

Section XII: Appendices

Appendix C: Grants

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
Samuel K. Baidoo				
National Pork Board	Critical review on botanical extracts as alternative production enhancers in swine production systems	2004-05	\$ 18,500	
National Pork Board	Effect of stocking density on the welfare and performance of grow finish pigs	2004-05		Dean, J. (PI) \$58,006
Zymetrics, Inc.	Evaluation of Phytase (Quantum Tm) in low phosphorus diets for young pigs	2004	\$ 52,838	co-PI L. Johnston
National Pork Board	Evaluation of the effect of group size and structure on welfare of gestating sows in pens with electronic sow feeders	2003-04		Dean, J. (PI) \$66,551
University of Nebraska/USDA	Restoring native perennial legumes for forage, feed and food	2002-04		Wyse, D. (PI) \$100,000
AES/Rapid Response Ag Fund	Restoring native legumes/plants to preserve perenniality and viability in MN agriculture	2002-04		Peterson, P. (PI) \$295,000
USDA AG RES SVC	Comparison of sow gestation housing	2002-03	\$ 15,000	
National Pork Board	A perspective observational study of periparturient sow mortality	2002-03		Dean, J. (PI) \$22,779
National Pork Board	Comparison of housing systems for gestating sows	2002-03		Dean, J. (PI) \$63,633
National Pork Board	Factors affecting sow mortality	2002-03		Dean, J. (PI) \$63,633
National Pork Board	Emerging technologies in swine manure mgmt	2002-03	\$ 35,000	
Calsporin Ltd., Japan	Probiotics for pregnant and lactating sows and young pigs	2000-01	\$ 15,000	
MN Dept. of Agriculture	Dietary manipulation on manure characteristics	1999-2000	\$ 95,000	
Hugh Chester-Jones				
Ridley Feed Operations	Nutri health mgmt of dairy calves	2003-08	\$ 370,000	
Hubbard Feeds	Effect of high-energy-no roughage growing-finishing programs for Holstein steers and their effect on feedlot performance and carcass quality	2002-03	\$ 14,652	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
Hubbard Feeds & Milk Products	Evaluation of pre-weaning liquid and dry feeding program and post weaning grower programs on calf performance and health	2001-03	\$ 16,663	
Nouriche Nutrition	Effect of vitamin/trace-mineral level and feed intake level on performance of Holstein calves from one week to 8 weeks-old	2002	\$ 1,500	
Cooperative Research Farms	Effects of early calf nutrition on Holstein steer performance and carcass characteristics	2001-02	\$ 26,865	
Legislative Comm. MN Resources	Sustainable Livestock Systems – Grazing alfalfa systems for dairy heifers on a commercial livestock farm	2000	\$ 13,000	
Brian A. Crooker				
Monsanto	Nutritional physiology research	ongoing gifts	\$ 433,944	
Monsanto	Clinical evaluation of feeding dairy replacement heifers	1998-01	\$ 201,450	co-PI H. Chester-Jones
Yang Da				
NIH	Comparative Medicine and Pathology training grant	2003-08		Carlson, C. (PI), et al \$945,423
USDA	Genetic linkage map for the turkey	2003-06		Reed, K. (PI); co-PIs S. Fahrenkrug, F.A. Ponce de León \$382,028
Cargill	Pedigree analysis large complex	2003-05	\$ 100,000	
USDA	Research training of veterinary students in microbial and animal health genomics	2003-05		Abrahamsen, M. (PI), et al \$100,000
USDA	New statistical methods for QTL mapping	2001-05	\$ 150,000	
USDA	Porcine Peyer's Patch Expressed sequences associated with disease resistance	2002-04		Murtaugh, M. (PI), co-PI S. Fahrenkrug \$240,000
Cargill	Development of analytical tools for animal genomics	2001-04	\$ 299,800	
UMN Grad School Grant in Aid	Statistical and computational methods for animal genomics	2001-03	\$ 18,693	
USDA	Development of an F-2 population for dairy QTL mapping	1999-03	\$ 65,000	co-PIs H. Chester-Jones, B. Crooker, M. Fahning, B. Seguin, F.A. Ponce de León
USDA	Germplasm Conservation Program		\$ 50,000	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
William R. Dayton				
USDA-NRI: Animal Growth Development & Nutrient Utilization	Role of porcine IGFBP-3 and -5 in proliferation and differentiation of porcine myogenic cells	2000-04	\$ 210,000	co-PIs D. Foster, M. Hathaway, M. White
USDA-NRI: Animal Growth Development & Nutrient Utilization	Role of satellite cell activation and growth factors in anabolic steroid-induced muscle growth of steers	1999-04	\$ 182,000	co-PIs M. Hathaway, M. White
Intervet	gift	2001	\$ 6,000	
USDA-NRI : Animal Growth Development & Nutrient Utilization	Insulin-like growth factor binding protein production by porcine myogenic cells	1997-00	\$ 180,000	co-PIs M. Hathaway, M. White
Hoerst Roussel	gift	1999	\$ 15,000	
Alfredo DiCostanzo				
Camus Inc	gift	ongoing gifts	\$ 60,925	
Mille Lacs Meadows Ranch Inc.	gift	2003	\$ 1,380	
Rahr Malting	gift	2001-03	\$ 19,576	co-PI G. Lamb
Balchem	gift	2002	\$ 7,291	
Roche Vitamins	gift	1999	\$ 2,000	
Mohamed El Halawani				
USDA	Modulation of fertility by monoamines in the domestic turkey	2004-07	\$ 385,314	
BARD, USDA	Environmental factors affecting the decline in reproductive efficiency of turkey hens: mediation by vasoactive intestinal peptide	2003-06	\$ 167,000	
MN Turkey & Research Promotion Council	Light spectrum requirement to maximizing breeder hen turkey egg production	2003-05	\$ 42,900	
Willmar Poultry Co.	Enhanced meat production by embryonic monochromatic light stimulation in turkeys	2000-05	\$ 51,636	
Willmar Poultry Co.	Body weight regulation in turkeys: role of leptin and myostatin	1998-05	\$ 66,060	
Willmar Poultry Co.	Development of vasoactive intestinal peptide-based vaccine to abolish broody behavior in turkey hen flocks	1995-05	\$ 372,000	
Midwest Poultry Consortium-USDA	Molting of turkey hens	2003-04	\$ 30,178	
Willmar Poultry Co.	Molting of turkey hens	2003-04	\$ 10,265	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
Willmar Poultry Co.	Increased skeletal muscle mass by maternal passive immunization against myostatin in the turkey	2002-04	\$ 108,406	
MN Turkey Research & Promotion Council	Influence of light intensity and wavelength on breeder hen reproductive performance	2001-04	\$ 118,400	
USDA	Modulation of reproductive efficiency by prolactin in the domestic turkey	2000-03	\$ 190,000	
Willmar Poultry Co.	Role of the eyes in the reproductive life cycle of breeder turkeys	2000-02	\$ 16,200	
BARD, USDA	Hot temperature stress and turkey reproduction	1998-01	\$ 176,600	
USDA	Modulation of reproductive efficiency by Prolactin in the domestic turkey	1997-00	\$ 243,294	
MN Turkey Research & Promotion Council	Influence of light intensity and wavelength on breeder hen reproductive performance	1998-99	\$ 35,000	
MN Turkey Research & Promotion Council	Application of recombinant turkey Interferon-Gamma to enhance turkey immune system	1997-99	\$ 22,500	
MN Turkey Research & Promotion Council	Improved feed efficiency of heavy turkeys	1996-99	\$ 30,000	
Marcia Endres				
MN Dept. of Agriculture	Yield and feeding value of annual crops planted for emergency forage	2002-04	\$ 19,000	
Scott C. Fahrenkrug				
UMN Academic Health Center	Development of a transgenic cystic fibrosis pig	2004-05		Steer, C. (PI) \$249,921
Babcock Swine	Locus specific amplification and comparative resequencing of the porcine 5'-AMP'activated protein kinase, gamma-3 subunit gene	2003	\$ 20,798	
UMN Grad School Grant in Aid	Calcineurin signaling in zebrafish muscle-cell specification and differentiation	2002-03	\$ 27,266	
USDA	Generation and mapping of genetic markers for swine	1999-03	\$ 42,501	(Balance transferred from L. Alexander in 2003)
Douglas N. Foster				
Midwest Poultry Consortium-USDA	Production and testing of high titer avian pneumovirus	2004-05	\$ 52,346	
UMN, AES Rapid Response Funds	Production and testing of high titer avian pneumovirus	2003-04	\$ 65,000	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
UMN, AES Rapid Response Funds	Immortalization and testing of turkey kidney and turbinate epithelial cells as substrates for avian pneumovirus propagation and vaccine production	2001-04	\$ 89,650	
MN Turkey Research & Promotion Council	Production and testing of high titer avian pneumovirus	2002-03	\$ 10,000	
Schering-Plough Corp.	Telemorized avian cell substrates	2000-03	\$ 100,000	
CIMA Biotechnology	Development of long term cell culture conditions for chicken primordial germ cells and embryonic stem cells	2000	\$ 46,305	
USDA	Genetic events that control the length of the cell cycle	1996-99	\$ 141,122	
Leslie B. Hansen				
American Jersey Cattle	gift	2001-04	\$ 13,800	
ABS Global	gift	2000	\$ 1,000	
Marcia Hathaway				
National Pork Board	Alternative strategies for utilizing antimicrobials as growth promotants	2001-03	\$ 50,000	co-PIs W. Dayton, M. Pampusch, M. White
MN Pork Producers Assoc.	Effect of antimicrobial supplementation on satellite cell responsiveness to growth factors	1997-99	\$ 15,000	co-PIs W. Dayton, M. White
Jacqueline Jacob				
US Poultry & Egg Association	Student recruitment funds	2004-05	\$ 3,000	
USDA	Organic poultry production	2002-05	\$ 197,641	
Elanco Animal Health	gift	2004	\$ 500	
UMN, AES Rapid Response Funds	Feeding strategies for organic poultry production	2002-04	\$ 78,000	
Elanco Animal Health	The effect of tylenol supplementation on nitrogen and phosphorus utilization of laying hens	2002-03	\$ 6,150	
Dennis Johnson				
Sustainable Agriculture Research & Education	Systems evaluation of the components of reduced input dairy farms	2003-05	\$ 10,000	
MN Dept. of Agriculture	Enhancement of on-farm alfalfa grazing for beef and dairy heifer production	2001	\$ 13,000	
LCMR	Sustainable livestock systems grant	1999	\$ 350,000	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
Lee Johnston				
MN Pork Producers Assoc.	Welfare, meat quality, growth	2002-04	\$ 20,000	
National Pork Board	Enhancing sow welfare high fiber	2002-04	\$ 78,940	co-PI S. Baidoo
MN Pork Producers Assoc.	Biological and economic performance of pigs housed in hoop barns	2001-03	\$ 11,250	co-PIs S. Baidoo, G. Shurson
Nutrifeeds	Dried porcine solubles for sows	1999-00	\$ 4,500	co-PI S. Baidoo
Graham C. Lamb				
Blandin Foundation	Establishing a reproductive biotechnology center at NCROC	2004-05	\$ 55,000	co-PI D. Rabas
Pfizer Animal Health	Influence of a CIDR prior to bull-breeding on pregnancy rates and subsequent calving distribution	2004-05	\$ 78,375	co-PIs M. Day, D. Kessler, D. Patterson
Select Sires, Inc.	Utilizing Progesterone (CIDR), GnRH, and PGF2a to develop a synchronized ovulation and fixed-time insemination protocol in suckled beef cows	2003-04	\$ 40,000	
National Association of Animal Breeders	Utilizing Progesterone (CIDR), GnRH, and PGF2a to develop a synchronized ovulation and fixed-time insemination protocol in replacement beef heifers	2003-04	\$ 10,000	
Westway Feeds	Determining effects of free choice dietary fat supplementation on reproductive parameters of beef cows	2001-03	\$ 6,142	co-PI A. DiCostanzo
Albion Mineral Co.	Effect of trace mineral nutrition on ovulation and embryo production parameters in superovulated Angus heifers	2000-03	\$ 8,475	
Select Sires Inc.	Resetting follicular waves for resynchronization of repeat inseminations of suckled beef cattle after synchronized ovulation and timed inseminations	2000-01	\$ 10,000	
WinRock International Foundation	Short term training proposal: Manipulation of bovine reproduction through synchronization, ovulation, and embryo transfer techniques	1999	\$ 21,304	
James G. Linn				
USDA AG RES SVC	Impact of alfalfa hay NDF content and digestibility on dairy cow performance	2003-05	\$ 117,257	
Nutritional Physiology Corp.	gift	2003	\$ 28,000	
Dow	gift	2002	\$ 10,000	
Glacial Grains & Spirits (AURI)	gift	2001	\$ 25,000	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
Mycogen Seeds	gift	1999-00	\$ 26,000	
Laura J. Mauro				
UMN Grad School Grant in Aid	Novel adhesive signals during skeletogenesis	2004-05	\$ 25,450	
NIH	Function of tyrosine phosphatase, OST-PTP in osteogenesis	1998-04	\$ 365,107	
UMN Grad School Grant in Aid	A multi-user microscopy station for cell and organ studies	2003-04	\$ 12,891	
NIH	Activation of mitogenic signaling by alkylating agents	1999-00	\$ 15,058	
Sally L. Noll				
Mycogen Seeds	gift	ongoing	\$ 35,000	
Finnfeeds	gift	ongoing	\$ 56,381	
Commodity Specialists	gift	ongoing	\$ 32,500	
Central Biproducts	gift	ongoing	\$ 10,926	
MN Turkey Research & Promotion Council	Improving the nutritional value of corn DDGS for poultry diets from ethanol processing-influence of solubles addition	2004-05	\$ 10,000	
Midwest Poultry/Sudan prime	Evaluation of apparent metabolizable energy and phosphorus availability of DDGS for poultry	2003-05	\$ 63,014	
Elanco Animal Health	gift	2004	\$ 8,000	
MN Corn Growers Assoc.	Improving the nutritional value of corn DDGS for poultry diets from MN ethanol plants	2004	\$ 25,000	
MN Special Liquids	gift	2004	\$ 4,000	
Dakota Gold	gift	2004	\$ 10,971	
MN Turkey Research & Promotion Council	Strategies for maximizing breast meat yield of heavy toms while minimizing feed ingredient cost	2001-04	\$ 62,250	
Novus, Inc.	gift	2003	\$ 3,000	
UMN, AES Rapid Response Funds	Detection of air sacculitis antimortum	2003	\$ 21,500	
Chemgen Corp.	gift	2003	\$ 5,465	
Carolina Feed Industry Assoc.	gift	2003	\$ 500	
MN Corn Research & Promotion Council	Strategies for maximizing breast meat yield of heavy toms while minimizing feed ingredient cost	2003	\$ 19,960	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
Elanco Animal Health	Effects of anti-coccidial programs on male market turkeys	2001-03	\$ 30,750	
MN Turkey Research & Promotion Council	Pathogenesis of avian pneumovirus in turkeys	2001-02	\$ 3,500	
Aventis	gift	2000	\$ 7,000	
Turkey Nutr Midwest Poultry	gift	2000	\$ 2,500	
Finnsugar Bioproducts	gift	2000	\$ 15,000	
Degussa-Huls Corp.	gift	2000	\$ 5,000	
MN Turkey Research & Promotion Council	Effect of methionine, betaine, and lysine supplementation on breast meat yield of male turkeys	1999-00	\$ 20,000	
Brinton Veterinary Supply	gift	1999	\$ 3,600	
Kindstrom-Schmoll Inc.	gift	1999	\$ 8,000	
Kemin Industries	gift	1999	\$ 12,500	
Roche Vitamins	gift	1999	\$ 4,316	
Optimum Quality Grains	gift	1999	\$ 5,000	
MN Turkey Research & Promotion Council	Energy sparing effects and energy to amino acid rations for growing male turkeys	1998-99	\$ 10,000	
Scott M. O'Grady				
Mayo FDN/NIH prime	Regulation of degranulation of human eosinophils	2001-06	\$ 564,323	
NIH	Scor Project 1	1993-04		Ingbar, D. (PI) \$2,677,292
Mayo FDN/NIH prime	Eosinophils in human disease	1997-01	\$ 232,406	
Abel Ponce de León				
USDA	Development of a contig map to localize male fertility's QTLs in BTAY	2001-04	\$ 220,000	
Hubbard	gift	2001	\$ 3,800	
Nextran	gift	2001	\$ 6,500	
UMASS/Cyagra	Transgenic strategy for production of single sex offspring	1998-01	\$ 111,755	
USDA	Comparative and QTL region-specific, genetic and physical maps for bovine	1996-01	\$ 219,669	
CIMA Biotechnology	Development of long term cell culture conditions for chicken primordial germ cells and embryonic stem cells	197-00	\$ 548,357	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
USDA	11th North American Colloquium on Domestic Animal Cytogenetics and Gene Mapping	1998-99	\$ 4,000	
Jeffrey Reneau				
Pharmacia	gift	2001-03	\$ 3,000	
Deborah Roeber				
UMN Grad School Grant in Aid	Impact of feeding distillers grains on sensory traits and color stability of beef	2004-05	\$ 26,040	
Colorado State Univ/Natl. Sheep Industry Improvement Ctr.	Sheep safety and quality assurance	2004-05	\$ 12,000	
Minnesota Beef Council	Evaluation of strategies to remove specified risk materials (SRM), especially dorsal root ganglia, from spinal columns in order to salvage the value of market cow and bull muscle cuts	2004-05	\$ 24,250	
Iowa Corn Promotion Board	Feeding distillers dried grains	2003-05	\$ 25,628	
Elanco Animal Health	Carcass Merit Program tenderness evaluation	2004	\$ 3,500	
National Cattlemen's Beef Association, Integrated Resource Management Program	University of Minnesota Beef Team Educational IRM Web Cast	2003	\$ 1,500	
Pfizer Animal Health	Integrated Resource Management Web Cast Programming Series	2003	\$ 750	
National Cattlemen's Beef Association, Beef Quality Assurance Program	Technology enhanced quality assurance educational delivery evaluation	2002-03	\$ 8,000	
National Cattlemen's Beef Association, Beef Quality Assurance Program	Development of a Beef Carcass Quality 101 producer educational workshop	2002-03	\$ 4,900	
Gerald Shurson				
National Pork Board	Evaluation of the effects of diet formulation methods and inclusion of DDGS and phytase on manure phosphorus excretion of grow-finish pigs and on the concentration and forms of P in manure amended soil	2004-05	\$ 46,539	co-PI L. Johnston
MN Soybean Research & Promotion Council	Nutritional aspects of marketing Norsoy soybean meal	2003-05	\$ 22,356	
MN Corn Research & Promotion Council	Evaluation of health benefits from feeding new corn distiller's co-products in diets for baby pigs	2004	\$ 17,300	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
US Grains Council	gift	2004	\$ 512	
USDA AG RES SVC	Analysis of feed ingredients for micro mineral content	2003-04	\$ 10,659	
Iowa Corn Promotion Board	The benefits of using DDGS with and without phytase, in swine diets on phosphorus balance, and phosphorus levels and chemical form of P in swine manure	2003-04	\$ 51,333	
MN Pork Producers Assoc.	Assessment of the nutritional and immunological properties of yeast cells derived from fuel ethanol production in diets for baby pigs	2003-04	\$ 25,000	
Chr. Hansen, Inc.	gift	2003-04	\$ 26,889	
MN Corn Research & Promotion Council	Evaluation of potential health benefits of corn DDGS produced from MN ethanol plants and a polyclonal antibody on the ability of pigs to resist and infection from salmonella	2002-04	\$ 15,540	
Commodity Specialists	gift	1999-04	\$ 120,088	
Pork Producer's Council	gift	2003	\$ 400	
Agri-Nutrition Services, Inc.	gift	2003	\$ 593	
Ralco-Mix Products	gift	2003	\$ 518	
Camas Incorporated	gift	2003	\$ 17,795	
Alpharma	gift	2002-03	\$ 40,300	
Illinois Corn Marketing Board	Effect of dietary inclusion of distiller's dried grains with solubles on gastrointestinal health and ability to resist ileitis challenge in growing pigs	2002-03	\$ 20,000	
MN Corn Research & Promotion Council	Effect of dietary fiber level and composition on gastrointestinal health and ability to resist ileitis challenge in growing pigs	2002-03	\$ 10,000	
Zinpro	gift	1999,02,03	\$ 10,356	
MN Pork Producers Assoc.	Effect of dietary inclusion of distiller's dried grains with solubles on gastrointestinal health and ability to resist ileitis challenge in growing pigs	2001-02	\$ 20,980	
North Dakota Soybean Council	Effect of barrier addition in a deep pit swine confinement system on growth performance of grow-finish pigs and emission of volatile organic compounds, ammonia, hydrogen sulfide, and odor	2001-02	\$ 5,000	

SUPPORTING AGENCY	TITLE OF PROJECT	EFFECTIVE DATES	TOTAL AWARDED	
MN Corn Research & Promotion Council	Effect of adding increasing levels of DDGS to gestation and lactation diets on sow and litter performance	2001-02	\$ 5,000	
AgriIliance	gift	2000-02	\$ 88,018	
MN Pork Producers Assoc.	Economic evaluation of nutritional strategies to reduce odor	1999-01	\$ 15,000	
MN Pork Producers Assoc.	Pilot project to improve the transfer of useful information	1999-01	\$ 15,000	
State of MN, Dept. of Agriculture	Effect of bacillus subtilusd ferm BP-3418	1999-00	\$ 15,000	
MN Pork Producers Assoc.	Diet formulation and ingredient selection to reduce odor	1999-00	\$ 15,000	
International Proteins	gift	1999	\$ 2,300	
Marshall D. Stern				
Ajinomoto Use	gift	2002	\$ 10,000	
Land O'Lakes	gift	2001-02	\$ 16,000	
Cargill	gift	2001	\$ 800	
Westway Trading Corp.	gift	2001	\$ 12,000	
Zinpro	gift	2000-01	\$ 50,000	
Monsanto	gift	2000	\$ 4,800	
Simplot	gift	2000	\$ 900	
Celtic Sea Minerals	gift	1999-00	\$ 12,000	
Westway	gift	1999	\$ 12,000	
Michael White				
Biotechnology Research & Development Corp.	IGFs and Cytokines in swine growth and health	1999-01	\$ 90,000	co-PIs W. Dayton, M. Hathaway
Biotechnology Research & Development Corp.	IGFs and Cytokines in swine growth and health	1998-99	\$ 55,000	
			TOTAL = \$ 9,844,655	