CURRICULUM VITAE

KENNETH P. BLEMINGS

Interim Dean, Davis College of Agriculture, Natural Resources, and Design Interim Director, West Virginia Agriculture and Forestry Experiment Station Professor of Nutritional Biochemistry West Virginia University PO Box 6108 Morgantown, WV 26506

EDUCATIONAL HISTORY

Ph.D. Nutritional Science & Animal Science – University of Wisconsin-

Madison, Madison, WI 1994

M.S. Meat and Animal Science – University of Wisconsin - Madison –

Madison, WI 1990

B.S. Animal Science – Virginia Tech – Blacksburg, VA 1987

PROFESSIONAL EXPERIENCE

University Administration

2018 – present	Interim Dean of the Davis College of Agriculture, Natural Resources, and Design, West Virginia University, Morgantown, WV
2015 – 2018	Dean of the WVU Honors College, West Virginia University, Morgantown, WV
2014 – 2015	Interim Dean of the Honors College, West Virginia University, Morgantown, WV
2013 – 2015	Program Leader, Intercollegiate Undergraduate Program in Biochemistry, West Virginia University, Morgantown, WV
2010 - 2014	Assistant Director for Academic Affairs, Division of Animal and Nutritional Sciences, West Virginia University, Morgantown, WV

Academic Appointments

2010 – present	Professor of Nutritional Biochemistry in the Division of Animal and Nutritional Sciences, West Virginia University, Morgantown, WV
2005 – 2010	Associate Professor of Nutritional Biochemistry and of Genetics and Developmental Biology, Division of Animal and Nutritional Sciences, West Virginia University, Morgantown, WV
1999 – 2005	Assistant Professor of Nutritional Biochemistry and of Genetics and Developmental Biology, Division of Animal and Veterinary Sciences, West Virginia University, Morgantown, WV
1994 – 1999	Post-doctoral associate, Department of Nutritional Sciences, University of Wisconsin – Madison, Madison, WI
1987 – 1994	Research Assistant, Department of Meat and Animal Sciences and Department of Nutritional Sciences, University of Wisconsin – Madison, Madison, WI
1983 – 1987	Laboratory Assistant, Department of Animal Sciences, Virginia Tech, Blacksburg, VA

ADMINISTRATIVE EXPERIENCE

Interim Dean of the Davis College of Agriculture, Natural Resources, and Design / Interim Director of the West Virginia Agriculture and Forestry Experiment Station (2018 – present)

The Dean is the chief academic officer for the College and charged with providing executive leadership for the college. The Davis College is WVU's oldest college and owes its existence to the Land Grant act, Senator Morrill, and President Lincoln. The Davis College is home to a broad array of programs from the traditional agriculture and forestry pursuits, to biochemistry, to design. The College has approximately 1900 undergraduate students, 200 graduate students, 100 faculty and 100 staff.

The Director of the Experiment Station provides executive leadership for the Experiment Station. The Experiment Station currently consist of 7 farms and over 3,000 acres as well as several forests totaling about 8,500 acres so that the total land is around 11,500 acres. The Experiment Station provides research infrastructure and teaching opportunities for the faculty as well as an interface for the public although the Extension Service is not part of the College. The Director works closely with the Dean of Extension.

Continuing Administrative Responsibilities

Oversee all the Programs of the College;

Work with internal and external stakeholders to lead the College;

Represent the College and its interest to the Provost and President;

Interact with accrediting bodies for specific programs;

Interact with friends of the College for development activities;

Represent the College's interests at Dean's meetings, State Fair meetings, and the State Conservation Committee;

Support the College's recruiting and retention efforts; and

Represent the College in efforts to globalize our footprint.

Major Accomplishments and On-going Activities

Culture – WVU engaged a culture shaping firm, Senn-Delaney, to help assess campus culture from the perspective of faculty and staff. The survey instrument measures 28 different aspects of campus culture. Overall the University had 14 areas that were satisfactory and 14 not satisfactory. For the Davis College, there were only 4 areas that were satisfactory and 24 were not satisfactory. This suggested to me the College culture is in need of serious help. To try and improve the culture, I have initiated the following steps:

- a. Gallup strengths training for the entire college. Thus far 4 of the 7 units (Admin, Animal & Nutritional Sciences, Plant and Soil Sciences, Forestry and Natural Resources, Design and Community Development, Resource Economics and Management, and Farms) have completed training with the last 3 slated for the spring 2020 semester.
- b. Provided coaching and feedback to 2 of my 5 Directors. Expect to provide feedback to 2 more in the Spring 2020 semester. Asked the administrative team and faculty executive committee to provide feedback and coaching to me.
- c. Working with the faculty executive committee and staff association to discern a plan of action to help improve the College culture. Expect to work with Talent and Culture (HR) as well as the Assoc. Provost for Faculty Development and Culture.
- d. Taking the College support staff to one-on-one lunch with the Dean to know them better and learn how they like to be appreciated.

Farm – In the spring of 2018, the College engaged an external review team to discern the state of the College's farms. That report suggested that there were ample opportunities to improve the functioning of the farms in support of the research and teaching activities of the College. To try and gain some consensus and guidance on how to make farm improvements, I have initiated the following steps:

- a. Engaged the Vice-President of Talent and Culture, who has expertise in change management, to assist me moving forward.
- b. We have assembled a fluid team that includes faculty, farm administrators, some Extension partners, Talent and Culture, and the Provost's office to chart a path forward that best serves the research and teaching missions of the College.
- c. Made the difficult decision to end milking operations at the Stewartstown Farm.

Budget – Budgeting at West Virginia University also has significant opportunity for improvement. Specifically, units do not generally understand their budgets and spending patterns and I have initiated the following steps:

- a. Asked each Division Director to prepare a budget of non-central accounts.
- b. Working to increase understanding of the budget in the College and to add transparency by having regular meetings with the College CFO and by having him present information at faculty meetings.

Strategic Transformation – When I arrived, several faculty members were looking for some sort of vision, mission, and goals statements. To help facilitate this, I have worked with the Assoc. Provost for Faculty Development and Culture who has been part of an overall University Strategic Transformation process. We have leveraged the work that each of the five academic units has already completed for the University process to aid in a College product for Strategic Transformation.

Interim Dean / Dean of the Honors College, West Virginia University (2014 – 2018)

The Dean is the chief academic officer for the Honors College and charged with providing executive leadership for the college. The Honors College is a primary recruiting tool for the university in its efforts to attract the best and brightest students to the institution. The Honors College office is located in Honors Hall where many Honors College freshman reside. Thus, the Honors College Dean has a special relationship with Honors students.

Administrative Responsibilities

Develop policy for academic matters

Work with Deans, Chairs and Faculty members to facilitate Honors Courses

Develop the Honors College budget

Oversight of Honors admissions, classes (HONR) and certification of completion of requirements

Oversight of staff and affiliated units (ASPIRE (Scholarships), PreHealth, and Undergraduate Research)

Major Accomplishments

Transformed the Honors College culture such that all members felt valued and added to our overall mission.

Reconstructed the WVU Honors College academic experience from a single 4-year program to two 2-year programs – Honors Foundation (Fr. & So.) and Honors Excel (Jr. & Sr.). In the single 4-year program, students were earning honors credits for earning As in regular classes. In the new programs, students had to have an enhanced educational experience to earn Honors Credits.

Collaborated with admissions to streamline the Honors admissions process and retire a shadow database.

Grew the Honors College budget from approximately \$600,000 to more than \$2,200,000 in a season of declining budgets.

Grew the incoming freshman class from 520 to ~1025 students, including students from every major in the University, while increasing the GPA and standardized test score necessary for Honors College consideration.

Hosted many recruiting events including Face to Face (9), Distinguished Scholars (7) and Academic Excellence (6).

Revitalized the Honors Advisory Council and started rotating memberships to offer fresh perspectives and increase campus participation in Honors education.

Added community engagement as an honors course and senior project option.

Worked with Housing to discern housing options for Honors students.

Worked with the WVU Foundation to facilitate development including hiring the first full-time development officer.

Collaborated with Honors Hall Residential Education staff to facilitate the Honors Live/Learn community experience.

Collaborated with Honors Hall Res. Ed. Staff, Admissions and the Visitors Center to interact with students and parents interested in the Honors College.

Collaborated with the Scholarship Office to screen and select Presidential Scholars who apply for the Bucklew and Foundation Scholarships.

Collaborated with the Associate VP Intl Student Affairs & Global Services and later the Dean of Students to select Foundation Outstanding Seniors and Order of Augusta.

Collaborated with University Events on the Honors Recognition Ceremony.

Participated in Honors Exit Interviews.

Worked with University Relations on Recruiting and Marketing.

ASPIRE -

Grew the office from 2 to 3

Collaborated with the ASPIRE office to offer opportunities and services for high-achieving students including Rhodes and Goldwater (chair) selection committees and Undergraduate Research Day at the Capital.

Record numbers of scholarship recipients for Fulbright, Gilman, and critical language.

Facilitated an increase in Rhodes finalists.

Worked with the ASPIRE office to cover the loss of the Pre-health coordinator at a critical time in the medical school application process.

PreHealth

Replaced the previous PreHealth Coordinator with someone who was more appropriate.

Grew the Office from 1 to 2.

Undergraduate Research

Grew the office from 1 to 3.

Collaborated with the STEM SURE coordinator to simplify the application process for Summer Undergraduate Research Experiences on campus.

Oversaw the start of a Research Apprenticeship Program which helped retain federal work study dollars to WVU and saw participants have an increased retention rate at WVU.

I continue to meet with the Acting Dean of the WVU Honors College approximately every other week so that I continue to oversee substantial changes in programs and staff. Also, we meet so that I can mentor the Acting Dean.

Program Leader, Intercollegiate Undergraduate Program in Biochemistry, West Virginia University, (2013–2015)

I arrived at West Virginia University in the fall of 1999 when the University just began admitting students into its new undergraduate biochemistry programs. Due to the political nature of the development of a biochemistry program there were in fact three different degree options: 1) BS Biochemistry through the Davis College housed in Animal and Nutritional Sciences 2) BA Biochemistry through the Eberly College housed in Biology and 3) BA Biochemistry through the Eberly College housed in Chemistry. This arrangement devolved into some unhealthy

competition and considerable confusion for students who frequently did not know in what program they were enrolled.

Administrative Responsibilities

Provide oversight to the Intercollegiate Undergraduate Program in Biochemistry.

Collaborate with Deans and Chairs concerning all aspects of the Program.

Major Accomplishments

Beginning in 2009 I worked with faculty, administrators and curriculum committees across two colleges and three departments to develop and get approval for a single Intercollegiate Undergraduate Program in Biochemistry leading to a BS in Biochemistry. This program was approved in May 2013.

Worked with undergraduate academic affairs offices in Davis College and Eberly College to recruit students to the program, have an accurate catalog description, and develop and maintain a DegreeWorks (Degree Auditing) interface that is accurate and useful.

Worked with the curriculum committee to assign students to advisors.

Assistant Director for Academic Affairs, Division of Animal and Nutritional Sciences, West Virginia University, (2010-2014)

The Division of Animal and Nutritional Sciences is housed in the Davis College of Agriculture, Natural Resources and Design. The Division is home to nearly 600 undergraduate students pursuing degrees in Animal and Nutritional Sciences (BS/BSA), Human Nutrition and Foods (BS/BA) and Biochemistry (BS). The Human Nutrition and Foods undergraduate program includes an accredited component, the Didactic Program in Dietetics. The Division is home to approximately 70 graduate students pursuing degrees in Animal Physiology (MS- thesis and non-thesis), Nutrition and Food Science (MS – thesis and non-thesis) and Animal and Food Science (PhD). The Human Nutrition and Foods graduate program includes two accredited components, a Graduate Dietetic Internship and an Individualized Supervised Practice Pathway. The Division houses approximately 25 faculty members.

Administrative Responsibilities

Worked with the Director to develop teaching assignments for Division faculty.

Worked with the Davis College Associate Dean and Director of Recruitment on recruiting efforts.

Collaborated with Division faculty to staff parent talk and advising sessions for the three different disciplines in the Division: Animal Science, Human Nutrition and Foods, and Biochemistry for New Student Orientation, First-year and Mid-year Academy.

Served as the graduate admissions coordinator for the Division.

Represented the Division in the absence of the Director at College Administrative Meetings.

Major Accomplishments

Prepared the Board of Governors' reports for both undergraduate and graduate programs.

Developed protocol for sharing graduate admissions applications with faculty.

Assisted faculty in the preparation of course and curriculum proposals.

Prepared electronic assessment tool for division graduates.

Other service and leadership highlights

Six times elected to the departmental promotion and tenure committee, chairing it three times

Faculty senate courses and curriculum committee (1 year)

Davis College Courses and Curriculum Committee (3 years, chair 2)

Club Advisor – Biochemistry Club (2013 – 2015)

Reader at Davis College Honors and Graduation Ceremonies

New Agricultural Sciences Building Committee

Completed the USDA's LEAD21 leadership training

Completed the Mountaineer Leadership Academy's Supervisor Development Institute

Served on 12 search committees chairing 3 of them

Over 700 letters of recommendation for students

Served as academic advisor for over 200 undergraduate students

Served on 33 Doctoral committees chairing 3

Served on 53 Masters committees chairing 11

Teaching Experience

Introductory Biochemistry –

(AGBI 410) & lab (AGBI 411/411H) Spring 2000-2014; Fall 2002, 2003; (AGBI 411/411H) Fall 2006& 2007

General Biochemistry-

(AGBI 610) Fall 1999-2001, 2004-2013, 2014 (20%)

Orientation to Biochemistry - (AGBI 199) Fall 2001-2014

Biochemistry Senior Seminar-(AGBI 494) Spring 2003, 2004, 2006, 2008, 2012, 2013

Honors Book Club (HONR 293 alpha)

How Not to Be Wrong (Fall 2016)

Thomas Jefferson, The Art of Power (Spring 2017)

Leadership is Half the Story (Fall 2019)

Guest lectures on Bioenergetics in Animal Growth and Physiology – (ANPH 400) Spring 2001 - 2014

Guest lectures in Teaching in Higher Education in (C&I-789) Fall 2012-13

Advise students in two majors- Animal Science and Biochemistry: 2000-2016 Honor's Advisor 2005 – 2016

Honors

2-year term on the J. of Nutrition editorial board	April 2001 - April 2003
Outstanding teacher in Animal and Nutritional Sciences	2001, 2002, 2009, 2010
Outstanding teacher in the Davis College of Agriculture, WVU	2002
Outstanding researcher in the Division of Animal and Veterinary	Sciences 2003
Outstanding advisor in the Davis College of Agriculture, WVU	2011
Outstanding Honor's advisor at West Virginia University	2010
WVU Foundation Outstanding Teaching Award	2012
APLU/USDA Regional Teaching Award	2012

Invited Talks

9

Abstracts

47

Extension articles - not refereed

7

Publications

- Gatrell, S.K., Berg, L.E. Grimmett, J.G., Moritz, J.S. & **Blemings, K.P.** (2018) Effect of moderate alterations of dietary protein or lysine on indices of lysine metabolism in liver, kidney and heart of growing pigs. Canadian Journal of Animal Sciences 98 (1):9-17.
- Gatrell, S.K., Silverstein, J.T., Barrows, F.T., Grimmett, J.G., Cleveland, B.M. & **Blemings**, **K.P.** (2016) Effect of dietary lysine and genetics on growth and indices of lysine catabolism in rainbow trout (*Oncorhynchus mykiss*) Aquaculture Nutrition 23:917–925.
- Gatrell, S.K., Swiger, B.N., Engels, J.G., Berg, L.E., Barnard, J.T., Moritz, J.S., & **Blemings**, **K.P.** (2014) Effects of strain and production cycle on indices of lysine catabolism in turkeys. International Journal of Poultry Science 13(12): 685-694.
- Evans, A.M., Swiger, B., **Blemings, K.P.**, Lilburn, M.S. & Moritz, J.S. (2014) The effect of strain and finisher diet non-phytate phosphorus level on performance and litter composition in large tom production. International Journal of Poultry Science 13(5):246-252.
- Kiess, A.S., Managi, M.K., Cleveland, B.M., Wilson, M.E. & **Blemings, K.P.** (2013) Effect of dietary lysine on hepatic lysine catabolism in broilers. Poultry Science 92(10):2705-2710.
- Gatrell, S.K., Berg, L.E., Barnard, J.T., Grimmett, J.G., Barnes, K.M. & **Blemings, K.P.** (2013) Tissue distribution of indices of lysine catabolism in growing pigs. Journal of Animal Science 91:238–247.
- Pink, D.B.S., Gatrell, S.K., Elango, R., Turchinsky, J., Kiess, A.S., Blemings, K.P., Dixon, W.T.
 & Ball. R.O. (2011) Lysine α-ketoglutarate Reductase but not Saccharopine
 Dehydrogenase is Subject to Substrate Inhibition in Pig Liver. Nutr. Res. 31:544-554.
- Cleveland, B.M., Weber, G.M., **Blemings, K.P.** & Silverstein. J.T. (2009) Insulin-like growth factor-I and genetic effects on indices of protein degradation in response to food deprivation in rainbow trout (*Oncorhynchus mykiss*). Am J Physiol Regul Integr Comp Physiol. 297(5):R1332-42.
- Carro, M., Falkenstein, E., **Blemings, K.P.**, & Klandorf, H. (2009) Distribution of Xanthine Oxidoreductase Activity in Broiler Tissues. Poult Sci. 88(11):2406-14.
- Cleveland, B.M., Leonard, S.S., Klandorf, H. & **Blemings, K.P.** (2009) Urate oxidase knockdown decreases oxidative stress in a murine hepatic cell line. Oxidative Medicine and Cellular Longevity 2(2):93-98.

- Lemley, C.O., Koch, J.M., **Blemings, K.P.** & Wilson, M.E. (2009) Alterations in progesterone catabolic enzymes, CYP2C and CYP3A, in hepatocytes challenged with insulin and glucagon. J. Anim. & Vet. Advances 8(1):39-46.
- Kiess, A.S., Cleveland, B.M., Wilson, M.E., Klandorf, H. & **Blemings, K.P.** (2008) Protein-induced alterations in murine hepatic alpha-aminoadipate delta-semialdehyde synthase activity are mediated posttranslationally. Nutr. Res. 28(12):859-865.
- Lemley, C.O., Koch, J.M., **Blemings, K.P.,** Krause, K.M. & Wilson, M.E. (2008) Concomitant changes in progesterone catabolic enzymes, cytochrome P450 2C and 3A, with plasma insulin concentrations in ewes supplemented with sodium acetate or sodium propionate. Animal.2(8):1223-1229.
- Cleveland, B.M, Kiess, A.S. & **Blemings, K.P.** (2008) α-Aminoadipate δ-semialdehyde synthase mRNA knockdown reduces the lysine requirement of a mouse hepatic cell line. J. Nutr. 138:2143-2147.
- Benevenga, N.J. & **Blemings, K.P.** (2007) Unique aspects of lysine nutrition and metabolism. Proceedings of the International Amino Acid Workshop. Budapest, Hungry. J Nutr. 137(6 Suppl 2):1610S-1615S. Review.
- Costine, B.A., Inskeep, E.K., **Blemings, K.P.**, Flores, J.A. & Wilson, M.E. (2007) Mechanisms of luteal resistance to Prostaglandin $F_{2\alpha}$ during maternal recognition of pregnancy in ewes. Domestic Animal Endocrinology. 32:106-121.
- Panaccione, D.G., Cipoletti, J.R., Sedlock, A.B., **Blemings, K.P.,** Schardl, C.L., Machado, C. & Seidel, G.E. (2006) Effects of Ergot Alkaloids on Food Preference and Satiety in Rabbits, as Assessed with Gene-Knockout Endophytes in Perennial Ryegrass (*Lolium perenne*). J. Agric. Food Chem. 54:4582-4587.
- Parsons, A.S., Buchanan, N.P., **Blemings, K.P.**, Wilson, M.E. & Moritz, J.S. (2006) Effect of corn particle size, pellet texture and feed form on broiler performance in the growing phase. J. Appl. Poult. Res. 15:245-255.
- Higgins, A.D., Silverstein, J.T., Wilson, M.E., Rexroad III, C.E. & **Blemings, K.P.** (2006) Starvation-induced alterations in hepatic lysine catabolism in different families of rainbow trout (*Oncorhynchus mykiss*) Fish Physiology and Biochemistry 31:33-44
- Chapman, P.E. & **Blemings, K.P.** (2006) Improving Retention Rates in Biochemistry: A Quasi-Experiment. Radical Pedagogy 8(1).
- Smith, D.L., Stinefelt, B.M., **Blemings, K.P.** & Wilson, M.E. (2006). Diet-induced alterations in progesterone clearance appear to be mediated by insulin signaling in hepatocytes. J. Anim. Sci. 84:1102-1109.

- Penula, N., **Blemings, K.P.** & Fitch, C.W. (2006) Protein, phosphorus and vitamin E intakes are associated with blood lead levels among WIC infants in rural West Virginia. Nutrition Research 26:96-99.
- Silverstein, J.T., Hostuttler, M. & **Blemings, K.P.** (2005) Strain differences in feed efficiency measured as residual feed intake. Aquaculture Research 36:704-711.
- Stinefelt, B.M., Leonard, S.S., **Blemings, K.P.**, Shi, X. & Klandorf, H. (2005) Free radical scavenging, DNA protection, and inhibition of lipid peroxidation mediated by uric acid. Annals of Clinical and Laboratory Science. 35:37-45.
- Manangi, M., Howeing, S.F.A., Engels, J.G., Higgins, A.D., Killefer, J., Wilson, M.E. & **Blemings, K.P.** (2005) Lysine α-ketoglutarate reductase and lysine oxidation are distributed in the extrahepatic tissues of chickens. J. Nutr. 105:81-85.
- Machin, M., Simoyi, M.F., **Blemings, K.P**. & Klandorf, H. (2004) Effect of Dietary Protein on Plasma Uric Acid, Body Weight, and Oxidative Stress in Broilers. Comparative Biochemistry and Physiology Part B 137:381-388.
- Holaskova, I., Lewis, G.L., Elliott, M., **Blemings, K.P.** & Dailey, R.A. (2004) Effect of Peptidoglycan-Polysaccharide Complex on Reproductive Efficiency and Mastitis in Sheep. American Journal of Reproductive Immunology 52:197-2003.
- Stinefelt, B.M., Eya, J.C., Semmens, K.J. & **Blemings, K.P.** (2004) Effect of Diet and Strain on Growth and Performance in Hybrid Bluegill. North American Journal of Aquaculture 66:312-318.
- Simoyi, M.F., Falkenstein, E., Van Dyke, K., **Blemings, K.P.**& Klandorf, H. (2003) Allantoin, the Oxidation Product of Uric Acid is present in Chicken and Turkey Plasma. Comparative Biochemistry and Physiology Part B 135:325-335.
- Chaney, R.C., **Blemings, K.P.,** Bonner, J. & Klandorf, H. (2003) Pentosidine as a Measurement of Chronological Age in Wild Birds. The Auk 120(2):394-399.
- Roy, C.N., **Blemings, K.P.,** Deck, K.M., Davies, P.S., Anderson, E.L., Eisenstein, R.S., & Enns, C.A. (2002) Increased IRP1 and IRP2 RNA Binding Activity Accompanies a Reduction of the Labile Iron Pool in HFE-Expressing Cells. J. Cellular Physiol. 190:218-226.
- **Blemings, K.P.**, Crenshaw, T.D., & Benevenga, N.J. (1998) Mitochondrial Lysine Uptake Limits Hepatic Lysine Oxidation in Rats Fed Diets containing 5, 20, or 60% Casein. J. Nutr. 128:2427-2434.
- Eisenstein, R.S., & **Blemings, K.P**. (1998) Iron Regulatory Proteins, Iron Responsive Elements and Iron Homeostasis. J. Nutr. 128:2295-2298.

- Chen, O.S., **Blemings, K.P.**, Schalinske, K.S., & Eisenstein, R.S. (1998) Dietary Iron Intake Rapidly Influences Iron Regulatory Proteins, Ferritin Subunits and Mitochondrial Aconitase in Rat Liver. J. Nutr. 128:525-535.
- Schalinske, K.S., **Blemings, K.P.**, Steffen, D.W., Chen, O.S., & Eisenstein, R.S. (1998) Iron Regulatory Protein 1 is Not Required for the Modulation of Ferritin and Transferrin Receptor Expression by Iron in a Murine Pro-B Lymphocyte Cell Line. Proc. Natl. Acad. Sci. USA 94:10681-10686.
- **Blemings, K.P.**, Gahl, M.J., Crenshaw, T.D. & Benevenga, N.J. (1996) Recombinant Bovine Somatotropin Decreases Hepatic Amino Acid Catabolism in Female Rats. J. Nutr. 126:1657-1661.
- **Blemings, K.P.,** Crenshaw, T.D. & Benevenga, N.J. (1994) Lysine alpha-ketoglutarate Reductase and Saccharopine Dehydrogenase are Located Only in the Mitochondrial Matrix in Rat Liver. J. Nutr. 124:1215-1221.
- Benevenga, N.J., Gahl, M.J. & **Blemings, K.P.** (1993) Role of Protein Synthesis in Amino Acid Catabolism. J. Nutr. 123:332-336.

Grants and Contracts

Summary information for funded and pending grants

1. West Virginia University Research Corporation

1.1 Senate Research Grant, WVU. \$8,973

<u>Title</u>: Quantification and Modulation of Lysine Oxidation in Chickens.

Authors: Blemings, K.P.

1.2 WVURC Program to Stimulate Competitive Research, WVU. \$36,000

<u>Title</u>: HPLC with Radioisotope Detection for Improving Efficiency of Nutrient Use.

Authors: Blemings, K.P., Fitch, C.W., Klandorf, H., Kenney, P.B. & Killefer, J.

1.3 WVURC Program to Stimulate Competitive Research, WVU. \$7,275

<u>Title</u>: Production of Antibodies to Chicken Liver Lysine α -ketoglutarate Reductase

Authors: Blemings, K.P.

1.4 WVURC Program to Stimulate Competitive Research, WVU. \$47,000

Title: Acquisition of a Real Time PCR Instrument

Authors: Blemings, K.P., Verlinden, S.J., Killefer, J. & Panaccione, D.

1.5 WVURC Program to Stimulate Competitive Research, WVU. \$5,775

Title: Acquisition of a Liquid Scintillation Counter

Authors: Blemings, K.P., Wilson, M.E., Verlinden, S.J. & Mazik, P.M.

1.6 WVURC – Senate Research Grant, WVU. \$14,500

 $\underline{\text{Title}}$: Generation of a Full-length cDNA Clone of Lysine α -ketoglutarate Reductase

from Chicken Liver

Authors: **Blemings**, **K.P.**

1.7 WVURC Program to Stimulate Competitive Research, WVU. \$31,576

Title: Modernization of Cell Culture Facilities

Authors: Wilson, M.E., Yao, J., Noueiry, A.O. & Blemings, K.P.

1.8 WVURC, \$450-\$750 each

Title: Undergraduate Research Support

Authors: **Blemings**, **K.P.**

1.9 WVURC, \$450 - \$550 each

<u>Title</u>: Travel grant support

Author: Blemings, K.P.

1.10 WVURC, \$20,580

<u>Title</u>: Enhancing the infrastructure to study RNA dynamics

Authors: Noueiry, A.O. & Blemings, K.P.

2. Industry

2.1 British United Turkey of America - \$15,000 was my part

<u>Title</u>: Effect of Early Nutrition and Management Practices on the Productive Performance, Carcass Composition, Microbial Colonization, Breast Blister Incidence and Formation, And Lysine Metabolism in Different Strains of Male and Female Turkeys Authors: Kenney, P.B., Peterson, R., Klandorf, H., **Blemings, K.P.** & Warren, J.

3. USDA

3.1 USDA/CSREES HATCH #WVA00413,

<u>Title</u>: Biochemical and Molecular Aspects of Lysine Degradation

Authors: **Blemings**, **K.P.**

3.2 USDA/NRI - \$14,000

<u>Title</u>: HPLC with Radioisotope detection for Improving the Efficiency of Nutrient Use <u>Authors</u>: **Blemings, K.P.,** Fitch, C.W., Klandorf, H., Kenney, P.B. & Killefer, J.

3.3 USDA/CSREES - \$15,000, \$33,500, \$23,367, \$53,644

<u>Title</u>: Aquaculture Food Marketing and Development Project, FY 02,03,04,06 Authors: Multi-investigator

Authors. Multi-mivestigator

3.4 USDA (WV Agriculture & Forestry Experiment Station) - \$6,500

<u>Title</u>: Tissue Specific Pathways of Lysine Oxidation in the Chicken

Authors: Blemings, K.P.

3.5 USDA/NRI - \$11,500

Title: Acquisition of a Liquid Scintillation Counter

Authors: **Blemings, K.P.,** Wilson, M.E., Verlinden, S.J. & Mazik, P.M.

3.6 USDA/NRI - \$75,000

<u>Title:</u> Development of Molecular Tools for Understanding Lysine Catabolism

Authors: **Blemings**, **K.P.**

3.7 USDA/NRI - \$14,668

<u>Title:</u> Acquisition of a microarray hybridization station for the Division of Animal and Veterinary Sciences at WVU

Authors: Yao, J., Wilson, M.E., & Blemings, K.P.

4. State of West Virginia

West Virginia Higher Education Policy Commission

4.1 WVHEPC \$75,000 (2015)

<u>Title:</u> The West Virginia University Summer Undergraduate Research Experience 2015 <u>Authors:</u> **Blemings, K.P.**

4.2 WVHEPC \$75,000 (2016)

<u>Title:</u> The West Virginia University Summer Undergraduate Research Experience 2016 <u>Authors:</u> **Blemings, K.P.**

West Virginia Department of Education

4.3 WVDE \$30,000 (2016)

Title: Albert Yanni Grant 2017

Authors: Claycomb, R.M. and Blemings, K.P.

West Virginia Department of Education and the Arts

4.3 WVE&A \$10,000 (2016)

<u>Title:</u> Governor's School for Math and Science 2016 Supplement Authors: Claycomb, R.M. and **Blemings, K.P.**

4.4 WVE&A \$110,000 (2016)

Title: 2017 Governor's School for Math and Science

Authors: Claycomb, R.M. and Blemings, K.P.

4.5 WVE&A \$370,000 (2016)

Title: Governor's Honors Academy 2017

Authors: Claycomb, R.M. and Blemings, K.P.