Clinton P. Rusk

Curriculum Vitae

January 2024

CURRICULUM VITAE

CLINTON P. RUSK

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CURRICULUM VITAE

CLINTON P. RUSK

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I. Education

Ph.D.	1997	Colorado State University – 4.0 GPA
M.S.	1992	Colorado State University – 3.9 GPA
B.S.	1980	Kansas State University – 4.0 GPA
A.A.	1978	Colby Community College – 3.96 GPA

II. Industry Appointments

Executive Vice President – American-International Charolais Association – (2021 – 2024)

Professor & Head, Department of Animal and Food Sciences, Oklahoma State Univ. (2012 – 2021)

Professor and Head, Department of Animal Science, South Dakota State University (2009 - 2012)

Associate Professor, Department of Youth Development and Ag. Education, Purdue University (2003 - 2009)

Assistant Professor, 4-H Youth Department, Purdue University (1997 - 2003)

Courtesy Appointment, Animal Sciences Department, Purdue University (1997 - 2009)

Research Associate, Department of Animal Sciences, Colorado State University (1985 - 1996)

III. Awards and Honors

Purdue University

Honorary Member – Indiana Association of Agricultural Educators – Purdue (2004)

4-H Program of Excellence: Junior Pork Day – U.S. Department of Agriculture (2002)

4-H Program of Excellence: Animal Sciences Workshop for Youth – U.S. Department of Agriculture (2001)

Team Award – Purdue University Cooperative Extension Specialist Association (2001)

Honorary State FFA Degree – Indiana FFA Association (2001)

Team Communicator Award: Pork Quality Assurance Program – North Central Region, National Association of Extension 4-H Agents (2000)

Team Award – Indiana Extension Educators' Association (1999)

National 4-H Curriculum Citation – U.S. Department of Agriculture (1998)

Colorado State University

Charles N. Shepardson Graduate Student Teaching Award – 1993
"Coach of the Year" 1991 and 1992 – National Livestock Judging Team Coaches' Association

Kansas State University

Summa Cum Laude graduate, Phi Kappa Phi honorary, President's Honor Roll - 4 semesters, Outstanding K- State Agriculture Student – Sept. 1979, Gamma Sigma Delta honorary, F.W. Bell Livestock Judging Award

Colby Community College

Presidential Scholar - 2 years, Outstanding Agriculture Student - 1978, Phi Theta Kappa honorary, National Champion Livestock Judging Team

IV. Membership in Academic, Professional, and Scholarly Societies

American Society of Animal Science (2001-2005 and 2009-2012)
National Association of Extension 4-H Agents (1997-2009)
National Association of County Agricultural Agents (2005)
National Livestock Judging Team Coaches Association (1987-1996)
Purdue University Cooperative Extension Specialists' Association (1997-2009)

V. Administrative Experience

South Dakota State University (2009 – 2012)

Dr. Rusk was selected to lead the Department of Animal and Range Sciences in the fall of 2009. Under his leadership, the department's undergraduate enrollment continued to increase with over 450 students enrolled in 2012 from 19 states. Income from grants and contracts also grew during Dr. Rusk's three-year employment at SDSU. The livestock revolving account was "under water" when Dr. Rusk started at SDSU but had recovered to a positive balance of over $350,000 upon his departure in 2012. During Dr. Rusk's third year at SDSU, a "Program Fee" was added to all ANSI classes. This fee resulted in an additional $240,000 coming to the department. Dr. Rusk used this money to replace the HVAC system in the Livestock Arena and renovate the departmentally controlled classroom in the arena. Dr. Rusk also converted the departmental computer lab into a modern classroom to facilitate additional classes of < 50 students. During his second year at SDSU, Dr. Rusk initiated a fund-raising campaign to raise money to build a new Beef Teaching and

Research Center. He also started a campaign to raise $1 million to endow a Livestock Judging Coach position. Over half of the funds had been raised for this endowment when Dr. Rusk left SDSU in 2012. During his third year at SDSU, Dr. Rusk joined forces with the South Dakota Pork Producers' Council to initiate a fund-raising campaign to raise money to build a new Swine Teaching and Research Center. The new facility called for a design that would provide visitors an opportunity to view the total swine operation in an attempt to "Demystify Pork Production".

Oklahoma State University (2012 - 2021)

Dr. Rusk was hired to lead the Department of Animal Science in the summer of 2012. Fall undergraduate enrollment grew from 880 students in the fall of 2012 to 1140 students in the fall of 2021. This growth represented 80% of the increase in undergraduate numbers in the Division of Agricultural Sciences and Natural Resources. In the fall of 2021, the undergraduate students came from 44 states and three foreign countries. Dr. Rusk developed a relationship with Mr. Randy Byford from Chickasha, OK, who donated three 15-passenger vans to the OSU Department of Animal and Food Sciences for judging team travel. Due to a strong relationship with Equine Faculty members, Mrs. Linda Cline donated $2 million dollars to construct a new Equine Teaching Center in honor of her late husband, Charles Cline. Construction was completed in 2015. Mr. Larry Ferguson, a very generous alumni, donated $2 million to build a new free stall barn at the OSU Dairy. This facility was completed in the fall of 2018. Mr. Ferguson provided additional funds to add a robotic milker to the OSU Dairy in the fall of 2020.

Thanks to a very generous Alumni Association, the OSU Department of Animal Science gave away over $450,000 in undergraduate scholarships in April of 2021. The Department of Animal and Food Sciences generated over 15,000 student credit hours in 2020 with 14.8 teaching FTE. This was the most student credit hours generated by any department in the Division. Despite the pandemic, the Department of Animal and Food Sciences was third in grants brought into the Division in 2020 and third in grant $/research FTE.

Dr. Rusk is a strong believer in providing undergraduate students with study abroad opportunities. Working closely with Adele Tongo from the College of Agriculture's Office of Multicultural Programs. Dr. Rusk led three study abroad trips to New Zealand in 2015, 2016 and 2018. He also joined professor Leon Spicer to co-lead a study abroad trip to Ireland in 2014. In 2013, Dr. Rusk traveled to China with Dr. Jean Sander, Dean of the College of Veterinary Medicine, Dr. Glenn Zhang, Regent's Professor and Dr. Jerry Malayer, Associate Dean for Research and Graduate Education in the College of Veterinary Medicine to explore the possibility of a study abroad trip to China, as well as a possible 2 plus 2 agreement with a Chinese Agriculture University that would facilitate undergraduate students studying for two years in China and two years at Oklahoma State University.

Dr. Rusk provided leadership for 28 faculty members, 30 staff members and 65 graduate students. His annual budget was approximately $7,246,673 in 2021. The department operated 8 farm and ranch units with high quality livestock that encompassed over 12,000 acres. The Animal and Food Sciences Department managed 580 beef cows, 150 replacement heifers, 200 breeding ewes, 120 dairy cows, 30 dairy heifers, 65 sows, 50 Boer goat does and 20 Quarter Horse mares in 2021.

American-International Charolais Association (2021 – 2024)

Dr. Rusk was chosen to serve as Executive Vice President of the American-International Charolais Association (AICA) in the fall of 2021. From November 2021 to December 2023, Dr. Rusk visited 125 Charolais herds in 21 U.S. states and 5 foreign countries. He also attended 61 Charolais sales in 14 states and Canada. Dr. Rusk is an advocate for genomic testing of cattle. In 2021, Charolais breeders submitted 4366 DNA samples to Neogen for genomic testing. In 2022, Charolais breeders submitted 9300 DNA samples for an increase of 113%. In 2023, Charolais breeders submitted over 9000 DNA samples to Neogen.

In July of 2022, a genetic defect called Bovine Progressive Ataxia (BPA) was discovered in Charolais cattle in the United States. Dr. Rusk worked with the AICA Executive Committee, the AICA Breed Improvement Committee and four geneticists to develop a policy for dealing with BPA. During the discovery process, Dr. Rusk learned that a test for BPA was included in the 100K chip used by Neogen for genomic testing Charolais cattle starting in July of 2021. By the end of 2023, over 20,000 Charolais cattle in the U.S. had been tested for Bovine Progressive Ataxia. This testing has provided Charolais breeders with the knowledge they need to manage their breeding programs in order to reduce the incidence of BPA.

Under Dr. Rusk's leadership, the AICA Board of Directors made the decision to hire two beef marketing specialists with a goal of increasing consumer demand for Charolais-influenced beef. These new hires are now working with a steering committee to develop a plan for conducting taste panel research and other research that will help demonstrate the carcass merit and feedlot performance of Charolais-influenced cattle.

One of Dr. Rusk's favorite events while working for the AICA was the Charolais Junior National that combines two of his passions: developing life skills in youth and promoting high quality cattle. Dr. Rusk made a point of getting to know members of the Charolais Junior Board throughout their time in the American-International Junior Charolais Association (AIJCA). In 2022, AIJCA hosted the largest Junior National in their history at Grand Island, NE when junior members from 32 states exhibited over 600 head of Charolais cattle and participated in more than 10 competitions, many of which did not require the youth to bring an animal to Junior National to compete in the event. Dr. Rusk made a point of walking through the barns, visiting with youth and adults, and recording interviews with youth about their experiences at Charolais Junior National.

Prior to attending Charolais Junior National in the summer of 2023, Dr. Rusk was invited to speak at the Beef Improvement Federation meeting in Calgary, Alberta, Canada. The topic of his talk was how to use purebred cattle in crossbreeding situations. Dr. Rusk discussed the ways to use Charolais cattle to cross on various beef breeds to create crossbred cows resulting in heterosis that improves lowly heritable traits like fertility, longevity and herd health. Dr. Rusk emphasized the use of gender selected semen, timed A.I. and beef on dairy as other options to improve crossbreeding schemes. In order to feed the world in 2050 and beyond, Dr. Rusk believes commercial cattle producers must use crossbreeding plans that include breed complementarity, utilize the best genetics available, and take advantage of the latest technology, including genomic enhanced Expected Progeny Differences.

VI. Evidence of Excellence in Engagement

Professor Rusk was hired at Purdue University in 1997 to develop youth-based educational programs that maximize the attainment of ethics and life skills through projects that involve the raising and showing of livestock. He believes in utilizing animals to provide opportunities for youth to learn responsibility and discipline while, at the same time, developing their communication, decision-making, time management, financial management, and leadership skills. An advocate for character education and integrity, Dr. Rusk trained over 1,700 Indiana volunteers, parents, and youth in good sportsmanship, ethical behavior, and the proper care and treatment of animals. Under his leadership, enrollment in these programs increased by over 7,000 Indiana youth—from 25,542 in 1997 to 32,690 in 2007. During this same period, the number of Indiana livestock operations decreased by 21%.

After being promoted to Associate Professor in 2003, Professor Rusk demonstrated an exceptional ability to develop quality and innovative educational programs that impacted the lives of thousands of youth and adults throughout Indiana and beyond. His greatest influence after being promoted to Associate Professor was in (1) the use of biometric identifiers to verify animal identity, and (2) teaching youth ethical behaviors in raising and showing livestock.

Biometric identifiers: Professor Rusk was the first in the country to use retinal images of 4-H beef, goat and sheep projects to verify animal identity and ensure the animals going to the Indiana State Fair were the same ones enrolled earlier in the year. Starting in 2005, Dr. Rusk verified the identity of the top three market steers, market goats, market lambs and breeding ewes in each class shown at the Indiana State Fair. Thanks to Dr. Rusk's efforts, the Indiana State Fair was the first fair of its kind to use retinal images to verify animal identity.

Ethical behaviors: Professor Rusk's efforts to increase the knowledge of youth concerning ethical behaviors with livestock have included: (a) development of an interactive web site that has been utilized to train and certify 4,537 youth about pork quality assurance; (b) development of an instructor-led, youth-based curriculum on animal ethics that yielded an average knowledge increase of 9.9 percent; and (c) incorporation of animal ethics-related training into established youth-based programming.

Dr. Rusk's commitment to ethical behaviors/values and life skills learning related to the raising and showing of livestock helped ensure Indiana's youth-based livestock programs maintained the highest ethical standards. As a result, Indiana has not experienced the cheating or questionable practices that have plagued similar programs in some nearby states.

A. Description and Impacts of Major Programs

1. Biometric Identifiers

Youth livestock specialists and Extension Educators involved with county and state fairs across the country were looking for a form of real-time verification to ensure the animals being exhibited at their county and state shows were the same animals enrolled earlier in the season by their 4-H and FFA members. In 2004, Professor Rusk began researching the use of retinal images as a means of verifying the identity of 4-H animal projects. Dr. Rusk utilized the OptiReader devise to collect retinal images from beef, goats and sheep in ten Indiana counties. Results of this study showed that retinal images provide the real-time verification feature of nose prints, with the

unique permanent identification of DNA. Retinal images taken with the OptiReader™ device were more consistent in quality than nose prints since the device itself determines when an image is acceptable. With a laptop computer and the OptiReader™ device, Extension personnel were able to positively verify sheep and goat projects at ring side, and beef projects at a chute or scale. The real-time verification feature of the retinal imaging process allowed show officials to verify animal identity before champions were selected, thus eliminating the awkward, and sometimes stressful, situations created when champion animals are disqualified after their true identity is determined days and/or weeks following a show.

Professor Rusk developed a verification exercise given to 4-H Youth Educators and adult volunteers involved in the 2004 Animal Sciences Workshop for Youth, to determine the rate of visual verification of retinal images and nose prints for both beef and sheep. The target group simulated the population that would be required to read the retinal images for real-time visual verification in a county fair setting. Volunteers were asked to determine if 20 pairs of retinal images (10 from beef and 10 from sheep) and 20 pairs of nose prints (10 from beef and 10 from sheep) were a match.

The results of the visual verification exercise, shown in the table below, reveal a 29.7 percent advantage for correctly identifying retinal images from beef cattle versus nose prints. This same trend was also true for sheep. The percentage of answers recorded as unsure was negligible for retinal images but ranged from 5.26 to 8.42 percent for nose prints.

Summary of participant's ability to match retinal images and nose prints

		N	Overall Percentage Correct	Percentage of Unsure Answers
Beef	Nose print	380	68.94[a]	8.42[d]
	Retinal Image	370	98.64[b]	0.27[e]
Sheep	Nose print	380	79.47[c]	5.26[d]
	Retinal Image	370	84.86[c]	0.00[e]

[abcde]Values in the same row with different superscripts are significantly different ($P < .05$)

Starting in 2005, Professor Rusk used retinal images to verify the identity of the top three market steers, meat goat wethers, market lambs and breeding ewes in each class shown at the Indiana State Fair. From 2005 to 2007, Dr. Rusk confirmed the identity of 1422 animals at the Indiana State Fair. Using retinal imaging technology, Professor Rusk confirmed the identity of 100% of the ruminant animals scanned at the Indiana State Fair.

Impacts

- Identity verified on 100% of the animals scanned at the Indiana State Fair.
- Over 200 Indiana Educators and volunteers trained to use the OptiReader device.
- Officials in five other states consulted with Dr. Rusk regarding retinal imaging programs.

Dr. Rusk trained over 200 volunteers and Extension Educators to use the OptiReader device to collect retinal images. He also trained leaders from Iowa and Ohio how to use the retinal imaging equipment. In addition to Indiana, retinal imaging technology has been used to verify the identity of 4-H animals in

Colorado, Iowa, Mississippi, New Mexico, and Ohio. Dr. Rusk consulted with 4-H officials in each of these states regarding the advantages and disadvantages of using the retinal imaging process to verify animal identity.

Professor Rusk conducted a study to evaluate volunteer leaders' and 4-H livestock members' perceptions of the retinal imaging process and the equipment used to collect retinal images. Partial results from the 4-H member survey are presented below.

4-H Members' Perceptions of Using Nose Prints and Retinal Images to Identify Livestock Projects

				Frequency of Responses					
Statement	N	Mean	St. Dev.	1	2	3	4	5	
The county weigh-in and identification was run in an efficient manner.	247	3.7	1.2	12	38	23	112	68	
I was informed of the retinal scanning procedure before the county weigh-in.	248	4.2	1.2	16	18	8	68	138	
I feel confident that animals can be verified by matching retinal scans.	249	4.3	1.0	4	11	34	67	133	
I feel confident that animals can be verified by matching nose prints.	249	3.5	1.0	9	35	75	88	42	
Using retinal scanning to positively identify animals will be beneficial to the 4-H program.	249	4.1	1.1	11	10	35	91	102	

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree

Professor Rusk developed an on-line tutorial to teach Extension Educators and clerical staff how to utilize the Optibrand software to up-load and manage retinal images once they had been collected.

2. Programs that Teach Ethical Behavior

a) **Pork Quality Assurance Web Site** (Animal Welfare Curriculum)

To improve the quality of pork, several major meat-packing companies initiated a requirement for pork producers to be pork-quality-assurance (PQA PLUS) certified in order to sell their hogs. This mandate included 4-H swine-project members, who needed training and a certification program focused on the ethical treatment of swine as one element of meat quality improvement. To address this need, Professor Rusk and Professor Brian Richert

Impacts

- 4,537 youth tested and certified via an interactive web site focusing on ethical treatment of swine to improve management practices and to reduce pork drug residues and bacterial contamination.
- Kansas State and Oklahoma State Universities adopted this website.

(Purdue Animal Sciences Department) developed a quality assurance program for youth. Dr. Rusk also worked collaboratively with Leanne Burrow (Distance Learning Specialist in Ag Information Technology) to design an interactive web site (www.ces.purdue.edu/PQA/) where 4-H members become PQA-certified. This unique approach resulted in 4,781 4-H'ers in 68 Indiana counties receiving certification. Extension professionals in Kansas and Oklahoma recognized the educational value of the PQA web site and asked permission to use it to help certify 4-H members in their states.

As a result of the PQA web site, Indiana 4-H members now have a unique opportunity to increase their understanding of safety concepts that impact drug residues and bacterial contamination of pork. Professor Rusk, in cooperation with the Area VII Extension Youth Educators, developed a PowerPoint presentation to assist educators with PQA training in their counties. This teamwork resulted in two awards: one from the Indiana Extension Educators' Association and one from the North Central Region of the National Association of Extension 4-H Agents. Also, an Ohio State University Extension specialist requested the presentation to assist in training Ohio 4-H youth in PQA principles.

b. **Junior Pork Day** (Hands-On Ethics Training)

Recognizing the need for educational programming on animal ethics and animal welfare, in 1999, Dr. Rusk added an animal ethics class and PQA training at Junior Pork Day (JPD), which is an annual one-day workshop held at Purdue University to provide 4-H swine members and their parents current information and hands-on learning about recent innovations in the swine industry. This effort resulted in the PQA certification of 150 4-H members and 20 parents in 1999 and 2000.

Impacts
- Over 60% of youth indicated they learned ethical behaviors in raising and showing swine (n = 32).
- Increased participation in Junior Pork Day by 170%.

With Professor Rusk and Professor Brian Richert (Animal Sciences Department) providing leadership, Junior Pork Day participants learned how to select and humanely care for (i.e., feed, breed, and show) their 4-H pig(s) plus they received training in swine evaluation, pork carcass identification, and the ethics of raising and showing swine. Attendance at JPD grew from 100 participants in 1997 to 278 in 2007 — a 170% increase.

Junior Pork Day also provides a significant recruiting opportunity for the Purdue Department of Animal Sciences by exposing participants to the Purdue campus, its faculty, and staff. In 2002, Junior Pork Day at Purdue University was selected as a "Program of Excellence" by the U.S. Department of Agriculture.

c. **State Fair Livestock Exhibits Program** (Ethics in Practice)

In 2007, the Indiana State Fair was the second largest 4-H livestock exhibition in the United States, with over 12,000 animal exhibits. This figure represents a 13 percent increase in the number of 4-H youth exhibiting animals at the Indiana State Fair since 1997, when Dr. Rusk started at Purdue.
With responsibility for the 4-H livestock exhibits at the Indiana State Fair (i.e., beef, dairy cattle, dairy goats, meat goats, sheep and

Impact
- Respondents rated their ability to raise an animal in a humane manner with a mean score of 3.96 on a 4.00 scale.

swine), Professor Rusk expanded the program's mission from life skill development to include ethical behaviors when youth are grooming and showing livestock.
To measure the impact of exhibiting livestock on ethics development in youth, Dr. Rusk directed a master's degree student's research study, to investigate the effect of raising and exhibiting 4-H beef, sheep, and swine on life and project skills acquisition by youth. In a survey, 176 respondents who had exhibited livestock at either the county fair only or at the county and state fair rated their ability to raise an animal in a humane manner with a mean score of 3.96 on a 4.00 scale. Indiana State Fair participants in the program ranked their skill level higher ($p < 0.05$) than those who exhibited at the county fair only, in the areas of animal grooming, animal health care, and animal selection. There was no difference in the way the two groups of livestock exhibitors rated their abilities in the areas of ethical behavior and safety. In response to the open-ended survey question, "What have you learned as a result of raising and exhibiting 4-H animal projects?", one participant wrote: "I am a role model for younger 4-H members who will learn things from others and from me. As they learn, honesty and fair play will help them when they get older. The main point I have come to understand is that winning isn't everything. Learning to do things in an ethical manner is the best part of the 4-H program."

The study also evaluated the impact of raising and exhibiting livestock projects on the development of life skills. In response to the open-ended survey question, "What life skills have you developed as a result of raising and showing beef, sheep and swine projects?" another participant wrote: "I have used skills learned from my livestock projects in many situations. I have learned to be honest and set priorities. Having livestock has made me more responsible with my friends, relationships and parents. I have also learned to work hard and set goals. I have learned to be more responsible in every aspect of life."

Professor Rusk and Professor John Forrest (Purdue Animal Sciences Department) initiated a beef carcass evaluation program as a post-State Fair educational opportunity for 4-H members to learn about the carcass qualities (i.e., yield grades, quality grades and carcass value) of their animals and to evaluate their feeding programs. In addition, the owners of all breed champion steers, barrows, and market lambs received carcass information on their animals. Dr. Rusk coordinated the collection and tabulation of all carcass data.

3. Programs that Teach Life Skills

a) **National Swine Curriculum** (Teaching Skills for Life)

Professor Rusk secured a $30,000 grant to increase technical and life-skills-development content to the National 4-H Swine Curriculum. He led a multi-disciplinary team of animal science faculty and youth development professionals from three universities to design three grade levels of curricula, a leader's guide, and an interactive youth web site (www.n4hccs.org) aimed at helping teach both project skills and life skills.

Impacts

- Improvement in ethical treatment of animals and ethical behavior of youth when showing animals.
- Over 70% of youth indicated the new swine curriculum helped them develop life skills.
- Adopted by 43 universities as their swine project curriculum (163,000 copies sold by July, 2008).

A national survey of youth participants (n = 109) revealed that the new 4-H Animal Science "Skills for Life" curriculum series was indeed effectively accomplishing its objectives. Over 75 percent of the respondents indicated the curriculum helped them improve the following project skills: caring for an animal, keeping an animal healthy, showing an animal, feeding an animal, grooming an animal, and appreciation for animal products. Over 70 percent indicated the curriculum helped them develop the following life skills: record keeping, accepting responsibility, planning and organizing, and communicating.

This curriculum was national jury reviewed, receiving a 3.4 average (on a 4-point scale) on 14 criteria, thus becoming part of the National 4-H Curriculum Collection and recommended for use in all states. As of July 2008, universities in 43 states had purchased 163,000 copies of the swine manuals.

b) Career Development Programs (Livestock Evaluation Training)

Professor Rusk chaired the Indiana 4-H/FFA Ag Judging Committee and was responsible for overseeing Indiana's 14 judging-based educational programs designed to develop life skills, such as critical thinking, decision-making, and oral communication. Through judging, young people are taught to make logical decisions based on sound educational principles, which form the basis for applying judgment in the decision-making process as a life skill.

Impact

- Over 80% of youth indicated the program was highly influential in building their self-confidence and in developing communication and decision-making skills.

In 2000, Dr. Rusk directed a master's student's research study to measure the impact of participation in the 4-H and FFA livestock judging-based career development event. A survey of 186 individuals (63.3% response rate), who had been out of the 4-H or FFA program for at least five years, rated the influence of livestock evaluation training on developing specific life skills. Over 80 percent of the respondents credited the training program as being highly influential or almost essential to their development of the following life skills.

Life Skill Development from 4-H/FFA Livestock Evaluation Training
n = 186

Life Skills Attributes	Mean	St. Dev.
Verbally defend a decision	4.20	0.81
Oral communication	4.07	0.81
Decision-making	4.04	0.80
Self-confidence	3.93	0.80

Scale: 1 = Not Influential at all, 2 = Mildly Influential, 3 = Moderately influential, 4 = Highly influential, 5 = Almost essential – to my ultimate development of this attribute

One survey participant made the following qualitative response: "Livestock judging was easily the best experience that prepared me for a career. The livestock judging program helped facilitate my ability to make decisions efficiently and to verbally defend those decisions."

In 2006, nearly 4,000 Indiana youth participated in one or more of the 14 judging-based career development events on the county level. In addition to Professor Rusk's role in all of Indiana's judging events, he served as superintendent of the State Livestock Judging Contest. An Indiana high school FFA advisor had the following comment: "The State Livestock Judging Contest, under the guidance of Dr. Rusk, is the best it has been since the early 1980s."

Professor Rusk also developed the following innovative software programs to enhance life skills through livestock-based career development events:

DVD's of the State Livestock CDE: In 2006, Professor Rusk and Phil Reid (Purdue Animal Sciences Department) developed digital versatile disk (DVD) copies of the classes presented at the State Livestock CDE. These DVDs contained live video footage of the classes, along with voice overlays of official placings and oral reasons for each class. For three years-in-a-row, DVDs of the State Livestock Contest were distributed to coaches across Indiana. Coaches used these tapes to prepare teams for future contests, while enhancing life skill development of their team members.

Digital images of meat cuts: Professor Rusk, Professor Susan Barkman (Purdue 4-H Youth Department) and Professor John Forrest (Purdue Animal Sciences Department) combined their creativity to enhance the State 4-H/FFA Meat Evaluation Contest by utilizing digital color images of beef rib-eyes and pork loin-eyes for contestants to measure and evaluate following live viewing of carcasses in the cooler. Use of digital color pictures at the State Meat Evaluation Contest allowed each contestant more time to measure the cuts, reduced the time contestants spent in the cooler, and improved the contest's overall efficiency and effectiveness. Following the event, 17 teachers purchased complete sets of the digital images to further enhance the meat evaluation skills of their students and to provide training sets for future teams.

Professor Rusk provided the following evaluation related training for coaches, teachers, and volunteer leaders:

Training teachers and coaches. Professor Rusk provided numerous training opportunities throughout Indiana for 4-H/FFA livestock judging coaches to enhance evaluation skills and improve their coaching technique. He also assisted several coaches in preparing their teams for national competition. Indiana's FFA team won the national FFA Livestock Judging Contest for the first time ever in 2007. From 1997 to 2009, Indiana 4-H teams placed first or second at the National 4-H Livestock Judging Contest three times.

Volunteer-leader training. Professor Rusk made numerous presentations at state and district volunteer-leader training sessions. He is well known for his innovative teaching style, which often includes non-livestock objects (e.g., flowers, cowboy boots, and Beanie Babies) to educate livestock leaders and judges about the importance of exhibitor interaction and project evaluation at county and state fairs. Two participants at the 2002 Indiana Central District 4-H Leaders' Conference offered the following comments:

"Dr. Rusk's session was completely different than I had expected. He asked us to evaluate and rank aprons, tulips and stuffed Koala bears. I found his session to be refreshing and informative. I am inspired to go back to my county to serve as the 4-H dairy goat leader."

"I hadn't planned to attend the livestock session, but I'm very glad I did. I found Dr. Rusk to be creative and enthusiastic as he described what parents look for in a good judge. He convinced me the exhibitor is more important than the exhibit. I appreciate his knowledge and passion for the subject."

c) **Animal Sciences Workshop** (A Multi-Disciplinary Approach to Life Skills Development)

Professor Rusk provided leadership for the Purdue Animal Sciences Workshop for Youth, a three-day, comprehensive, educational program that involves faculty and staff from three academic units: 4-H Youth Department, Animal Sciences Department, and the School of Veterinary Medicine. Its primary objective is to develop and foster life skills through positive interaction with others; therefore, enrollment is limited to 50 participants in each of 11 specie groups to maximize hands-on experiential learning opportunities.

Impacts

- 76 percent of participants gained knowledge concerning animal behavior and welfare to help them better manage their animals.
- Selected by the USDA as a 4-H Program of Excellence for 2001.

A survey of 257 delegates at the 2006 Animal Science Workshop for Youth yielded the following results:

Evaluation of Animal Science Workshop for Youth (n = 257)

Percent*	Response
92%	Found the Workshop to be a positive learning experience
88%	Said impression of Purdue University improved as a result of attending the Workshop
87%	Understanding technology used in Animal Science increased as a result of attending the Workshop
85%	Had increased their desire to pursue a college degree
80%	Were motivated to share information they learned at the Workshop with others in their community
79%	Learned information at the Workshop about animal behavior and welfare that would help them better manage their 4-H animal project(s)

Rating scale: Strongly agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly disagree = 1

* Percent of total respondents who strongly agreed or agreed with a given statement.

Since 1997, Professor Rusk secured funds to provide 13 scholarships that enabled youth from CA, ID, IL, KS, MI, OH, OK, PA, TX, and WA to attend the Workshop's rabbit section. In 1999, he added "companion animal" and "veterinary science" sections to the Workshop, which drew an additional 42 participants the first year. Recognizing the value of the Workshops, animal-related state associations and various agricultural enterprises provided approximately $5,000 in annual support. In 2001, the Animal Sciences Workshop for Youth at Purdue University was selected as a "Program of Excellence" by the U.S. Department of Agriculture.

VII. Evidence of Financial Support for Educational Programs

Profes**sor Rusk secured and administered over $1,341,000 in funding for the youth development programs under his direction, as follows:**

1. Competitive Grants

Agency/Title of Grant: USDA/APHIS / Evaluation of Identification Systems for Exhibition Animals and the Ability of the Colorado State Fair, Indiana State Fair, National Western Stock Show and the North American International Livestock Exposition to Comply with the National Animal Identification System
Duration of Funding (Dates): 2007 - 2008
Total amount of award: $325,000
Your role: PI

Agency/Title of Grant: USDA/APHIS / 4-H Curriculum Development for the National Animal Identification System
Duration of Funding (Dates): 2005 - 2006
Total amount of award: $74,074
Your role: Co-PI
If Co-PI, how much of the total funding were you directly responsible for: 85%

Agency/Title of Grant: National Pork Board / There's a Pig in My Classroom
Duration of Funding (Dates): 2005 - 2006
Total amount of award: $30,940
Your role: PI

Agency/Title of Grant: Purdue CES / Carcass Evaluation
Duration of Funding (Dates): 2001
Total amount of award: $10,000
Your role: PI

Agency/Title of Grant: Purdue CES / Electronic I.D. of 4-H Animals
Duration of Funding (Dates): 2000
Total amount of award: $17,150
Your role: PI

Agency/Title of Grant: U.S. Department of Agriculture / Pork Quality Assurance Program
Duration of Funding (Dates): 1999
Total amount of award: $2,000
Your role: Co-PI
If Co-PI, how much of the total funding were you directly responsible for: 50%

Agency/Title of Grant: National 4-H Cooperative Curriculum System / 4-H Swine Curriculum
Duration of Funding (Dates): 1998
Total amount of award: $30,000
Your role: PI

SUB TOTAL (COMPETITIVE GRANTS): $489,164
Dr. Rusk's responsibility: $477,053

2. Programmatic Funds

Agency/Title of Grant: Elanco Animal Health, Indiana 4-H Foundation, United Feeds, Inc., Moorman Manufacturing Co., Heinhold Feed, Inc., Curt and Cindi Fankhauser, Eight animal-related state associations / Animal Science Workshops for Youth
Duration of Funding (Dates): 1997-2008
Total amount of award: $41,200
Your role: PI

Agency/Title of Grant: Indiana Farm Bureau / 4-H Livestock Judging Team
Duration of Funding (Dates): 1997-2008
Total amount of award: $7,200
Your role: PI

Agency/Title of Grant: Indiana Horse Council / 4-H Animal Science Programs
Duration of Funding (Dates): 1997-2008
Total amount of award: $4,900
Your role: PI

Agency/Title of Grant: Indiana State Fair Commission / Indiana Livestock Program
Duration of Funding (Dates): 1997-2008
Total amount of award: $746,786
Your role: PI

Agency/Title of Grant: Indiana State Fair Board / 4-H Career Development Events
Duration of Funding (Dates): 1997-2008
Total amount of award: $62,150
Your role: PI

Agency/Title of Grant: Cinergy/PSI Energy Foundation / Ag. Judging Handbook
Duration of Funding (Dates): 1999
Total amount of award: $1,217
Your role: PI

SUB TOTAL (PROGRAMMATIC FUNDS): $863,453
Dr. Rusk's responsibility: $863,453

TOTAL (COMPETITIVE GRANTS AND PROGRAMMATIC FUNDS): $1,352,617
Dr. Rusk's responsibility: $1,340,506

VIII. Evidence of Youth Engagement Excellence (Including Innovations in Engagement Education)

1. Computerized Tabulation Program

While at Colorado State University, Professor Rusk worked with Robert Mitchell (P.E., Consulting Engineer), Castle Rock, CO. to develop the "AGJUDGE" computer software, which was designed to tabulate livestock, dairy, wool, horses and meat judging contest results. Mr. Mitchell provided the programming expertise, while Dr. Rusk guided the practical application and continually suggested revision to enhance the program's efficiency and output. The tenth version of "AGJUDGE" was used by the National Western Stock Show in Denver, CO, the Arizona National in Phoenix, AZ, and by 12 universities in AL, AZ, CA, CO, KY, NV, OH, PA, and TX. The "Ag Judge" software, which had more features than any tabulation software on the market, was licensed by over 50 groups and organizations.

Dr. Rusk helped incorporate some of the same mechanics into a livestock judging tabulation program at Purdue University and also wrote the program user's guide. All 10 Indiana Extension areas utilized the Purdue tabulation program. A high school agricultural education instructor made the following comment: "The verification portion of the Purdue tabulation program is a big improvement over previous software."

IX. Publications (* indicates the primary author)

1. Refereed Journal Articles

Martin, C.A., and Rusk*, C.P. (2021). Youth Livestock Programs Provide Intangible Benefits Through Life Skill Development. *Animal Frontiers. 11(2). pp. 64-71*

Culp*, K.C., Claeys, M.C., Lemenager, R.P., Rusk, C.P., Bridges, G.A., & Lake, S.L. (2013). *E*ffects of Continuous and Step-up Ractopamine Hydrochloride Supplementation Protocols on Feeding Performance and Carcass Characteristics of Finishing Steers. *Professional Animal Scientist*.

Schinckel*, A. P. and C. P Rusk. (2012). The Need for Accurate Prediction Equations for the Carcass Lean Content of Pigs. J. Ext. Vol 50(3). Online. Available at: http://www.joe.org/joe/2012june/rb5.php

Gunn*, P.J., Schultz, A.F., Van Emon, M.L., Neary, M.K., Lemenager, R.P., Rusk, C.P. and Lake, S.L. (2010). Effects of Elevated Crude Glycerin Concentrations on Feedlot Performance, Carcass

Characteristics, and Serum Metabolite and Hormone Concentrations in Finishing Ewe and Wether Lambs. *Professional Animal Scientist. 26:298-306 9 pp.*

Howell*, B.M., Rusk, C.P., Blomeke, C.R., McKee, R.K., & Lemenager, R.P. (2008). Perceptions of Retinal Imaging Technology for the Identification of 4-H Ruminant Animals. *Journal of Extension*. 46(5). 10 pp.

Wagler*, S.E., Rusk, C.P., Blomeke, C.R., Richert, B.T., Latour, M.A., & Talbert, B.A. (2008). Classroom Evaluation of an Elementary Educational Swine Curriculum: There's a Pig in My Classroom. *Journal of Agricultural Education. 49(3). 12 pp.*

Platt*, J.C., Rusk, C.P., Blomeke, C.R., Talbert, B.A., & Latour, M.A. (2008). An Evaluation of Digital Versatile Disc (DVD) Instruction, Live Instruction, and Live Animals in Third Grade Classrooms. *NACTA Journal.* 52(1). pp. 2-5

Wagler*, S.E., Rusk, C.P., Blomeke, C.R., Richert, B.T., Latour, M.A., & Talbert, B.A. (2007). An Evaluation of Attitude Change by Participation in an Elementary Educational Swine Curriculum. *NACTA Journal.* 51(3). pp. 38-43

Rusk*, C.P., Blomeke, C.R., Balschweid, M.A., & Elliott, S.J. (2006). An Evaluation of Retinal Imaging Technology for 4-H Beef and Sheep Identification. *Journal of Extension*. 44(5), 11 pp.

Rusk*, C.P., Brubaker, K.M., Balschweid, M.A., & Pajor, E.A. (2006). Evaluation of a Livestock Ethics Curriculum for High School Youth. *Journal of Agricultural Education.* 47(3), 12 pp.
Rusk*, C.P., Brubaker, K.M., Balschweid, M.A., & Pajor, E.A. (2005). Capitalizing on the Human-Animal Bond to Teach Ethics to Youth. *New Directions for Youth Development.* 108, 12 pp.

Rusk*, C.P., Summerlot, J.M., Machtmes, K.L., Talbert, B.A., & Balschweid, M.A. (2003). Impact of raising 4-H beef, sheep, and swine projects on the development of life and project skills. *Journal of Agricultural Education.* 44(3). 11 pp.

Rusk*, C.P., & Machtmes, K.L. (2003) Livestock ethics: A curriculum for teachers. *Journal of Extension.* 40(3). 5 pp.

Rusk*, C.P. (2002). Electronic identification of 4-H animal projects. *Journal of Extension.* 40(6), 5 pp.

Rusk*, C.P., & Machtmes, K.L. (2002). Teaching youth through 4-H animal science workshops. *Journal of Extension*. 40(5), 4 pp.

Rusk*, C.P., Egger, T.M., Machtmes, K.L., & Richert, B.T. (2002). Junior Pork Day—A family experience. *Journal of Extension, 40(4), 4 pp.*

Rusk*, C.P., Martin, C.A., Talbert, B.A., & Balschweid, M.A. (2002). Attributes of Indiana's 4-H livestock judging program. *Journal of Extension. 40(2), 8 pp.*

Rusk*, C.P., King, M.E., Mortimer, R.G., & Speer, N.C. (2002). Relationships of scrotal circumference and scrotal volume to growth and semen traits in beef bulls. *The Professional Animal Scientist.* 18:79-84.

Rusk*, C.P., Kerr, C.A., Russell, M.A., & Talbert, B.A. (2001). Profiling Indiana's 4-H horse and pony leaders. *Journal of Extension*, 39(4), 7 pp.

2. Book Chapter

Rusk*, C.P., Frobose, D., & Moeller, S. (2001). Environmental assurance. In J. P. Black, R. W, Flood, J. Grimes, & J. M. Osborne (Eds.), *Beef Resource Handbook* (4-H 117R) (pp. 131-135). Columbus, OH: Ohio State University Extension.

3. Refereed Papers/Presentations - NOTE: The following papers were selected by a panel of peers.

Dr. Rusk authored (3) and co-authored (1) invited paper prior to 2003. Invited papers authored since 2003 are listed below:

Woloshuk*, J.M., Rusk, C.P., & McKee, R.K. (2006, October). National Animal ID for Youth – A Program for Youth Producers. Paper presented at the National Association of Extension 4-H Agents' Conference, Milwaukee, WI. 10pp.

Rusk*, C.P., Blomeke, C.R., Balschweid, M.A., & Elliott, S.J. (2005, November). An Evaluation of Retinal Imaging Technology for 4-H Beef and Sheep Identification. Paper presented at the National Association of Extension 4-H Agents' Conference, Seattle, WA. 5pp.

Rusk*, C.P., Blomeke, C.R., Balschweid, M.A., & Elliott, S.J. (2005, July). An Evaluation of Retinal Imaging Technology for 4-H Beef and Sheep Identification. Paper presented at the National Association of County Agricultural Agents, Buffalo, NY. 5pp.

Blomeke*, C.R., Rusk, C.P., Balschweid, M.A., & Elliott, S.J. (2004, November). The Eyes Have It. Paper presented at the North Central Region Volunteer Forum, Indianapolis, IN. 3pp.

Blomeke*, C.R., Rusk, C.P., Balschweid, M.A., & Elliott, S.J. (2004, September). The Eyes Have It. Paper presented at the National Extension Technology Conference, West Lafayette, IN. 3pp.

Blomeke*, C.R., Rusk, C.P., Balschweid, M.A., & Elliott, S.J. (2004, March). Identification of Livestock Through Retina Identification: Protecting the Food Supply. Paper presented at the Biometric Standards, Performance, and Assurance Laboratory Research Meeting, West Lafayette, IN. 3pp.

4. Extension Publications (numbered)

Dr. Rusk authored (14) and co-authored (2) Extension publications prior to 2003.

Rusk*, C.P., Barkman, S., Berg, E.P., Carr, R.K., Forrest, J.C., Sheiss, E.B., & Weaver, A. (2006). A Coaches' Guide to the Indiana 4-H/FFA Meat Evaluation and Identification Contest (4-H 718). Purdue University Cooperative Extension Service, West Lafayette, IN. 52 pp.

5. Computer-Based Applications (two Web sites and three computer programs)

Rusk*, C.P., Woloshuk, J.M., Osborne, P.I., Westendorf, M.L., Mickel, R., McKee, R.K., Tanner, J.P., Holzer, Q., Morris, D.L., & Graves, C. (2006). National Animal ID for Youth – A Program for Youth Producers. A national youth curriculum developed for the USDA/APHIS. 31pp.

Rusk*, C.P. & Stewart C.J. (2002). Indiana 4-H Livestock. Purdue University, 4-H Youth Department Web site: www.four-h.purdue.edu/livestock.

Rusk*, C.P. & Forrest, J. C. (2002). Purdue Carcass Evaluation Software (Beta Version) [Computer software]. West Lafayette, IN: Purdue University

Rusk*, C.P. & McGiveron L.M. (1999). Pork Quality Assurance. Purdue University Cooperative Extension Service Web site: www.ces.purdue.edu/PQA/.

Mitchell*, R.D. & Rusk, C.P. (1996). AGJUDGE (Version LS-2.3) [Computer software]. Castle Rock, CO: Robert D. Mitchell, P.E.

6. Other Publications

Rusk*, C.P., King, M.E., Mortimer, R.G., & Speer, N.C. (1997). Relationships of scrotal circumference and scrotal volume to growth and semen traits in beef bulls. Colorado State University Beef Program Report, Fort Collins, CO. pp. 31-39.

Rusk*, C.P., Green, R.D., Yemm, R.S., Berg-Ramsey, J.L., Holtzen, M. & Stockburger, E. (1997). Validation of microsatellite markers for DNA fingerprinting Angus cattle. Colorado State University Beef Program Report, Fort Collins, CO. pp.191-197.

7. Periodicals

Rusk*, C.P. (January, 2024). Strengthening the breed through international collaboration. *Charolais Journal*, pp. 17.

Rusk*, C.P. (2024, Winter). Adding value to Charolais-influenced feeder cattle. *Charolais Edge*, pp. 1.

Rusk*, C.P. (December, 2023). Genetic merit pricing task force. *Charolais Journal,* pp. 17.

Rusk*, C.P. (November, 2023). When it comes to sale videos, quality matters! *Charolais Journal,* pp. 17.

Rusk*, C.P. (October, 2023). Quality available in a variety of herd sizes. *Charolais Journal,* p. 17.

Rusk*, C.P. (September, 2023). VitaFerm CharFocus promotes leadership development. *Charolais Journal,* pp. 17.

Rusk*, C.P. (August, 2023). Charolais Junior National – a family affair. *Charolais Journal,* pp. 17.

Rusk*, C.P. (June/July, 2023). Promoting Charolais genetics on an international stage. *Charolais Journal,* pp. 17.

Rusk*, C.P. (May, 2023). AICA and CCA to conduct joint evaluation. *Charolais Journal,* pp. 17.

Rusk*, C.P. (April, 2023). Springtime blessings! *Charolais Journal,* pp. 17.

Rusk*, C.P. (March, 2023). The value of genomic testing. *Charolais Journal,* pp. 17.

Rusk*, C.P. (2023, Spring). The Value of Genomic Testing. *Charolais Edge,* pp. 1.

Rusk*, C.P. (February, 2023). Customer service – the key to success. *Charolais Journal,* pp. 17.

Rusk*, C.P. (January, 2023). Strengthening industry relations through international trade. *Charolais Journal,* pp. 17.

Rusk*, C.P. (2023, Winter). Roadmap to sustainable beef cattle production in the USA. *Charolais Edge,* pp. 1.

Rusk*, C.P. (December, 2022). Consumer demand for Charolais beef. *Charolais Journal,* pp. 17.

Rusk*, C.P. (November, 2022). Knowledge is power! *Charolais Journal,* pp. 17.

Rusk*, C.P. (October, 2022). Leadership development! *Charolais Journal,* pp. 17.

Rusk*, C.P. (September, 2022). Charolais cattle from a world perspective. *Charolais Journal,* pp. 17.

Rusk*, C.P. (August, 2022). Preparing breed leaders at Charolais Junior National. *Charolais Journal,* pp. 17.

Rusk*, C.P. (June/July, 2022). Charolais contributions to a beef on dairy program. *Charolais Journal,* pp. 17.

Rusk*, C.P. (May, 2022). Charolais contribution to feeding the world in 2050. *Charolais Journal,* pp. 17.

Rusk*, C.P. (April, 2022). Spring – a time for new beginnings. *Charolais Journal,* pp. 17.

Rusk*, C.P. (March, 2022). Camaraderie – people helping people. *Charolais Journal,* pp. 17.

Rusk*, C.P. (2022, Spring). Bull sale season is here. *Charolais Edge,* pp. 1.

Rusk*, C.P. (February, 2022). Great first impressions and carcass merit. *Charolais Journal,* pp. 17.

Rusk*, C.P. (January, 2022). Historic past – bright future. *Charolais Journal,* pp. 17.

Rusk*, C.P. (2008, Spring). An honor and a privilege. *The Showtimes,* pp. 58-59.

Rusk*, C.P. (2005, Spring). Judging market lambs. *Sheep Tales,* pp. 7-8.

Rusk*, C.P. (2004, August). An honor and a privilege. *The Livestock Exchange*, pp. 29.

Rusk*, C.P. (1999, February). Traits of a champion. *Purple Circle*, pp.16.

Rusk*, C.P. (1997, Nov./Dec.). Judging market lambs. *Purple Circle*, pp. 26-28.

Rusk*, C.P. (1996, Nov./Dec.). The ideal market steer. *Purple Circle*, pp. 14.

Rusk*, C.P. (1994, January). The mystical eye. *Cattle Guard*, Vol. 40, No. 1, pp. 10.

X. Invited Out-of-State Lectures

1. Professor Rusk served as beef cattle instructor at the first annual Wisconsin Livestock Show Camp in Milwaukee, WI, in June 1999. Eighty-five Wisconsin 4-H members participated in the training, with this comment from one of the adult leaders:

   "Your information was very helpful to all the kids we took from our county. At our Lacross County Fair in July, four of the top five intermediate showmen attended your workshop".

2. Professor Rusk spoke at the third annual Cattail Classic Judging Camp at Woodbine, MD. Here is what a community college judging team coach said about his presentation:

"I can't begin to tell you how many compliments I have had regarding the contest and in particular your enthusiasm towards the young people and the judging program in general. Clint, you have an amazing way of making young people listen and learn from your comments."

3. Professor Rusk spoke on "Animal Ethics" and "The Value of 4-H Animal Projects" at the 2002 annual meeting of the California Agricultural Education Instructors in San Louis Obispo, CA.

4. Professor Rusk spoke on "Animal Ethics" at the 2004 4-H Livestock Clinic in Lacrosse, WI.

5. Professor Rusk spoke on "Beef Cattle Evaluation" at the 2005 Doornbos Lecture Series at Casper College in Casper, WY.

6. Professor Rusk spoke on "Retinal Imaging and the National Animal Identification Program" at the 2006 Annual Meeting of the National Institute for Animal Agriculture in Louisville, KY.

7. Professor Rusk spoke on "The National Animal Identification Program for Youth" at the 2006 Livestock Identification Meeting of the National Institute for Animal Agriculture in Kansas City, MO.

XI. Invited In-State Lectures

At Purdue University, Professor Rusk spoke annually at numerous county Extension meetings, FFA banquets, leader seminars, and livestock gatherings. He participated in Purdue's "Professor in the Classroom" program, making seven presentations since 1997.

			Number of People	
Year	Number of Presentations	Topics	Adults	Youth
1997	11	Ethics, judging, leadership	429	286
1998	17	Ethics, sheep, showmanship	623	415
1999	12	Beef cattle, judging, life skills	468	312
2000	8	Electronic I.D., leadership, PQA	320	253
2001	10	Ethics, foot-and-mouth, swine	398	291
2002	8	Value of animal projects, ethics	337	271
2003	9	Animal ethics, showmanship	374	309
2004	10	Animal ethics, beef, sheep	396	354
2005	11	Retinal imaging, animal ethics, beef	423	382
2006	10	Retinal imaging and premises registration	382	367
2007	9	Animal identification and retinal imaging	351	296
2008	6	Animal identification and retinal imaging	246	267

XII. Evidence of Learning Excellence

A. Contributions in course and curriculum development

Professor Rusk team-taught ANSC 201 ("Functional Anatomy and Animal Performance") with Dr. Mark Russell in the fall of 2000. Dr. Rusk had 39 student contact hours teaching ANSC 201.

Rusk's Instructor Rating in ANSC 201, Fall 2000
n = 39

Statement	Rating*
This course effectively challenges me to think.	4.5
My instructor is effective in teaching the subject matter of this course.	4.6
My instructor displays enthusiasm when teaching.	4.7
My instructor has a good working relationship with students.	4.7
Overall, I would rate this instructor as:	4.8

*Rating scale: Strongly agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly disagree = 1

Professor Rusk taught YDAE 555 ("Principles of Extension Education") in the spring of 2006, 2007 and 2008. Dr. Rusk had 31 student contact hours as a result of teaching YDAE 555 for three semesters.

Rusk's Instructor Rating in YDAE 555, Spring 2006
n = 14

Statement	Rating∗
My instructor seems well prepared for class.	4.4
My instructor is a very good communicator.	4.1
My instructor displays a personal interest in students and their learning.	4.3
My instructor creates an environment of mutual respect.	4.2
Overall, I would rate this instructor as:	4.0

∗Rating scale: Strongly agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly disagree = 1

Rusk's Instructor Rating in YDAE 555, Spring 2007
n = 11

Statement	Rating∗
My instructor seems well prepared for class.	3.8
My instructor is a very good communicator.	3.3
My instructor displays a personal interest in students and their learning.	4.2
My instructor creates an environment of mutual respect.	4.1
Overall, I would rate this instructor as:	3.3

∗Rating scale: Strongly agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly disagree = 1

Rusk's Instructor Rating in YDAE 555, Spring 2008
n = 6

Statement	Rating∗
My instructor seems well prepared for class.	5.0
My instructor is a very good communicator.	5.0
My instructor displays a personal interest in students and their learning.	5.0
My instructor creates an environment of mutual respect.	5.0
Overall, I would rate this instructor as:	4.9

∗Rating scale: Strongly agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly disagree = 1

Professor Rusk planned and implemented the curriculum for the "Livestock Practicum" course. He developed a pre-course exam (100 questions) to place students in laboratory sections according to knowledge and background in order to make the curriculum more relevant and interesting to the students.

B. Graduate Student Advising

Professor Rusk is a member of the graduate faculty and has served on Eighteen graduate committees. He has served as the chair or co-chair for sixteen M.S. students.

Student	Degree	Thesis Title	Status
Carla Kerr	M.S. in Agricultural Education	Evaluation of 4-H Horse and Pony Leaders in Indiana and Wisconsin	Graduated, December 1998
Chad Martin	M.S. in Agricultural Education	Impact of 4-H Livestock Judging on Life Skills Development	Graduated, July 2000
Jill Summerlot	M.S. in Agricultural Education	Impact of Exhibiting 4-H Livestock Projects on Life and Project Skills Development	Graduated, December, 2001
Keli Brubaker	M.S. in Agricultural Education	Evaluation of a Livestock Ethics Curriculum for High School Youth	Graduated, May, 2004
Christy Blomeke	M.S. in Agricultural Education	An Evaluation of Retinal Imaging Technology for 4-H Beef and Sheep Identification	Graduated, December, 2004
Dawn Hains	M.S. in Animal Sciences	Non-thesis	Graduated, August, 2005
Jenise Platt	M.S. in Agricultural and Extension Education	An Evaluation of Digital Versatile Disk (DVD) Instruction, Live Instruction, and Live Animals in Third Grade Classrooms	Graduated, August, 2006
Sarah Pence	M.S. in Agricultural and Extension Education	There's a Pig in My Classroom: Development and Evaluation of an Elementary Educational Swine Curriculum	Graduated, August, 2006
Brian Howell	M.S. in Agricultural and Extension Education	Public Perception of Retinal Imaging Technology as a Means of Identifying 4-H Beef and Sheep Projects	Graduated, December, 2006

Cari Butcher	M.S. in Agricultural Education	Non-thesis	Graduated, May, 2007
Kraig Bowers	M.S. in Agricultural and Extension Education	Non-thesis	Graduated, August, 2007
Ashley Musselman	M.S. in Agricultural and Extension Education	Effects of crude glycerin on feedlot performance and carcass characteristics of market lambs	Graduated, August, 2008
Jenna Smith	M.S. in Agricultural Economics	Traceability of 4-H Exhibition Animals: Issues and Analysis for Animal Agriculture in West Central Indiana	Graduated, December, 2008
Kelli Slack	M.S. in Agricultural and Extension Education	An Evaluation of an On-Line Retinal Imaging Tutorial	Graduated, May, 2009
Brittany Simmons	M.S. in Agricultural and Extension Education	An Evaluation of Electronic Identification in 4-H Beef, Sheep and Swine	Graduated, May, 2009
Kelli Reiff	M.S. in Agricultural and Extension Education	Evaluation of Identification Systems for Exhibition Animals and the Ability of Those Exhibitions to Comply with the National Animal Identification System	Graduated, August, 2009
Kyle Culp	M.S. in Agricultural and Extension Education	Investigating Methods for using Ractopamine Hydrochloride in Domestic Beef Cattle and Factors Affecting Body Condition of cattle on I1 N'gwesi Group ranch in Kenya, Africa	Graduated, May, 2010
Jamie Pietig	M.S. in Animal and Range Sciences	Balancing Amino Acid Profiles in Swine Finishing Diets	Graduated, December, 2010

C. Invited International Lectures

1. "Using Assisted Reproductive Technology in Designed Breeding Programs", National Association of Animal Breeders' Biannual Symposium, Calgary, Alberta, Canada, July 3, 2023.

2. "Update on the American-International Charolais Association", presented at the 2023 World Charolais Technical Conference, Brno, Czech Republic, April 24, 2023.

3. "A Roadmap to Sustainable Beef Cattle Production in the USA", keynote address at the XI Conference of the Indian Meat Science Association and the International Symposium on the topic of "*Novel Technologies and Policy Interventions for Sustainable Meat Value Chain*", ICAR – National Research Center on Meat, Hyderabad, India, December 14, 2022.

4. "Understanding and Using Expected Progeny Differences in Beef Cattle Breeding Systems", Autonomous University, Guadalajara, Mexico, March 1992.

XIII. Evidence of National Recognition

A. Professor Rusk chaired the design team for the 4-H Cooperative Curriculum System's swine curriculum, which received the National 4-H Curriculum Citation from the U.S. Department of Agriculture and has been used in 42 states.

B. Professor Rusk co-chaired the Animal Sciences Workshop for Youth at Purdue University, which the U.S. Department of Agriculture selected as a Program of Excellence in 2001.

C. Professor Rusk served on the National 4-H Livestock Judging Contest Leadership Committee from 1997 to 2021. Each year, 30-40 states send their top 4-H livestock judging teams to the national contest in Louisville, KY, in conjunction with the North American International Livestock Exposition. Dr. Rusk selected educational classes, gathered performance data, and wrote informative scenarios to help contestants improve their decision-making and public speaking skills. Approximately 140 4-H members benefit from this training annually. Professor Rusk served as the Assistant Superintendent for the 2008 National 4-H Livestock Judging Contest and as Superintendent in 2009 and 2010.

D. Professor Rusk was invited to serve on the National FFA Livestock Judging Contest Leadership Committee from 2005 to 2007. He selected classes and evaluated oral reasons at the 2006 National FFA Livestock CDE in Indianapolis.

E. Professor Rusk provided leadership for the judging contest at the first-ever National Junior Swine Show in 1998 and was invited to repeat his efforts in 1999 and 2002 - 2004. An 18-year-old Ohioan stated, *"It was really organized, especially for the first year. I've been to other national shows and they weren't half that organized".*

F. Professor Rusk served as superintendent for the collegiate livestock judging contest at the National Western Livestock Show in Denver, CO from 1999 to 2025.

G. Professor Rusk provided leadership for the collegiate livestock judging contest at the American Royal in Kansas City, MO from 1999 to 2011.

H. Professor Rusk provided leadership for the collegiate livestock judging contest at the Arizona National in Phoenix, AZ from 2017 to 2022.

I. Professor Rusk served as superintendent for the judging contests at the National Junior Shorthorn and National Junior Hereford Shows in 2003. He served as superintendent for the National Junior Angus judging contest in 2006 and for the National Junior Limousin judging contest in 2015.

J. Professor Rusk served as a judge for the "Team Sales" competition at the 2003 National Junior Angus Show.

K. Professor Rusk served as a judge for the finals of the 2000 National FFA Extemporaneous Speaking Contest at Louisville, KY.

L. Professor Rusk served on the beef cattle committee for the 1999, 2005 and 2006 National FFA Livestock Judging Contests in Louisville, KY, with contestants representing nearly every state in the country.

M. Professor Rusk provided leadership for the "Quiz Bowl" at the 1998 National Jr. Angus Show.

N. Professor Rusk evaluated cattle or sheep at the following national shows:

National Western Stock Show in Denver, CO. (1992-1994, 1997-1999, 2003, 2005-2007, 2009-2010, 2017 – 2018 and 2024)
National Junior Maine-Anjou Show in Lawton, OK (2007)
Big Eastern Livestock Show in West Springfield, MA (2004-2007)
Houston Livestock Show in Houston, TX. (1994, 1998, 1999, 2006 and 2020)
Keystone International Livestock Exposition, Harrisburg, PA (2001)
American Royal Livestock Show in Kansas City, MO (1993, 1994, 1998, 1999, 2005, 2010 and 2011)
North American Livestock Show in Louisville, KY (1991, 2001-2003, and 2005)
National Junior Hereford Show in Rapid City, SD (1992), Hutchinson, KS (1997) and Tunica, MS (2004)
National Gelbvieh Show in Denver, CO (2003)
National Simmental Show in Louisville, KY (2002)
National Junior Gelbvieh Show in Rapid City, SD. (2002)
Northern International Livestock Exposition in Billings, MT (2018 – 2019)
Royal Agricultural Winter Fair in Toronto, Ontario, Canada (1998)
Fort Worth Stock Show, Ft. Worth, TX (1998 and 2018)
National Polled Hereford Show in Louisville, KY (1991)
National Junior Polled Hereford Show in Lincoln, NE (1990)

XIV. University and Department Administrative Service

A. Departmental Committees (Purdue University)

Engagement Committee, chair (2004-2009)
Curriculum Committee (1997-1999)
State Fair Committee (1997-2009)
Ag Judging Committee, chair (1997-2009)
Animal Sciences Workshop for Youth Committee, co-chair (1997-2009)
Junior Pork Day Committee (1997-2009)
Animal Science Search Committee, undergraduate youth program coordinator (1997)
4-H Youth Faculty Search Committee, "Companion Animals" (1998)
4-H Youth Round-Up Committee, housing co-chair (1998-2009)
4-H Youth Faculty Search Committee, "Plant Science" (1999)

B. Advisor for Clubs and Fraternities

Purdue Block and Bridle Club (1998-2001, 2004-2007)
Purdue Agricultural Council (2000-2004)
Purdue FarmHouse Fraternity (2004 - 2009)
SDSU FarmHouse Fraternity (2010 – 2012)
Oklahoma State University FarmHouse Fraternity (2015- 2020)

C. School of Agriculture Committees

Purdue University

Recruitment and Retention Committee (1997)
Charting a Course for the Family Farm Committee (1999)
Grievance Committee (1999-2000)
Field Staff Promotion Committee (2003-2006)
A/P Advancement Committee (2004-2005)
Honors Committee (2005)
Library Committee (2006-2007)
Grade Appeals Committee (2007-2008)

South Dakota State University

Search Committee Chair –for Agriculture and Natural Resources Program Leader 2010-2011
College of Agriculture and Biological Sciences Strategic Planning Committee 2011-2012

D. University Committees

Purdue University

Staff Appeal Board for Traffic Regulations (2001-2008) Served as the Chair from 2006 – 2008.
Censure and Dismissal Committee (2005-2009)

Oklahoma State University

Search Committee for the VP and Dean of the Division of Agricultural Sciences and Natural

Resources (2012-2013)

E. Regional and National Service

Peer Reviewer – Journal of Extension (2005 – 2009) (19 articles reviewed)
National 4-H Livestock Judging Contest Committee (1997- 2021) Superintendent (2009 – 2010)
Cooperative Curriculum System Swine Design Team, chairman (1998)
National Junior Swine Show Committee, judging contest chairman (1998-1999)
National FFA Livestock Judging Contest Committee (1999 and 2005 - 2007)
National FFA Extemporaneous Speaking Contest, judge (2000)
National Junior Swine Show, judging contest official (2002 - 2004)

F. Consulting Activities

To maintain contact with the livestock industry, Professor Rusk accepts genetic evaluation responsibilities at livestock expositions across the country and in Canada. This effort contributes to his recognition and success as an expert and leader in the livestock industry. He has evaluated the genetics of cattle, swine, and sheep at over 100 livestock expositions in 43 states and Canada since 1985. Since 1997, Dr. Rusk has evaluated genetics at an average of 8-10 state, national, and international livestock exhibitions a year.