

Mickey A. Latour
Arkansas State University
College of Agriculture

Education and Faculty Appointments

NIH Fellow, 1997	Washington University School of Medicine, St. Louis, MO. <i>Division of Nutrition and Lipid Disorders (Studied rare lipid disorders in Hypobetalipoproteinemia kindreds)</i>
PhD, 1995	Mississippi State University, <i>Animal Physiology</i>
MS, 1992	Mississippi State University, <i>Animal Physiology</i>
BS, 1990	Southeastern Louisiana State University, <i>Major Animal Science and minor Biology</i>

Faculty Appointments:

At Purdue University, maintained a three-way appointment, research, extension and teaching.

- Assistant Professor, Purdue University, West Lafayette, IN 1997-2002
- Associate Professor and tenured, Purdue University, West Lafayette, IN 2002-2009
- Professor with tenure, Purdue University, West Lafayette, IN 2010-2012
- Professor with tenure, Southern Illinois University, Carbondale, IL 2012-2020
- Professor with tenure, Arkansas State University, Jonesboro, AR 2020-present

Executive Experience (10+ years of experience between Purdue University, Southern Illinois University and Arkansas State University)

Dean, College of Agriculture (CoA), Arkansas State University (2020–present)
Major Initiatives

Development of a New Strategic Plan (2022–2027):

Framework established with key priorities:

- Expanding experiential learning opportunities.
- Promoting entrepreneurial initiatives.
- Increasing diversity, inclusion, and belonging.
- Growing enrollment and enhancing student success metrics.
- Strengthening alumni communications.
- Advancing community engagement.
- Driving fundraising efforts.

Development of New Executive Advisory Board:

- Established a board with President, Vice President, Treasurer/Secretary, and other executives.
- The board actively implements the strategic plan and facilitates key engagement connections.
- Increased endowments by nearly 30% and raised millions of dollars to support targeted college goals.

Agriculture Academy:

- The privately funded *Agriculture Academy* at Arkansas State University has had a transformative impact on students, the university, and the broader agricultural community. This innovative program serves as a model for leadership development and experiential learning, equipping students with the skills, knowledge, and networks necessary to excel in the agriculture industry.
- Offers experiences such as leadership training, travel, dining etiquette, internships, and specialized certificates.

Judd Hill Farmers' Market Facility:

- Led development of the Judd Hill Farmers' Market a primarily privately funded, multimillion-dollar experiential and entrepreneurial complex, which led way to the new Aggie Market. The new complex has significant impact on the local community, the regional economy, and agricultural education. The complex is a hub for local produce, education, and innovation, it has fostered connections between growers, consumers, and institutions, advancing the agricultural sector in meaningful ways.

- Facility opened in 2023, with products entering the marketplace by Fall 2024. The

Privately Funded Broiler Complex in Partnership with PECO Foods:

- The PECO Foods Facility has revolutionized hands-on learning opportunities for students at Arkansas State University. By offering access to advanced equipment and real-world applications, the facility enables students to gain practical experience in poultry production. These experiences prepare graduates to meet industry demands and excel in careers related to agriculture, food science, and supply chain management.

Enrollment and Online Program Development:

An important part of the college is growing enrollment and student success. Over the past few years, college has experienced growth and in multiple areas:

- **Enrollment and Retention Growth:** Achieved nearly a 30% increase in overall enrollment while maintaining some of the highest retention and graduation rates on campus.
- **Agricultural Economics Programs:** Partnered with the Neil Griffin College of Business to launch online MBA and BA programs in Agricultural Economics, attracting nearly 110 new students (90 undergraduates and 20 MBA students).

Across the college, we have grown the number of internships, and certificates. In addition, we have enhanced partnerships, funding opportunities, improved facilities, grown endowments, growing a more diverse student body, and providing opportunities for community engagement for our students.

Meat Laboratory Remodel:

- The establishment of a new meat laboratory at A-State has significant and far-reaching impacts on the university, its students, the regional agricultural community, and the broader meat and food industries. The new complex allows for innovative approaches in the development of new products through student activities and provides students with real-world experience in meat science, processing, and safety, bridging the gap between classroom theory and industry practice.
- The facility was updated through targeted grants and now a state-of-the-art meat lab now under state inspection.
- A catalyst to support innovation and entrepreneurial activities.

Futures/Hedging Program:

This privately funded resource strengthens the university's position as a hub for agricultural and commodity trading education, preparing students for careers in global markets and fostering regional economic development. The platform allows students to engage in simulated commodity trading, gaining practical skills in market analysis, risk management, and decision-making under real-world conditions utilizing real funds. At the same time, students learn to navigate global agricultural markets, understand price fluctuations, and apply financial tools like futures and options contracts, making them highly competitive job candidates.

Diversity, Equity, and Inclusion (DEI) Initiatives: Established a DEI committee to promote training for students and faculty, foster a stronger community within the college, e.g., World Culture Day and extracurricular activities.

Engagement, Community, and Alumni Relations

- Donor and Stakeholder Cultivation: Key relationships established before, during, and after the strategic plan development.
- Furry 5K Fun Walk (2021–present): Annual campus event coinciding with homecoming to engage alumni and showcase college programs.
- Ag and Autism Partnership (2023): A new initiative to raise awareness and foster community.
- Bill and Alice Nix Farm Day (refreshed in 2021): Updated campus event to connect the community with food production education.
- Football and Basketball Suites (2021–present): Created donor cultivation opportunities at Centennial Bank Stadium.
- Expanded Alumni Awards Program (2021–present): Introduced Young Alumni, Outstanding Alumnus, and Outstanding Service awards to coincide with AG Day football games.
- Venison Snack Stick Program: Collaborated with Feed the Hungry to create products addressing food insecurity for Arkansas schoolchildren.

Collaboration and Leadership Development

- Veterinary Medicine College: Co-led the ongoing development of Arkansas State University's College of Veterinary Medicine.
- Water Symposium (2022): Co-organized a multi-university symposium focused on water management challenges.
- Dean Leadership Retreats: Led efforts in strategic planning (2021) and inclusive leadership (2022) with Washington University's Olin School of Business.
- Recruitment and Retention Team: Improved student success and retention, including a 30% increase in freshman enrollment (Fall 2022).

Dean, College of Agricultural Sciences, Southern Illinois University (2012–2017)

Major Initiatives

1. Addressed Financial Challenges

- Managed year-over-year budget cuts while identifying new revenue sources.
- Operated for nearly 800 days without a state budget (2015–2017), navigating the nation's longest budget stalemate.

2. Enhanced Student Success

- Strengthened student success metrics by implementing professional advising and mentoring programs.
- Focused on course articulation, degree pathways, and career readiness.

3. Expanded Distance Learning and Online Programs

- Developed online and summer school courses to improve accessibility and generate new revenues.
- Achieved significant growth in credit hour generation across terms (+319% in Fall; +414% in Spring/J-Term).

4. Promoted Research and Experiential Learning

- Launched *Ideas to Investigation (i2i)* program, providing hands-on research opportunities for undergraduates in collaboration with industry partners. Secured \$325,000 in private funding.
- Collaborated with the Colleges of Science and Engineering to create the *Elevating Research* initiative, fostering cross-disciplinary partnerships and increased grant submissions.

Outcomes

- **Student Success:** Introduced professional advising to improve degree pathways and faculty mentorship.
- **i2i Program:** Students gained critical skills in problem-solving, communication, and project execution.
- **Fall Festival:** Engaged 700+ FFA students annually through interactive learning, alumni recognition, and recruitment activities.
- **Research Impact:** Faculty collaboration led to new federal grants and interdisciplinary partnerships.

Associate Dean, Purdue University (2010–2012)

Responsibilities

- Oversaw Purdue Extended Campus and Distance Learning programs (75% appointment) while maintaining an active lipid metabolism research program (25%).

- Directed online courses, degree programs, and strategic initiatives for approximately 13,000 students.

Major Initiatives & Outcomes

1. Distance Learning Growth

- Increased online course offerings by 400%, saving ~\$1M annually by reducing dependency on Indiana partner institutions.
- Developed budget models to support course and program growth.

2. Program Oversight

- Managed Executive MBA, Agribusiness MBA, MS in Technology, Online Veterinary Technology Degree, and teacher certification programs.
- Launched new programs in Strategic Communication and Curriculum Instructional Design.

3. Revenue Generation

- Online programs contributed ~\$15M annually, supporting university-wide initiatives.

Leadership & Administrative Service

- Co-Chair, Development of College of Veterinary Medicine, Arkansas State University (2023–present).
- Chair/Member, Search Committees (A-State Chancellor, College of Business Dean, Vice Chancellor for Student Affairs, 2016–2022).
- Co-Chair, Faculty Senate Governance Committee, A-State (2019–2020).
- Lead Negotiator, Non-Tenure Track Union Contracts, SIU (2014–2017).
- Member, Enrollment Task Force, A-State (2020).
- Director, Purdue Meats Products Laboratory (2008–2012).
- Panel Member, USDA Grant Review (2006, 2007).

Awards & Honors

1. Excellence in Leadership, Association of Illinois Cooperatives (2014).
2. Richard L. Kohls Outstanding Teaching Award, Purdue University (2008).
3. Teaching Academy Fellow, Purdue University (2008).
4. USDA Excellence in Classroom Instruction Award (2004).
5. Sigma Xi Award for Dissertation Research (1994).

Leadership Training

- *Leadership 101*, John Maxwell (2009).
- *The 8th Habit*, Stephen Covey (2010).
- *Transformative Leadership Coaching*, Olin School of Business, Washington University (2013–2022).

Excellence in Research

A national and international expert in the area of lipid metabolism, especially as this relates to final food products. Extensively trained many undergraduate, graduate and visiting scientists while at Purdue University and in the area of manipulation of fatty acids, specifically in the fat cells as it relates to growth, stress and/or dietary alterations. Conducted studies on how lipids in fat cells impact final food products such as bratwurst and bacon as well as consumer preferences (texture, mouth feel and appearance). A national leader on the *identification of soft fat in swine, principally the level of linoleic acid (C18:2n6) and how that impacts final food products, specifically bacon and bratwurst.*

Journal Articles

- 1) Peebles, E.D. and M. A. Latour, 2021. Albumen glucose utilization during embryogenesis and effects of *in ovo* glucose supplementation in broiler hatching eggs. Research & Reviews: [Journal of Agriculture and Allied Science](#)
- 2) Schoonover, J., and M. A. Latour, 2015. Crafting the exam, NACTA (59) 89-90.
- 3) Ellis, C., and M. A. Latour, 2014. Improving course completion rates through the use of a distance learning assistant. JMERE Vol 4, No. 11, pages 924-929.
- 4) Apgar, G., B. Banz, and M. A. Latour, 2014. Engaging students in large lecture classes. NACTA (58) 85-86.
- 5) Zhu, Y., S. Arnold, B. Richert, A. Schinckel and M. Latour, 2012. Impact of Distillers Dried Grains with Solubles and Restaurant Grease on Pork Loin Quality. JABR Vol 1(6)102-115. *Student in M. Latour laboratory.*
- 6) Hooda, S., L.G. Ferreira, M.A. Latour, L.L. Bauer, G. C. Fahey, Jr. and K.S. Swanson, 2012. Digestion and Metabolic Characteristics of an Expanded Pork Skin Chew and a Rawhide Chew in Healthy Dogs. J. Anim. Sci. 90:4355-4361.
- 7) White, H.M., B.T. Richert and M.A. Latour, 2012. Impacts of Nutrition and Environmental Stressors on Lipid Metabolism: ISBN 980-953-307-142-3, Invited Chapter *Student in M. Latour laboratory.*
- 8) White, H.M, B.T. Richert, J.S. Radcliffe, A.P. Schinckel, S. Koser, S.S. Donkin and M.A. Latour, 2009. Feeding conjugated linoleic acid partially recovers carcass quality in pigs fed dried distillers grains with solubles. J. Anim. Sci. 87(1) 157-166. *Student in M. Latour laboratory.*
- 9) Wert, K.M., N.R. Augspurger, J.D. Spencer, H.M. White, A.P. Schinckel and M.A. Latour, 2009. Effects of distillers dried grains with soluble and growmega™ on bratwurst meat quality. Amer. Reg. Prof. Anim. Sci. 695-700. *Student in M. Latour laboratory.*
- 10) Latour, M.A., B.T. Richert, J.S. Radcliffe, A.P. Schinckel, and H. White, 2008. Effects of feeding restaurant grease, tallow and conjugated linoleic acid on finishing pig carcass and growth performance. Amer. Reg. Prof. Anim. Sci. 24(2) 156-160.
- 11) Platt, J., C.P. Rusk, C.R. Blomeke, B.A. Talbert and M.A. Latour, 2008. An evaluation of digital versatile disc (DVD) instruction, live instruction, and live animals in third grade classrooms. NACTA 52(1) 2-5. *Student in M. Latour laboratory.*
- 12) Wagler, S.E., C.P. Rusk, C.R. Blomeke, B.T. Richert, M.A., Latour, and B. A. Talbert, 2008. Classroom evaluation of an elementary educational swine curriculum: there's a pig in my classroom. J. Ag. Ed. 49(3) 8-12.

- 13) Zhai, W., S.L. Newman, M.A. Latour and P.Y. Hester, 2008. The effects of *in ovo* injection of L-carnitine on hatchability of white leghorns. *Poult. Sci.* 87(3):569-572.
- 14) White, H.M., B.T. Richert, A.P. Schinckel, J.R. Burgess, S.S. Donkin, and M.A. Latour, 2008. Effects of temperature stress on growth performance and bacon quality in grow-finish housed at two densities. *J. Anim. Sci.* 86(8)1789-1798. *Student in M. Latour laboratory.*
- 15) Legan, E., H.M. White, A.P. Schinckel, A.M. Gaines and M.A. Latour, 2007. Evaluating growth and carcass changes in cull gilts fed distiller's dried grains with solubles. *Amer. Reg. Prof. Anim. Sci.* 23(6) 612-615. *Student in M. Latour laboratory.*
- 16) Zhai, W., S.L. Newman, M.A. Latour and P.Y. Hester, 2007. The effects of dietary L-carnitine on semen traits of white leghorns. *Poult. Sci.* 86(10) 2228-2235.
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- 18) Latour, M.A., 2006. Evaluating acceptance of modules in a virtual course: introduction to animal sciences. *NACTA* 50(2) 32-35.
- 19) Wang, X, G. Hockerman, H.W. Green, C.F. Babbs, S.I. Mohammad, D.E. Gerrard, M.A. Latour, B. London, K. Hannon and A. Pond, 2006. Merg1k+ channel induces skeletal muscle atrophy by activating the ubiquitin proteasome pathway. *Fed. Amer. Soc. Exp. Biol.* 20 (9) 233-241.
- 20) Gordon, L. M., A. Cox, A. Schinckel, and M.A. Latour, 2005. Evaluating the fatty acid profile of retail bratwurst and Fertiliium treated sows. *Amer. Reg. Prof. Anim. Sci.* 21:232-238. *Student in M. Latour laboratory.*
- 21) Ley, M.A., K. Orvis, and M.A. Latour, 2005. Analysis of virtual and traditional teaching assistants used in introductory to animal science courses. *NACTA* 49(3) 47-50.
- 22) Norberg, S.E., R.N. Dilger, H. Dong, B.G. Harmon, O. Adeola, and M.A. Latour 2004. Utilization of energy and amino acids of spray-dried egg, plasma protein, and soybean meal in ducks. *Poult. Sci.* 83:939-945. *Student in M. Latour laboratory.*
- 23) Taylor, J., C.F. Babbs, M.B. Alzghoul, A. Olsen, M.A. Latour, A. Pond, and K. Hannon 2004. Optimization of ectopic gene expression in skeletal muscle through DNA transfer by electroporation. *Biotech.* 4:11-15.
- 24) Woodcock, M., E. Pajor, and M.A. Latour, 2004. The effects of hen vocalizations on chick feeding behavior. *Poult. Sci.* 83(12) 1940-1943. *Student in M. Latour laboratory.*
- 25) Frank, N., J.E. Sojka, and M.A. Latour, 2004. Effect of hypothyroidism on the blood lipid response to high dietary fat intake in mares. *J. Anim. Sci.* 82:2640-2646. *Student in M. Latour laboratory.*
- 26) Frank, N., J.E. Sojka, B.W. Patterson, K.V. Wood, C.C. Bonham and M.A. Latour, 2003. Effect of hypothyroidism on kinetic parameters of very low density lipoprotein in mares. *Amer. J. Vet. Res.* 64(8)1052-1058. *Student in M. Latour laboratory.*
- 27) Frank N., J.E. Sojka, and M.A. Latour 2003. Effects of hypothyroidism and withholding of feed on plasma lipid concentrations, concentration and composition of very-low-density lipoprotein, and plasma lipase activity in horses. *Amer. J. Vet. Res.*

- 64(7):823-828. *Student in M. Latour laboratory.*
- 28) Meunier, R.A., B.A. Talbert, and M.A. Latour, 2003. Evaluation of the incubators in the classroom: does it increase fourth grade students' knowledge about agriculture professions? *J. Agr. Ed.* 44:23-33. *Student in M. Latour laboratory.*
- 29) Latour, M.A. and P. Collodi, 2003. Evaluating the performance and acceptance of teleconference instruction vs. traditional teaching methods for undergraduate and graduate students. *Poult. Sci.* 82:36-39
- Srivastava, N., D. Noto, M. Aversa, J. Pulai R.A.K. Srivastava, T.G. Cole, M.A. Latour, B.W. Patterson and G. Schonfeld. 1996. A new apolipoprotein B truncation (apoB-43.7) in familial hypobetalipoproteinemia: Genetic and metabolic studies. *Met. Exp. and Clin.* 45(10) 1296-1304.
- 30) Latour, M.A., 2002. Test comparison between teleconferencing vs. traditional classroom lectures for an introductory animal sciences course. *NACTA* 47(1) 2-7.
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- 32) Peebles, E.D., C.D. Zumwalt, P.D. Gerard, M.A. Latour, and T.W. Smith, 2002. Market age live weight, carcass yield, and liver characteristics of broiler offspring from broiler hens fed diets differing in fat and energy content. *Poult. Sci.* 81:23-39.
- 33) Braun, C.M., N. Frank and M.A. Latour. 2002. Changes in circulating lipids in duck embryos and newly hatched ducklings from different age parents. *Biol. Neo.* 82(2):128-133. *Student in M. Latour laboratory.*
- 34) Braun, C.M., S. Neuman, P.Y. Hester, and M.A. Latour, 2002. Breeder age alters the performance of Pekin ducklings. *J. Appl. Poult. Res.* 11(3):270-274. *Student in M. Latour laboratory.*
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- 36) Frank, N., J.E. Sojka, and M.A. Latour, 2002. Effect of withholding feed on concentration and composition of plasma very low density lipoprotein and serum nonesterified fatty acids in horses. *Amer. J. Vet. Res.* (7):1018-1020. *Student in M. Latour laboratory.*
- 37) Meunier, R.A., B.A. Talbert, and M.A. Latour, 2002. Evaluation of the incubators in the classroom: Does it increase fourth grade students' knowledge of agriculture-related science concepts? *J. Agr. Ed.* 43(3)49-60. *Student in M. Latour laboratory.*
- 38) Peebles, E.D., S.M. Doyle, C.D. Zumwalt, P.D. Gerard, M.A. Latour and C.R. Boyle. 2001. Breeder age influences embryogenesis in broiler hatching eggs. *Poult. Sci.* 80:272-277.
- 39) Latour, M. A., E.D. Peebles, S.M. Doyle and T. Pansky. 2001. Effects of broiler breeder hen age and dietary fat intake on circulating serum lipids. *J. Appl. Anim. Res.* 19:73-84.
- 40) Braun, C.M., J.M. Burgess and M.A. Latour. 2001. Liver lipid accumulation in duck embryos and hatchlings changes with parental age. *Biol. Neo.* 80:228-234. *Student in M. Latour laboratory.*
- 41) Latour, M.A., A.A. Devitt, R.A. Meunier, J.J. Stewart and B.A. Watkins. 2000. Effects of conjugated linoleic acid. 1. Fatty acid modification of yolks and neonatal fatty acid

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- 42) Latour, M.A., A.A. Devitt, R.A. Meunier, J.J. Stewart and B.A. Watkins. 2000. Effects of conjugated linoleic acid. 2. Embryonic and neonatal growth and circulating lipids. *Poult. Sci.* 79:822-826.
- 43) Meunier, R.A., B.A. Talbert, and M.A. Latour. 2000. Creating agricultural awareness through an interactive learning experience: incubators in the classroom. *J. Ext.* (<http://www.joe.org/>) vol. 38 no. 1 (web-based only). *Student in M. Latour laboratory.*
- 44) Peebles, E.D., C.D. Zumwalt, S.M. Doyle, P.D. Gerard, M.A. Latour, C.R. Boyle and T.W. Smith. 2000. Effects of dietary fat type and level on broiler breeder performance. *Poult. Sci.* 79:629-639.
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- 47) Latour, M.A., R.A. Meunier, C.M. Braun, J.M. Eggert and A.P. Schinckel. 2000. Conjugated linoleic acid enriched swine fat alters the growth profile and VLDL composition of Sprague Dawley rats. *Bal. J. Lab. Anim. Sci.* 10:221-226.
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- 49) Latour, M.A., and R.A. Meunier. 1999. Transferring poultry information to the public using the Internet: AvianNet @ Purdue University. *J. Ext.* (<http://www.joe.org/>) vol. 37 no. 5 (web-based only).
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- 51) Latour, M.A., B. Patterson, T. Kitchens, R.E. Ostlund, D. Hopkins and G. Schonfeld. 1999. Effects of alcohol and cholesterol feeding on lipoprotein metabolism and cholesterol absorption in rabbits. *Artero* 19:598-604.
- 52) Watkins, B.A., A.A. Devitt, L. Yu, and M.A. Latour. 1999. Biological activities of conjugated linoleic acids and designer eggs. Egg nutrition and Newly Emerging Ovo-Biotechnology 2nd Ed. J.S. Sim, S. Nakai and W. Guenter editors. CABI Publishing, UK.
- 53) Watkins, B.A., A.A. Devitta, L. Yu and M.A. Latour. 1999. Biological activities of conjugated linoleic acid and designer eggs (Chapter 14). IN: *Egg Nutrition and Biotechnology*, 2nd Edition. pp. 181-195.
- 54) Frank, N., J.E. Sojka, M.A. Latour, S.R. McClure and L. Polazzi. 1999. Effect of hypothyroidism on the blood lipid concentrations in horses. *Amer. J. Vet. Res.* 60:730-733. *Student in M. Latour laboratory.*
- 55) Chen, Z., J.E. Saffitz, M.A. Latour and G. Schonfeld. 1999. Truncated apoB-70.5-containing lipoproteins bind to megalin but not the LDL receptor. *J. Clin. Invest.* 103:1419-1430.
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- Gerard. 1999. Embryo and yolk compositional relationships in broiler hatching eggs during incubation. *Poult. Sci.* 78:1435-1442.
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- 76) Peebles, E.D., M.A. Latour, S.E. Broome, J.D. Cheaney and C.D. Zumwalt. 1996. Effects of oral ethanol on serum lipoprotein cholesterol in juvenile meat-type chickens. *Alcohol*, 13:111-115.
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- 82) Brake, J.D., M.J. Fuller, C.R. Boyle, D.E. Link, E.D. Peebles and M.A. Latour. 1993. Evaluations of whole chopped Kenef and Kenef core used as broiler litter material. *Poult. Sci.* 72:2079-2083.
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Graduate Student Involvement

Graduated Students: served on numerous graduate committees and either directed or co-directed n=10, MS, PhD – 3; 2 Visiting Scientists and served on numerous committees.

Excellence in Extension

Extensive expertise in poultry and meat products, specifically bratwurst and bacon.

- 1) **Small and Large Producer Assistance:** One of the fastest growing segments of agriculture is the natural and organic sector. USDA reports that growth in retail sales has grown significantly since 1990. Served on the USDA awards panel which distributed funds for organic farms and was the principal poultry and swine person responsible for reviewing those grant applications.
- 2) **Assistance to Meat Processors:** Along with Dr. Daryl Swartz, served as the technical advisors to the Indiana Meat Processors Association. Provided direct assistance concerning how to handle the bellies of pigs to create the best slice of bacon and expertise on how to create the best bratwurst. In shared responsibilities, workshops on basic knife skills, and pork, beef and poultry processing were done in 2009-2012.
- 3) **State Meats Competition:** Led the meats competitions for the state of Indiana (n=100 participants) and development of the first ever bi-state meats competition between Illinois and Indiana through cooperative relationships with the University of Illinois.
- 4) **State Wide Initiative-Incubators in the Classroom:** In order to increase agriculture awareness, developed created the incubators in the classroom program and the following hands-on teaching components for this program: 1) a story-line coloring book, 2) a teacher's Lesson Guide on incubating chicken eggs, 3) an incubator, and 4) two CD-ROM's.

Impact of the Program

- One hundred fifty preschool and daycare programs with an average enrollment of 20 students per program (total students = 2,920).
- Two hundred ninety-five elementary school classes with an average enrollment of 22 students per class (total students = 7,222).
- Three home-schooling programs with an average enrollment of 4 students (total students = 12).
- Fifteen Agriculture day programs in individual counties with an average participation of 600 persons (total participants = 9,000).
- Two presentations at the Indiana School for the Deaf (24 students) and the Indiana State Museum (1,950 participants).

University Recognition for Incubators in the Classroom: Awarded the 2001

distance learning award as the best non-credit material at Purdue University.

National Recognition for "Incubators in the Classroom:" Since October 2000, various components, e.g., either an embryology poster or CD's have been distributed to 1,235 classrooms, across 42 states.

Extension Publications

- 1) Latour, M.A., and A.P. Schinckel, 2008. The influence of dried distiller's grains on carcass fat in swine. *Ag. Com., AS-345W.*
- 2) Latour, M.A., 2008. Eggs Experiments: A fundamental way to teach science using eggs. *Ag. Com., AS-574-W.pdf*
- 3) Latour, M.A., and T. Applegate. 2005. Getting started with the home poultry flock. *Ag. Com., AS-568W.*
- 4) Meunier, R.A., and M.A. Latour. 2000. Commercial poultry production and processing. *Ag. Com., Purdue University, AS-545-W.*
- 5) Meunier, R.A., and M.A. Latour. 1999. A guide for housing, brooding, and handling chicks safely. *Ag. Com., Purdue University, ACS 527.*
- 6) Linton, R., J. Eiffert and M.A. Latour. 1999. Food safety: it's in your hands. *Ag. Com., Purdue University, FS-8.*
- 7) Latour, M.A., R. Meunier, and K. Wolber. 1998. Incubators in the classroom: A guide for teachers. *Ag. Com., Purdue University, AS-521.*
- 8) Latour, M.A., and A.L. Pond. 1998. Chirp and Shelby's exciting discovery. *Ag. Com., Purdue University, AS-520.*
- 9) Stewart, J., A. McBride, R. Meunier, and M.A. Latour. 1998. The developing chick embryo. *Ag. Com., Purdue University, AS-523.*
- 10) Stewart, J., and M.A. Latour. 1998. The formation of an egg. *Ag. Com., Purdue University, AS-525.*
- 11) Latour, M.A. 1997. Making a chick book. *Ag. Com, Purdue University, AS-519.*
- 12) Akers, D., M. Akers, and M.A. Latour. 1997. Choosing a poultry breed. *Ag. Com., Purdue University, AS-518.*
- 13) Peebles, E.D., M.A. Latour and C.D. Zumwalt. 1994. Pumping up fat in poultry feed. *Res. Highlights, Mississippi State University, 57:2.*
- 14) Brake, J.D., M.J. Fuller, C.R. Boyle, D.E. Link, E.D. Peebles and M.A. Latour. 1994. Kenaf for broiler litter. *Res. Bulletin, Mississippi State University, 1011:24.*
- 15) Peebles, E.D., M.A. Latour and J.D. Brake. 1992. Fat not all bad for broiler chicks. *Res. Highlights, Mississippi State University, 55:3.*

Conference Proceedings

- 1) Richert, B.T. and M.A. Latour. Use of conjugated linoleic acid in swine feeding programs, Swine Nutrition Conference, Indianapolis, Indiana (presentation, September 2009).
- 2) Latour, M.A., 2007. Soft fat in swine as influenced by diet and environment. Carolina Feed Industry Association
<http://www.carolinafeed.com/2007%20CFIA%20Fall%20Program.pdf>
- 3) White, H.M. and M.A. Latour. The impact of added dietary fat on carcass fat

quality. 2007. Midwest Swine Nutrition Conference-Indianapolis, Indiana.
<http://www.livestocktrail.uiuc.edu/uploads/porknet/papers/2007%20MWSNC%20Proceedings.pdf> pages 42-48.

Extension Workshops: (chaired or member of approximately 100 different extension workshops)

Invited Presentations (National and International)

1. Welcome for the 2023 Farm Bill hearing (US senators John Boozman and Debbie Stabenow), Arkansas State University, 2022.
2. Challenges in Distance Learning, University of New Orleans, 2018.
3. Distance Learning, Reykjavik University, Iceland, 2017.
4. Design of Dog Treats, Scott Pet, Rockville, IN. 2016.
5. Hypobetalipoproteinaemia Kindreds, Southeastern Louisiana University, 2016.
6. Headwinds of Higher Education, Southeastern Louisiana University, 2016.
7. Creating an Executive i2i Enrichment program for Talented Undergraduates, Purdue University, IN 2014.
8. Expanding Undergraduate Research Discovery, Alabama A & M, 2014.
9. Illinois Agriculture, University of Havana, Cuba, 2014.
10. Vision for Higher Education in Agriculture, University of Illinois, Chicago, 2013.
11. How fat is manipulated in swine, Elanco, IN 2011.
12. Digestibility of pork skin in non-ruminants, PetSmart, Phoenix, Arizona 2011.
13. Lipid stability in pork skin, Costco, Seattle, WA, 2011
14. What causes soft fat in swine, Kent Feeds, IA, 2010.
15. How to develop distance learning programs. University College Dublin, Ireland. 2009.
16. How soft fat alters slicing ability in pork bellies, Oscar Mayer, Madison, WI. 2009.
17. Linoleic acid impact on sausage, Dublin Ireland. 2009.
18. How n6 fatty acids impact bacon quality, Köln, Germany. 2009.
19. Manipulating sow fat during the cull period, United, Sheridan, IN and Galesburg, IL. 2008.
20. Swine fat manipulation with diet and environment, Sempach, Switzerland. 2008.
21. Fatty acid metabolism in poultry, Alberta, Canada. 2008.
22. Distillers dried grains with solubles impact in sow carcass fat, Johnsonville, WI. 2008.
23. Estimating *trans fatty acids* using both gas chromatography coupled with near infrared (NIR) technology, Foss North America, Cleveland, OH. 2008.
24. Soft fat in swine both market pigs and sows, Pioneer, IA. 2008.
25. Fat cell formation and fatty acid manipulation in non-ruminants, Southeastern Louisiana University, Hammond, LA. 2008.
26. Soft fat in swine market pigs and sows, SD. 2008.
27. On math in the college of agriculture, Kansas State University, Manhattan, KS. 2008
28. Teaching symposium on distance learning, National American Society of Animal Sciences, Indianapolis, IN. 2008.

29. Use of introduction to animal sciences to satisfy course science requirement in Indiana high schools, Pearl River High School, Pearl River, LA. 2008.
30. Showcase our efforts in distance education for animal agriculture. *Bangalore, India*. 2008.
31. Challenges in distance education courses. *Paris, France*. 2008.
32. Use of digital media in animal sciences. *Zürich, Switzerland*. 2008.
33. How stocking density influences fat metabolism in swine, Smithfield, VA. 2007.
34. Fatty acid manipulation in swine fed distiller's dried grains, Foss North America, NC. 2007.
35. Fat sampling on market pigs and its impact on carcass iodine value, Kent Feeds and Tyson Foods-Swine, IA. 2007.
36. Fat formation in swine, Akey, Lewisburg, OH. 2007.
37. Sow fat manipulation, Johnsonville, Momence, IL. 2007.
38. Soft fat in swine. Midwest Feeding and Nutrition Conference, Indianapolis, IN. 2007.
39. Fat manipulation by diet and environment, North Carolina Feed Conference, Raleigh, NC. 2007.
40. Challenges in distance learning environments, North Central Region-Academic Program, Lincoln, NE. 2007.
41. Effects of heat stress on fat tissue, Smithfield Foods, VA. 2006.
42. Use of gas chromatography to identify soft fat characteristics, Murphy-Brown, Tar Heel, NC. 2006.
43. Sausage softness as influenced by the level of linoleic acid, Johnsonville, Watertown WI. 2006.
44. Use of distiller dried grains as related to soft fat tissue, United Feeds, Sheridan, IN. 2006.
45. Fatty acid metabolism in fast and slow growing pigs, Premium Standard Farms, Princeton. MO. 2006.
46. Fatty acid manipulation using conjugated linoleic acid. BASF Corp., New Jersey. 2006.
47. Student engagement at a distance using virtual teaching assistants in the classroom and beyond, National American Society of Animal Sciences, St Paul, MN. 2006.
48. Use of digital technology in the classroom for Introduction to Animal Sciences, University of Connecticut, Storrs, CT. 2006.
49. Implementing learning materials on embryology in the elementary classroom, University of Illinois, Champaign-Urbana. 2005.
50. Factors that influence fat firmness in pigs, Smithfield Foods, VA. 2005.
51. Fatty acid alterations in swine, poultry and humans during various phases of life, University of British Columbia, *Vancouver, Canada*. 2005.
52. Lipid markers in market pigs, BASF Corp., New Jersey. 2004.
53. Fat manipulation in market pigs during the final phase of feeding, *Merida, Mexico*. 2004.
54. Fatty acid markers in sows, Johnsonville Sausage Co., Momence, IL. 2004.
55. Fat firmness in market pigs, *Hermosillo, Mexico*. 2004.
56. Lipid metabolism in non-ruminant animals, Purina Mills, St. Louis, MO. 2004.

57. Fatty acid metabolism in non-ruminants (swine and poultry) *Guadalajara, Mexico*. 2004.
58. Teaching in a virtual classroom to Indiana high school teachers workshop, Indianapolis, IN. 2004
59. Distribution of fatty acids of sows challenged with various diets, Johnsonville Sausage Co., Watertown, WI. 2003.
60. Using a variety of different approaches to teach introduction to animal sciences, Ball State University, Muncie, IN. 2003.
61. Implementing a totally virtual course, Indiana University School of Dentistry, Indianapolis, IN. 2003.
62. Challenges and opportunities in creating a distance learning course, North Carolina State University, Raleigh, NC. 2003.
63. Use of conjugated linoleic acid in market pigs, Smithfield Foods, VA. 2003.
64. Distance learning in animal science, University of Kentucky, Lexington, KY. 2002.
65. Physiology of the layer hen, BASF, New Jersey. 2002.
66. Dyslipidemia in avian offspring from young breeders, The Ohio State University, Columbus, OH. 2001.
67. Lipid metabolism in avian offspring, USDA/ARS, Starkville, MS. 2001.
68. Metabolism of conjugated linoleic acid, Trouw Nutrition, Highland, IL. 2001.
69. Delivery of educational material in cooperative extension, West Virginia University, Morgantown, WV. 2001.
70. The relationship between lipid mobilization and carotenoids in layer hens, BASF Company, New Jersey. 2000.
71. Delivery of electronic media and international studies, National American Society of Animal Science, Baltimore, MD. 2000.
72. Effects of conjugated linoleic acid on lipid deposition and circulating lipoproteins, Alpha Food Ingredients, Chicago, IL. 2000.
73. Improving poultry production, *Honduras*. 1999.
74. Lipid metabolism in avian vs. mammals, Animal Sciences Department, Michigan State University, East Lansing, MI. 1998.
75. Atherosclerotic plaque formation and lipoproteins, University of Michigan School of Medicine. Ann Arbor, MI. 1998.

Excellence in Teaching

Lead instructor for Introduction to Animal Science (ANSC 10200) which is a foundation course within the Animal Science Department of Purdue University. Initially, it was taught solely on the Purdue University West Lafayette campus; however, it was expanded beyond this single offering mode. In 1998, developed an online version of Introduction to Animal Science for students around the globe which was separate from that accessible to students on the West Lafayette campus. Revenues generated from the online version were used to study distance education. The online course generated more than 1 million in new revenues while serving the needs of students away from campus. The work was recognized (nationally and state), *see awards section for complete listing* and membership in the Purdue Teaching Academy.

Led the development of Advanced Placement test for High School Students; that is, created a test out option for students being taught by high school teachers, which is now part of the Core Science requirements in Indiana.

Teaching Awards

- *Richard L. Kohls* Outstanding Teaching Award, Purdue University, 2008.
- Teaching Academy Fellow, Purdue University. 2008.
- National Teaching Fellow, North American Colleges and Teaching in Agriculture. 2007.
- Department of Animal Science, Teaching Award, Purdue University. 2001, 2004 and 2007.
- Excellence in Classroom Instruction, USDA. 2004.
- Award of Excellence in Distance Education, Purdue University. 2001.

Led Experiential Learning Opportunities for Undergraduate Students

- 1) Meunier, R.A. Lipid transfer in neonatal chicks treated with various fatty acids, 1998.
- 2) Woodcock, M. Maternal behavior of the chicken. 1999.
- 3) Ockenga, S. Poultry behavior in non-selected chickens during incubation. 2000.
- 4) Weaver, A. Developed laboratory learning materials for ANSC 10200 and taught one laboratory section of ANSC 10200. 2000.
- 5) Jinks, A. Developed laboratory learning materials for ANSC 10200 and taught one laboratory section of ANSC 10200. 2001.
- 6) Branson, T. Developed laboratory learning materials for ANSC 10200 and taught one laboratory section of ANSC 10200. 2001.
- 7) Developed laboratory learning materials (n=180 pages) for ANSC 10200 and taught one laboratory section of ANSC 10200. 2002. A. Weaver, A. Jinks, T. Branson, and A. Jasinski
- 8) Bennett, A. Development of a lipoprotein lipase assay for horses. 2001.
- 9) Thomas, M. Evaluating the pigment of layer hens fed specific carotenoids. 2002 (the student presented this material at Creighton Bros., in Warsaw, Indiana and useful information towards a patent).
- 10) Pohle, K. Examining Fatty Acid Profiles of Sows. 2002. (student presented these material at Johnsonville Foods).
- 11) Gordon, L. Investigating the Omega 3 deposition in Sows. 2003-2004 (the student has presented this work at the university agriculture research posters (3rd place), Ball State University and at the national Animal Sciences meeting in St. Louis, MO, 2004. (published).
- 12) Perry, K. Investigating the composition of eggs from different retail markets. 2006.
- 13) Berger, E. Investigating the composition and appearance of sausage in casing from various retail markets. 2006.

- 14) Legan, E. Evaluating growth and carcass changes in cull gilts fed distiller's dried grains with solubles, (published). 2007.
- 15) Kesselbrock, K. Manipulation of fat tissue in sow to create a healthier bratwurst (published work). 2009.
- 16) Kamrath, C. ANSC 49300: Estimating the level of trans fatty acids in a wide range of sausage products. 2008.
- 17) Anspach, A. ANSC 49300: Using digital images to estimate pork belly firmness. 2008.
- 18) Benitez, M. ANSC 49100: Literature review on the use of distillers dried grains with solubles in wild bird diets. 2008.
- 19) Carson, A. ANSC49100: Use of a new form of conjugated linoleic acid in swine to improve fat quality. 2008.
- 20) McIntire, W. ANSC49100. Examine bacon defects in final products. 2008-2009. (This work was used as preliminary data in the recently funded Kraft Foods Grant for \$92,000).

Grants and Awards

1. Federal

- USDA, Higher Education Challenge Grant. 2010-2012. Development of pathways for high school students to earn college credit. \$450,000, Co-PI.
- USDA, Development of a HACCP and GMP's Train-the-Trainer Program, Food Safety \$50,000, CoPI.
- USDA, Health survey of small poultry flocks, PI, \$72,840.
- USAID, PI (2012-2014) on advancements in agricultural training, \$110,000.

2. Development of an open-campus course, self-supporting, Virtual Introduction to Animal Science. The online course was one of the very first within the College of Agriculture 1998/1999 and was delivered world-wide online (estimated \$1.5 M contribution and continues today). The purpose was to provide educational opportunities for students world-wide and to garner "new" revenue.

3. State and Government Agencies:

- Indiana Value Added Grant: "The effects of conjugated linoleic acid (CLA) on blood cholesterol levels of pigs, pig growth and carcass composition, and the regulation of gene expression, \$60,000. Co-PI"
- To assess a dry egg product in segregated early weaned (SEW) piglets. \$28,000 Co-PI.
- US Poultry and Egg: "Carnitine's role in improving reproductive efficiency in chicken and turkey breeders". \$150,000 Co-PI.
- National Pork Board: "Pork quality in sows fed distiller's dried grains." \$67,000 PI
- National Pork Board: "Distillers grains in market pigs." \$60,000 Co-PI.
- Illinois Board of Higher Education: Co-PI. \$700,000 design of dual credit courses.

- Arkansas Department of Agriculture and CARES funds, \$500,000.
4. Industry support for research in lipid metabolism (~1,000,000): Swift Foods, Maple Leaf Farms, Cambridge Isotopes, Purina Mills, Nutreco Nutrition, BASF, Smithfield Foods, and Kraft Foods.