



Kamel Z. Mahmoud, Ph.D.

Jordan University of Science & Technology

Home Address:

P.O. Box 542246
Amman, 11937 Jordan
Home: 962-5-5240715
Cell: 962-79-5937657

Work Address:

Faculty of Agriculture
Jordan University of Science & Technology
P.O. Box 3030
Irbid, 22110 Jordan
Work: + 962-2-7201000 Ext. 22212

	Degree	Area	Institute	Year
Education and Credentials	Ph.D.	Poultry Science Management, Genetics and Physiology	North Carolina State University – Raleigh, USA	2000
	M.Sc.	Animal Science Poultry Physiology	University of Nebraska-Lincoln, USA	1995
	B.Sc.	Animal Production	The University of Jordan, Amman, JORDAN	1990

Administrative Experience

1. Dean, Faculty of Agriculture, Jordan University of Science and Technology. 9/2016 – 9/2020.
2. Head of Animal Production Department, Faculty of Agriculture, Jordan University of Science and Technology. 9/2013 – 9/2016.
3. Head of Animal Production Department, Faculty of Agriculture, Jordan University of Science and Technology. Irbid, Jordan. 9/2011– 9/2012.
4. Assistant Dean, Faculty of Agriculture, Jordan University of Science and Technology. Irbid, Jordan. 9/2002– 9/2004

Current Position Full Professor of Animal Science, Department of Animal Production, Faculty of Agriculture, Jordan University of Science & Technology

Major Duties:

I actively mentored graduate and undergraduate students. Twelve MS students completed their graduate programs directly under my supervision and thirteen other students participated in their advisory board. I taught in-class courses to undergraduate and graduate students. I provided research and internship opportunities to several undergraduate students from under-represented communities. I served as chair and/or member of several departmental, faculty and university administration and program management committees. I conducted research, education and extension activities funded through JUST deanship of research and other competitive governmental and international sectors.

Professional Experiences

1. Associate Professor of Poultry Science, Animal Production Department, Faculty of Agriculture, Jordan University of Science and Technology. Irbid, Jordan. 6/2006 – 1/2014.
2. Visiting Scholar, Department of Poultry Science, North Carolina State University, Raleigh, USA. 9/2009 – 1/2011.
3. Visiting Scholar, Department of Poultry Science, North Carolina State University, Raleigh, USA. 5/2001 – 9/2001.
4. Assistance Professor, of Poultry Science, Animal Production Department, Faculty of Agriculture, Jordan University of Science and Technology. Irbid, Jordan. 6/2001 – 6/2006.
5. Full-time lecturer, Dept. of Animal Production/Faculty of Agriculture, Jordan University of Science & Technology, 9/2000 – 6/2001
6. Graduate Research and Teaching Assistant, North Carolina State University, Raleigh, 9/1995 – 6/2000
7. Graduate Research Assistant, University of Nebraska, Lincoln, 1993- 1995.
8. Field technical manager for layer parent stock company at Jordan, Amman 9/1991 – 5/1993

Administrative and Academic Activities

Departmental Activates

- Department Council
- Curriculum Development Committee
- Graduate Studies Committee
- Students Affairs Committee
- Research Committee

Faculty Activities

- Faculty Council
- Graduate Studies Committee
- Students Affaires Committee)

- Science and Education Committee
- Library Committee
- Scientific Day Committee

University Activities

- Responsible and accountable for setting and advancing the academic strategy of the Faculty of Agriculture in line with University strategic plans and direction
- Develop and sustain appropriate structures for management, consultation, decision-making and communication with staff and students
- Mentoring Early Career Researchers Member in the University Animal Care and Unit Committee “ACUC”.
- Supervising the experimental design and analysis for many graduate students and faculty members at the Faculty of Agriculture, Faculty of Veterinary Medicine and Faculty of Science
- Graduate student research award referee / Scientific Day / Faculty of Graduate Studies
- Faculty Library and Supplies Committee
- Developed memorandum of understanding agreement between the Faculty of Agriculture/JUST and University of Illinois
- Patent evaluation concerning poultry automatic drinker for the Ministry of Industry and Trade
- A committee member to evaluate a statistical book entitled "Biostatistics for Health & Life Sciences"

Community Activities

- Poultry Arab Conference Scientific and Administrative Committees
- Civil Service Bureau to prepare competitive exams for employee recruitment
- Agricultural award referee for Agricultural Engineering Association
- Training course concerned Poultry Farm Management organized by the Jordanian Agriculture Engineers Association
- Training courses in “Design and Statistical Analysis for Livestock Research Experiments” at the National Center for Agricultural Research and Extension”
- Free service consultation for small-scale local farms.

Governmental Activities

- Member of steering committee of “The National Biosafety Framework” Ministry of Environment. Control the transfer and handling of genetically modified organisms
- Board member of “National Agricultural Research Center Council” Ministry of Agriculture: Development of reviewing agricultural policy research in Jordan
- Scientific Research Support Fund for Agricultural and Veterinarian Research Committee. (Ministry of Higher Education; member)
- Civil Service Bureau to prepare competitive exams for employee recruitment
- Agricultural biodiversity and genetic resources (Ministry of Agriculture;

- member)
- Trading genetically modified food ingredients committee (Ministry of Agriculture; member)
- Participation in the workshop for accreditation development for the agricultural departments at the Jordanian Universities (Ministry of Higher Education)
- Member of the national strategy for agricultural development (National Center for Agricultural Research and Technology Transfer)
- Member of the Animal Production Council at the National Center for Agricultural Research and Technology Transfer
- Free service consultation for small-scale local farms.

Courses Taught

Undergraduate Courses:

1. Introduction to Animal Science (AP 206)
2. Biostatistics (PP 213)
3. Practical Training, I and II (AP 301; AP401)
4. Animal Physiology (AP321)
5. Poultry Nutrition (AP316)
6. Animal Breeding and Improvement (AP418)
7. Meat Science (AP416)
8. Poultry Farm Management (AP431)
9. Summer Training (AP400)
10. Seminar (AP 491)

Undergraduate Courses:

1. Experimental Design (AP701)
2. Linear Models (AP702)
3. Advanced Animal Physiology (AP711/AP712) / Renal and Respiratory Modules.
4. Seminar (AP791)
5. Special Topics (Feed mill Management; AP792)

Average Teaching Load Per Semester

9 – 12 Credit hours

Research Area Interest

- Enhance chickens' performance and immunity through using feed additives
- Enhances chickens' tolerance to heat stress through managerial and nutritional strategies.
- Food security
- Renewable energy
- Youth and carrier development

International Projects and Collaboration

Enhanced Surveillance of the Transboundary Animal Diseases (TADS) in rural areas of Jordan Affected by the Crises in Syria. Funded by FAO. To understand the impact of Syrian crises on TADS as well as needs of pastoral communities in Jordan (Project member; 2015 – 2016).

Improving education and employment prospects for Jordanian and Syrian youth in the agri-food sectors through a connected and inclusive entrepreneurship programme. Funded by NUFFIC. (Project Coordinator; 9/2020 – 3/2022).

Desert Garden Project. This project is directed to promote the use of hydroponic by the refugees in Zaatari and Azraq camps in Jordan. Funded by the University of Sheffield. (Project Coordinator; 9/2020 – 3/2022).

Research Grants

- Age effect on the use of of Xylanase-Amylase-Protease cocktail on broilers performance fed corn/soy diets. Deanship of Research-Jordan University of Science and Technology (Funded \$ 6740)
- Betaine supplementation: Effect on intestinal development and humoral immunity of meat type chickens. Deanship of Research – Jordan University of Science and Technology (Funded \$ 8900).
- Betaine supplementation: Effect on performance and carcass characteristics of meat type chickens with graded levels of methionine. Deanship of Research – Jordan University of Science and Technology (Funded \$ 9600).
- Pathogenesis of respiratory diseases in chickens and wild birds. Jordanian Ministry of Higher Education (Funded \$ 259,000). Saad M. Gharaibeh and Kamel Z. Mahmuod.
- Dietary supplementation of garlic (*Allium sativum*): Influence on performance parameters, meat quality and humoral immune response in broiler chicks. Deanship of Research – Jordan University of Science and Technology (Funded \$ 3000).
- Effect of garlic (*Allium sativum*) supplementation on egg quality, yolk cholesterol and humoral immune response in layer hens. Deanship of Research – Jordan University of Science and Technology (Funded, \$ 5100).
- Influence of dietary fatty acids composition on glutathione metabolism and glutathione redox status in broiler chicks. Deanship of Research – Jordan University of Science and Technology (Funded, \$ 4500).

- Thermotolerance ability of male broiler chicken subjected to different feed- withdrawal regimens. Deanship of Research – Jordan University of Science and Technology (Funded, \$ 1500).
- The correlation between Heterophil/lymphocytes ratio and heat shock protein. Deanship of Research – Jordan University of Science and Technology (Funded, \$ 4500).
- Thermotolerance ability and heat shock protein (HSP70) expression among local types of chickens. Deanship of Research – Jordan University of Science and Technology (Funded, \$ 5100).

Supervised Master Students

Main Advisor:

1. **Omar Al-Quda:** Newly recruited graduate student
2. **Tariq Sharyah:** Age-related influence of Xylanase-Amylase-Protease cocktail on broilers performance fed corn/soy diets. (**Graduated Jan/2019**)
3. **Anas Swalqah:** Osmoregulatory function of betaine and broiler carcass characteristics. (**Graduated Jan/ 2019**)
4. **Walaa' Al-younis:** Effect of dietary lipase supplementation on energy utilization of broiler chicken. (**Graduated Jan/2017**)
5. **Mohammad Al-Sady:** *Bacillus Subtilis* supplementation: Effect on performance of meat type chickens with graded levels of crude protein.
Published in Livestock 195: 99 – 104.
6. **Yasmeen Jabaly:** Betaine supplementation: Effect on intestinal development and humoral immunity of meat type chickens. (**Under publication**)
7. **Amjad Migdady:** Betaine supplementation: Effect on performance and carcass characteristics of meat type chickens with graded levels of methionine. (**Under publication**)
8. **Basheer M. Nusairat:** Dietary supplementation of garlic (*Allium sativum*): Influence on performance parameters, meat quality and humoral immune response in broiler chicks.
Published in Italian J. Anim. Sci. 9:414-419.
9. **Amer Qutramize:** Effect of Garlic (*Allium sativum*) supplementation on Serum/Yolk Cholesterol Level, Egg Quality and Humoral Immune Response in Layer Hens.
Published in Asian Aust. J. Anim. Sci. 11:1503-1509.
10. **Omar S. Al-Marashdeh:** Thermotolerance Ability of Male Broiler Chickens Subjected to Different Feed-withdrawal Regimens.
Published in 1st Mediterranean Summit of WPSA. Advances and

Challenges in Poultry Science, 7–10 May 2008.

- 11. Alia A. Hijazi:** Influence of CCl₄ hepatotoxicity on Glutathione Redox Status and Antioxidants Levels in Broiler Chicks Fed Vitamin A or E.

Published in Journal of Animal Physiology and Animal Nutrition 91:333- 340.

- 12. Asad M. Yaseen:** The correlation between heterophil / lymphocyte ratio and heat shock proteins as selection criterion for heat stress resistance.

Published in Asian Aust. J. Anim. Sci. 18:1444-1450.

Committee Member for:

- 1. Jomanah Maswdeh:** Effect of feeding Atriplex (*Helimus L.*) on growth performance and carcass characteristics of fattening Awassi lambs. Pending, 2015.
- 2. Tony D. Abdullah:** Thermophysiological responses of heat and immune- challenged hypercholesterolemic rats, -treated with resveratrol. Dec 2014.
- 3.** Effect of organic acids inclusion on the productive performance and blood parameters of broiler chicken. July, 2013.
- 4. Taha Ali Taha:** Effect of enzymatic soya protein concentrates (SPCE) on the performance and immunity of broiler chickens. May 2013.
- 5. Shady Hatahet:** Effect of adding lactose in drinking water on the performance of broiler chicken. December, 2012.
- 6. Ala'a Airout:** Dietary Supplementation of ginger root (*Zingiber officinale*) in broiler chickens: Influence on growth performance, antioxidant status and carcass and meat characteristics. May, 2012.
- 7. Areej F. Al-Hazaimeh:** Effects of *Nigella Sativa* (Black Seed) Supplementation on The Growth Performance and Physiological Aspects on Broiler Chicks. Jan., 2006
- 8. Alia A. Al-Jamal:** The Effect of Using Urea-Based Feed Blocks for Awassi Ewes Nutrition Under Farm Conditions. June, 2005
- 9. Murad M. Rjoup:** Growth Performance, Carcass and meat quality Characteristics of Different Commercial Crosses of Broiler Strains of Chickens. Jan., 2005.
- 10. Ahmad Q. Al-Momani:** Growth Performance and Biological Parameters of Awassi, F₁ Charollais-Awassi and F₁ Romanov-Awassi Ram and Ewe Lambs. Jan., 2004.

11. **Soura N. Goussous:** The Use of Yeast in Fattening Awassi Lambs. Dec, 2003.
12. **Said S. Al-Khetib:** Effect of Administering Increasing Dosage of Royal Jelly on Estrus Synchronization and Pregnancy Rate in Awassi Ewes. August, 2003.
13. **Ismail Zaitoun:** Identification of Native Caprine Breeds in Jordan by Using a polymerase Chain Reaction Technique and by Studying Some Production and Morphostructural Characteristics. July, 2002

Publications

1. Thermotolerance of Broiler Chicks Ingesting Dietary Betaine and/or Creatine, 2019. Hosam Al-Tamimi, **Kamel Mahmoud**, Amani Al-Dawood, Basheer Nusairat, and Hussam Bani Khalaf. *Animals*, 9, 742; doi: 0.3390/ani9100742.
2. The potential use of layer litter in Awassi lamb diet: Its effects on carcass characteristics and meat quality, 2019. Belal S. Obeidat, Mohammad A. Mayyas, Abdullah Y. Abdullallah, Mofleh S. Awawdeh, Rasha I. Qudsieh, Mohammad D. Obeidat, Basheer M. Nusairat, **Kamel Z. Mahmoud**, Serhan G. Haddad, Fatima A. Al-Lataifeh, Mysaa Ata, Majdi A. Abu Ishmais and Ahmed E. Aljamal. *Animals*, 9, 782; doi:10.3390/ani9100782.
3. Replacing Soybean Meal with Sesame Meal in the Diets of Lactating Awassi Ewes Suckling Single Lambs: Nutrient Digestibility, Milk Production, and Lamb Growth, 2019. Belal S. Obeidat, Rami T. Kridli, **Kamel Z. Mahmoud**, Mohammed D. Obeidat, Serhan G. Haddad, Hadil S. Subih, Mysaa Ata, Ahmed E. Al-Jamal, Tasneem Abu Ghazal, Jáfar Mansur Al-Khazáleh. *Animals*. 9(4), 157; doi.org/10.3390/ani9040157.
4. The effect of *Saccharomyces cerevisiae* supplementation on intake, nutrient digestibility, and rumen fluid pH in Awassi female lambs, 2018. Belal S. Obeidat, **Kamel Z. Mahmoud**, Mohammad D. Obeidat, Mysaa Ata, Rami T. Kridli, Serhan G. Haddad, Hosam H. Titi, Khaleel I. Jawasreh, Hosam J. Altamimi, Hadil S. Subih, Safaa M. Hatamleh, Majdi A. Abu Ishmais and Ruba Abu Affan. *Veterinary World*, 11(7): 1015-1020.
5. The effect of *Saccharomyces cerevisiae* supplementation on intake, nutrient digestibility, and rumen fluid pH in Awassi female lambs, 2018. Belal S. Obeidat, **Kamel Z. Mahmoud**, Mohammad D. Obeidat, Mysaa Ata, Rami T. Kridli, Serhan G. Haddad, Hosam H. Titi, Khaleel I. Jawasreh, Hosam J. Altamimi, Hadil S. Subih, Safaa M. Hatamleh, Majdi A. Abu Ishmais and Ruba Abu Affan. *Veterinary World*, 11(7): 1015-1020
6. Effect of *Bacillus subtilis* supplementation and dietary protein level on

growth performance and intestinal morphological changes of meat type chicken, 2017.

K.Z. Mahmoud, B.S. Obeidat, M.Z. Al-Sadia, Sh.R. Hatahet. *Livestock* 195: 99 – 104.

7. Effects of feeding *Atriplex halimus* L. on growth performance and carcass characteristics of fattening Awassi lambs, 2016 . Obeidat, B. S., **K. Z. Mahmoud**, J. A. Meswadeh, E. Y. Bsoul. *Small Ruminant Research*, 137:65-70.
8. Comparative Effects of Various Forms of Selenium on Thioredoxin Reductase Activity in Broiler Chickens, 2015. K.M. Gowdy , F.W. Edens and **K.Z. Mahmoud**. *International Journal of Poultry Science*, 14 (7): 376-382.
9. Roasted sesame hulls improve broiler performance without affecting carcass characteristics, 2015. **Kamel Z. Mahmoud**, Belal S. Obeidat, Majdi Abd Ishmais . *Italian Journal of Animal Science*, 14:395-501.
10. Decay of maternal antibodies in broiler chickens, 2013. Gharaibeh, S., **Mahmoud, K Z**. *Poultry Science*, 92:333-2336.
11. Breeder age affects small intestine development of broiler chicks with immediate or delayed access to feed, 2012. **Mahmoud, K.Z.**, Edens, F.W. *British Poultry Science*, 53:32-41.
12. Small intestinal histology, production parameters, and meat quality as influenced by dietary supplementation of garlic (*Allium sativum*) in broiler chicks, 2010. Abdullah Y. Abdullah, **Kamel Z. Mahmoud**, Basheer M. Nusairat, Rasha I. Qudsieh. *Italian Journal of Animal Science*, 9: 414 – 419.
13. Garlic (*Allium sativum*) Supplementation: Influence on Egg Production, Quality, and Yolk Cholesterol Level in Layer Hens, 2010. **Mahmoud, K.Z.**, Gharaibeh, S.M., Zakaria, H.A., Qatramiz, A.M. *Asian-Australasian Journal of Animal Sciences*, 23: 1503-1509.
14. Effect of feeding sesame meal on growth performance, nutrient digestibility, and carcass characteristics of Awassi lambs, 2009. B.S. Obeidat, A.Y. Abdullah, **K.Z. Mahmoud**, M.S. Awawdeh, N.Z. Al-beitawi. *Small Ruminant Research*, 82: 13-17.
15. Field evaluation of maternal antibodies transfer against group of pathogens in meat-type hens, 2008. Saad M. Gharaibeh and **Kamel Z. Mahmud** and M. Al- Natour. *Poultry Science* 87:1550 – 1555.
16. Sexual performance of rams sequentially exposed to short-tailed and fat-tailed ewes, 2008. Rami T. Kridli, Abdullah Y. Abdullah, Moh'd M. Shaker

and **Kamel Z. Mahmoud**. Reproduction in Domestic Animals.

17. Effect of vitamin A and/or E on enzymatic antioxidant systems and total antioxidant capacity of broiler chickens challenged with carbon tetrachloride, 2007. **K. Z. Mahmoud** and A. A. Hijazi. Journal of Animal Physiology and Nutrition. 91:7-8:333 – 340.
18. Effect of Feed with Withdrawal and Heat Acclimatization on Stress Responses of Male Broiler- and Layer-type Chicken (*Gallus gallus domesticus*), 2005. **K. Z. Mahmoud** and A. M. Yaseen. Asian-Aust. J. Anim. Sci. (18):1444 – 1450.
19. Influence of Organic Selenium on HSP70 Response of Heat-Stressed and Enteropathogenic *Escherichia Coli*-Challenged Broiler Chickens, 2005. **Kamel Z. Mahmoud** and F. W. Edens. Comparative Biochemistry and Physiology C: (141): 69 – 75.
20. Effect of Varying Levels of Dietary Undegradable Protein on Nutrient Intake, Digestibility and Growth Performance of Awassi Lambs Fed on High Wheat Straw Diets, 2005. S. G. Haddad, **K. Z. Mahmoud**, H. A. Talfaha. Small Ruminant Research (58): 231 – 236.
21. Influence of selenium sources on age-related and mild heat stress-related changes of blood and liver glutathione redox cycle in broiler chickens (*Gallus domesticus*), 2003. **Kamel Z. Mahmoud** and F. W. Edens. Comparative Biochemistry and Physiology B: (136): 921 – 934.
22. Effect of Ascorbic Acid and Acute Heat Exposure on Heat Shock Protein 70 Expression by Young White Leghorn Chickens, 2003. **Kamel Z. Mahmoud**, F.W. Edens, E.J. Eisen, and G.B. Havenstein. Comparative Biochemistry and Physiology C (136) 329 – 335.
23. The effect of dietary phosphorus on Heat Shock Proteins mRNA During Acute Heat Stress of Male Broilers (*Gallus gallus*), 2004. **Kamel Z. Mahmoud**, F.W. Edens, E.J. Eisen, and G.B. Havenstein. Comparative Biochemistry and Physiology C (137): 11 – 18.
24. Ascorbic Acid decreases Heat Shock Protein 70 and Plasma corticosterone in broilers (*Gallus gallus Domesticus*) Subjected to Cyclic Heat stress, 2004. **Kamel Z. Mahmoud**, F.W. Edens, E.J. Eisen, and G.B. Havenstein. Comparative Biochemistry and Physiology B(137): 35 – 42.
25. Acute High Environmental Temperature and Calcium-Estrogen Relationships in the Hen, 1996. **Mahmoud, K. Z.**, M. M. Beck, S. E. Scheideler, M. F. Forman, K. P. Anderson, and S. D. Kachman. Poultry Sci. 75:1555-1562.

**Additional
Professional Activities
(Conferences and
Workshops)**

1. Betaine supplementation improves water balance and meat quality of broiler chicks. **K. Z. Mahmoud**. International Poultry Scientific Forum, **Atlanta, GA, USA**. Feb 11 - 12, 2019.
2. Early feed delay ameliorates Hepatic Glycogen concentration in broiler chicken. **K. Z. Mahmoud** and F. W. Edens. 53rd Southern Conference on Avian Diseases, **Atlanta, GA, USA**. January 23-24, 2015.
3. Decay of maternal antibodies against a group of pathogens in broiler chickens. Saad Gharaibeh, and **Kamel Mahmoud**. 53rd Southern Conference on Avian Diseases, **Atlanta, GA, USA**. January 23-24, 2015.
4. Growth performance and meat quality characteristics of broilers fed different levels of sesame hulls. **K. Z. Mahmoud**; B. S. Obeidat; A. Y. Abdullah; and M. A. Ishmais. Poultry Science Association, Raleigh NC USA. July, 2009.
5. Effect of feed withdrawal on antioxidant status, H/L ratio, and growth performance in male broiler chicks subjected to acute heat stress, 2008. **K. Z. Mahmoud**, O.S. Al Marashdeh. The 1st Mediterranean Summit of WPSA, **Porto Carras, Chalkidiki, Greece** 7 – 11 May, 2008
6. Effect of garlic (*Allium sativum*) supplementation on egg quality and yolk cholesterol in layer hens, 2006. **K. Z. Mahmoud**, Gharaibeh, A. M. Qatramiz. The 12th European Poultry Conference, **Verona, Italy** 10 – 14 Sept, 2006.
7. Effect of Recombinant Bovine Somatotropin on Pregnancy Rate and Hormonal Profile in Estrous-Synchronized Awassi sheep. Ababneh M. M., Husein, M. Q., **K. Z. Mahmoud** Proc. 6th International **Sheep Veterinary Congress. Greece**. 2005.
8. Effect of Feed with Withdrawal and Heat Adaptation on Stress Responses of Male Broiler- and Layer-type Chicken. **K. Z. Mahmoud** and A. M. Yaseen. Proc. 11th **AAAP Congress, Malaysia** Vol. II: 426 – 428, 2004.
9. Heat shock protein mRNA and phosphorus relationships during heat stress of male broilers, 1997. **K. Z. Mahmoud**, S. Wang, S. Mann, and F.W. Edens. Southern Poultry Science Society. 76(Suppl. 1).
10. Influence of vitamin C on heat shock protein 70 expression in five-week-old White Leghorn chickens subjected to acute heat stress, 1998. **K. Z. Mahmoud** and F.W. Edens. Poultry Science. 77(Suppl. 1): 22 (Abstr.)
11. Vitamin C reduces HSP70 and plasma corticosterone response in broilers subjected to cyclic heat stress, 1999. . **K. Z. Mahmoud**, F.W. Edens and E. Eisen. Southern Poultry Science Society. 78(Suppl. 1): S46 (Abstr.).

12. Variation in heat shock protein 70 expression rate among naked neck crosses with athens-canadian or commercial broiler backgrounds, 1999. **K. Z. Mahmoud**, F.W. Edens, E. Eisen, G. Havenstein, and K. Washburn. 78(Suppl. 1):61 (Abstr.).

**Review Articles for
Several Journals**

1. Asian-Australasian Journal of Animal Science
2. Comparative Biochemistry and Physiology Journal
3. Iranian Journal of Animal Science
4. Italian Journal of Animal Science
5. Jordan Journal of Agricultural Sciences
6. Journal of Agricultural Science and Technology
7. Journal of Animal Physiology and Nutrition
8. Livestock Science

**Workshops
Attended as a
Trainee**

- Using SAS Under UNIX Primer, North Carolina State University, February, 1996.
- SAS Short Course, North Carolina State University, February, 1998
- Chair of The Twelfth Annual NCSU Physiology Graduate Student Symposium. April, 1999.
- Professional Development Workshop. Nominated Participant, October, 1999. Chapel Hill, NC.
- Workshop on Educational Technology, JUST. 1/2001.
- Workshop on Student Grading and Evaluation, JUST. 6/2001.
- Fourth Jordanian Quality Conference. Amman, Jordan. 8-10/9/2003.
- Training Course on Analysis Using HPLC, JUST. 1/2005.
- Hatchery Management Workshop, Raleigh, NC, 3/2010
- Development of Curriculum & Study plans, 1/2014
- Statistical Package for Social Sciences, 1/2014

Skills

- Hormone analyses using radioimmunoassay
- Hormone analyses using ELISA
- Approximate feed analysis
- Blood Chemistry assays
- Antioxidant enzyme assays
- Mineral analyses using Atomic Absorption and Spectrophotometer
- Horizontal and vertical electrophoresis, DNA/RNA extraction, DNA labeling
- Western blot, Northern blot and Southern blot, PCR, PCR-RFLP and RAPD
- Statistical Analysis Software (SAS):
- Descriptive Statistics (Proc UNIVARIATE, Proc Means, Proc TTEST)
 - General Linear Models (Proc ANOVA, Proc GLM, Proc NESTED)
 - Mixed Models (Proc MIXED)
 - Simple and Multiple Regression (Proc REG)
 - Polynomial Models with Several Variables (Proc RSREG)
 - Proc FREQ
 - Non-parametric Analysis (Proc RANK, Proc NPAR1WAY)

Professional Memberships

- American Society of Poultry Science / Former member
- Jordanian Council for Agricultural Engineers

Awards Received

- Frank and Inez Mussehl Graduate Scholarship, Nebraska, Lincoln 1995.
- Fulbright Fellowship, Department of State, USA, 2009/2010

Languages

Fluent English and Arabic

Extension and Consultation Experience

- Provide management and nutritional and managerial advices to local farms in Jordan.
- Workshops in Poultry Farm Management / National Center for Agricultural Research and Extension.
- Workshops in Experimental Design and Statistical Analysis / National Center for Agricultural Research and Extension.
- Educational lectures about different poultry topics especially nutritional management to different national agencies and public gatherings: Jordan University of Science and Technology (students), Agricultural Engineers Association (Amman and Irbid).
- Feed additive evaluation for the following companies:
 - Al-Ghad Technology for Feed additives Co. Ltd., Koufor Yoba, Jordan
 - Biochem Zusatzstoffe Handels-und Produktionsges. Lohne, Germany
 - Animal Wellness Product (AW.P), Reggio Emilia – Italy

References**Dr. Frank W. Edens**

Department of Poultry Science
North Carolina State University
Raleigh, NC 27695, USA
Email:
fwedens@mindspring.com

Dr. Mary M. Beck

A224h Animal Science
Building Lincoln, NE 68583,
USA Email:
mbeck1@unl.edu

Dr. Sa'eb Khresat

President of Jordan University of Science & Technology
P.O. Box 3030
Irbid, 22110, JORDAN
Email: rkridli@just.edu.jo