A. Torres (Horticulture). Strawberry quality and nutritional quality under organic and conventional management. February 2005 to February 2006.
- Canming Xiao (Soil Science). Effect of organic and conventional farming on soil health and strawberry quality. July 2005 to June 2007.
- Dan TerAvest (Soil Science). MultispeQ: A deployable sensor for the PhotosynQ network to enable critical plant, soil and seed measurements for African breeders and extension agents. May 2015 to June 2016.

#### *Undergraduate Advising*

Undergraduate advisor to Soil Science majors and minors since 1983 and Organic Agriculture Systems majors since 2006; currently advise about 25 students.  
Advise at least 15 students in the WSU Online Organic Agriculture Certificate Program

#### *Other Teaching Related Activities*

- Nominated Dr. A.J. Busacca for the 1990 CAHE Junior Faculty Award for Excellence in Teaching and Dr. J.B. Harsh for the 2000 CAHE Award for Excellence in Research (Both won the awards.)
- Applied and received GER status (B, Tier II) for Soils 201
- Developed (in cooperation with Kathi Peck) the new course, Organic Gardening and Farming (Soils 101), 2002
- Established (in cooperation with Brad Jaeckel and Kathi Peck) the first organically certified teaching farm (3 acres) and Community Supported Agriculture (CSA) enterprise on the Pullman campus of Washington State University, 2004

Developed (in cooperation with Brad Jaeckel) the new course, Practicum in Organic Agriculture (Soils 480), 2004

Spearheaded the development of the Organic Agricultural Systems major at Washington State University, the first such major in the United States (effective June 2006)

Special Visit by Governor Christine Gregoire concerning my organic agriculture research and teaching program and the benefits of organic agriculture to Washington State, May 2005.

Co-developed the online Soils 101 course (Organic Gardening and Farming) as part of the online Organic Agriculture Certificate in the Distance Degree Program at Washington State University

Successfully nominated Charles Benbrook as an Adjunct Faculty member in the Department of Crop & Soil Sciences

Co-developed and manage the internship program for the Organic Agricultural Systems major

Interviewed about the WSU organic agriculture undergraduate program in a feature article, "Creative Ways to Energize Your Career", in the journal *Science* (12 September 2008, pp. 1513-1518).

#### SERVICE AND PROFESSIONAL ACTIVITIES:

##### A. Service to the Department of Crop and Soil Sciences

Freshman Student Orientation Committee, 1985-1987

Future Cougar Days Committee, 1984-1987

Undergraduate Student Recruiting Committee, 1983-1987, 1991-1995

Chair, Student Recruitment Display Committee, 1987-1994

Undergraduate Program Committee, 1987-now

Scholarship Committee, 1983-now

Author, ~300 letters of recommendation for students, 1983-now

Sponsor, Russia Summer Student Internship in Agriculture Program, 1990

Department Chair Search Committee, 1986-1987

Faculty Awards for Excellence Committee, 1990

Outstanding Senior Award Committee, 1984-1996

Chair, Annual Christmas Party, 1984-1995

Graduation Committee, 1986-now

Organic Farm Tour Leader for press reporters and visiting scientists, 1988-now

Member of search committee for Soil Physics position, 1997

Member of search committee for Department Chair, 1987

Member of search committee for Weed Scientist position, 2005-2006.

Member of search committee for Soil Biology position, 2007.

Chair of the Career Guidance Committees for Drs. Markus Flury, Anne-Marie Fortuna, Kevin Murphy, Lynne Carpenter-Boggs, and David Brown.

Member of the Career Guidance Committees for Drs. Kim Kidwell, Ian Burke, Jessica Goldberger, Tarah Sullivan Guest, Kefy Desta, and Michael Neff.

Chair, Search Committee for Assistant Professor of Soil Quality and Sustainable Soil Management position at WSU-Everett, 2016-2017

##### B. Service to the College of Agricultural, Human, and Natural Resource Sciences

Career Days Committee, 1985-1995  
 Community College In-Service Workshop for Ag. Instructors Committee, 1984  
 Improvement of Instruction Committee, 1988-2003  
 Long-Range Planning Committee, 1990  
 Planning Committee for CAHE Branch Campus Workshop, 1987-1988  
 Tri Cities Curriculum Committee, 1991-1995  
 Co-Chair, Dean's Task Force "Conserving and Managing Our Natural Resources", 1989-90  
 Chair, CAHE Awards Committee, 1999-2000  
 Planning Committee, Honors courses for CAHE, 2002-2003  
 Promotion and Tenure Committee (Chair, 2006), 2004-2006  
 Promotion and Tenure Committee, 2015-2017

### C. Service to the University

Instructional Media Services Film Review Committee, 1987-1996  
 Agriculture and Liberal Arts Program Committee, 1986-1988  
 Environmental Science and Regional Planning Policy Committee, 1988-1991  
 Sponsor, Graduate Student Summer Grants, 1988-now  
 Interdisciplinary Land Use Planning Research Unit, 1986-1988  
 Land Use Committee, 1983-1994  
 Olympic Weightroom Expansion Planning Committee, 1994-2000  
 "Alive" Student Orientation Program, 1999-2006  
 Leadoff speaker for WSU's Innovators Series Fall 2006, Rainier Club, Seattle, WA  
 Speaker for WSU's Innovators Series Fall 2007, Fairmount Hotel, San Francisco, CA  
 Speaker for WSU's Innovators Series Fall 2008, Marcus Whitman Hotel, Walla Walla, WA  
 Provost Search Committee, WSU, 2013-2014  
 Regents Professor Nominating Committee (Chair 2016), WSU, 2013-2016

### D. Service to the Profession

Associate Editor of the *Journal of Natural Resources and Life Sciences Education* (formerly the *Journal of Agronomic Education*), 1986-1992  
 Ad Hoc Referee for the following professional journals: *Nature*, *Science*, *Soil Science Society of America Journal*, *Journal of Soil and Water Conservation*, *Soil Science*, *American Journal of Alternative Agriculture*, *Landscape and Urban Planning*, *Agriculture Ecosystems and Environment*, *Environmental Management*, and *Geoderma*, 1983-now  
 Ad Hoc Referee for numerous grant proposals submitted to the following: USDA Competitive Grants, US Environmental Protection Agency, National Science Foundation, The Organic Center, USDA Sustainable Agriculture Research and Extension  
 Outside referee for several university scientists coming up for tenure and/or promotion, 1990-now  
 Member of California People-to-People Agricultural Delegation to China, 1984  
 Member of the Natural Systems Agriculture Advisory Board of The Land Institute, 1997-now

Current or past member of the American Society of Agronomy, Soil Science Society of America, Soil and Water Conservation Society, National Association of College Teachers in America, and American Farmland Trust  
National Academy of Sciences 21<sup>st</sup> Century Systems Agriculture Committee, 2007-2010  
AGree Food Policy Research Committee, 2011-now  
USDA National Program Agricultural System Competitiveness & Sustainability: Cropping Systems Panel, 2013