

**COMPLETED research projects****Eileen Wheeler**

<b>Project Title</b>	<b>Years</b>	<b>Amount</b>	<b>Funding Source</b>
<b>Principal Investigator</b>			
Odor-Reduction Wetland Performance	2003-2004	\$52,000	Pennsylvania Department of Agriculture
Comprehensive Odor Reduction Livestock Facility	2001-2002	\$162,946	Pennsylvania Department of Agriculture
Reducing Ammonia Emissions from Poultry Houses by Enhanced Manure and Diet Management	2001-2004	\$270,000 PSU (\$870,000 Total)	U.S. Department of Agriculture, IFAFS (U Kentucky, Lead; Iowa State U)
Water Flow Evaluation of Broiler Drinker Design	2005	\$5,000	Chore Time, Inc.
Comprehensive Odor Reduction Livestock Facility	2001-03	\$162,946	Pennsylvania Department of Agriculture
Pit Fans for Fly Control	2000	\$6,539	Pennsylvania Egg Research Program
Summer Ventilation & Heat Stress Management	2000	\$10,459	Pennsylvania Broiler Research Program
Odor Control Wetlands for Liquid Swine Manure	1999-2000	\$41,816	Pennsylvania Department of Agriculture
Constructed Wetlands for Clean Greenhouse Wastewater	1998-99	\$58,582	Pennsylvania Department of Agriculture
Pit Ventilation Improvements for Fly Control	1998-99	\$159,887	Pennsylvania Department of Agriculture
Ammonia Control Strategy Cost-Benefits	1998	\$15,000	Pennsylvania Broiler Research Program
Winter Ventilation & Fuel Use: An Economic & Productivity Analysis	1997	\$15,686	Pennsylvania Broiler Research Program
Layer House Environment Control Strategies for Improved Productivity & Profitability	1997	\$17,654	Pennsylvania Egg Research Program
<b>Co-Investigator</b>			
Reducing Ammonia Emissions from Dairy Farms-Evaluating Whole Farm Strategies	2004-07	\$332,000	U.S. Department of Agriculture, Special Grant
Field Olfactometry for Quantifying and Targeting Agricultural Odor Control	2005-07	\$70,240	Pennsylvania Department of Agriculture
Ferric Iron Treatment to Reduce Manure Odors	2004-06	\$170,000	Pennsylvania Department of Agriculture
CFD Modeling of the Spread of Airborne Diseases in Chicken Houses	2005	\$5000	Penn State Indoor Environment Center Seed Grant

The Application of Fenton Reaction for Reducing Manure Odors	2004-05	\$12,000	Penn State College of Agricultural Sciences
Evaluation of Embryonic Metabolism and Heat Production of High Yielding Broiler Breeds: Single Stage Environment	2002-04	\$45,045	U.S. Poultry & Egg Association
Detection of Important Respiratory Irritants in Equestrian Facilities	2003-04	\$42,100	Pennsylvania Department of Agriculture
Enzymatic Deodorization of Swine Manure	2002-04	\$119,000	Pennsylvania Department of Agriculture
Advanced Molecular Analyses of Microbes from Constructed Treatment Wetlands	2003	\$7,250	College of Agricultural Sciences, Penn State Univ.
Deodorization of Livestock and Poultry Manure by Microorganisms	2001-03	\$74,682	Pennsylvania Department of Agriculture
Air Quality Parameters in Animal Housing Facilities	2000-02	\$59,455	Pennsylvania Department of Agriculture
Facility Design & Management Practices for Dairy-Beef & Veal	1996-99	\$141,016	Pennsylvania Department of Agriculture