

Dr. Muhammad Mobashar (Tel: +92-3359523622)

Assistant Professor, Department of Animal
Nutrition, The University of Agriculture,
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Objectives

To work in the field of animal and agricultural sciences with a special emphasis on research (In Vitro and In Vivo experiments), animal nutrition (poultry nutrition), mycotoxins, nutrient biology at molecular level, role of nutrient from growth to performance of an animal, feed intake and energy and protein regulation, bioinformatics, microbiology, animal reproduction, feed industry, poultry farm, poultry diseases, sales/marketing, HGT, ELISA, HPLC, GC, PCR and to discover new strategies which are both economically and environmentally compatible by acquiring different techniques to improve animal sector.

Experiences

**The University of Agriculture,
Peshawar, Pakistan**
Department of Poultry Science.
Assistant Professor
April, 2013-continue

- 1) Teaching "Recent Developments in Poultry Nutrition"
- 2) Teaching "Avian Physiology" to postgraduate students
- 3) Teaching "Avian Embryology" to Ph. D students
- 4) Supervision of students in research.
- 5) Running projects for students in poultry sector (Nutrition and Mycotoxin).

**The University of
Bonn, Germany,**
Institute of Animal
Science, Animal
Nutrition Group- **as a
Junior Scientist**
December 2005- October
2011

In-Vitro Trials:

- Worked on project "Ruminal degradation of mycotoxin at varying rations and rumen microbial populations".
- Worked on project "Comparative activity of rumen fluid from sheep and horse faeces as inoculums for in vitro gas production measurements".
- Worked on feed evaluation, gas and digestibility estimation.
- Worked on ammonia and short chain fatty acids production.

- Worked with Hohenheim Gas Test (HGT), Gas Chromatography (GC), High Performance Liquid Chromatography (HPLC) and Polymerase Chain Reaction (PCR).
- Worked on establishment of different rumen microbial populations.
- Practical experience with molecular biology.
- Worked on different chemical (antibiotics plus fungicides) and physical methods (centrifugations) concerning rumen microbes.
- Worked with bacteria, fungi and protozoa populations.
- Microscopic experience with counting and quantifying bacteria, fungi and protozoa

In-Vivo Trials:

- Feed intake and digestibility.
- Passage rate and use of markers in nutritional studies.
- Measures of digestibility (ruminants & poultry).
- Effects of thymol, carvacrol and their active components on feed intake and performance of broilers.
- Feed conversion ratio.
- Intestinal microflora enumeration and carcass traits

Laboratory, Feeds & Inspections:

- Experience with laboratory proximate analysis techniques.
- Proximate analysis of nutrients g/kg dry matter (DM) of diets fed to growing broiler chicks.
- Worked on laboratory scale feed processing.
- Feed manufacture (feed mill on small scale).
- Chemical analysis of herbs used in broiler feeds.
- Ration formulation.
- Feed pellets production
- Experience with feed mixing (concentrate and roughage).
- Inspected poultry slaughter house (Borgmeier GmbH-Delbruek-Schoening-Germany. This includes anesthesia, automatic slaughtering, cleaning, packing and marketing of the broilers.
- Inspected layer Breeder Poultry Farm (White Lohmann and Brown Lohmann)-Remscheid, Germany. This includes rearing systems, hatchery, automatic system of eggs transferring from floor and cages and then sorting, labeling, packing and marketing.
- Assisted colleagues in team in scientific writing (manuscripts), statistical analysis and data interpretation.
- Took part actively in scientific discussions on different projects running in team.
- Delivered different presentations.

Georg-August University Goettingen, Germany, Institute of Animal Breeding and Animal Genetics-as a paid trainee

October 2004- February 2005

- Worked on cryopreservation of murine embryo.
- Application of conventional slow freezing technique.
- Superovulation of female mice
- Collection of embryo by dissection of female reproductive system
- Sacrificing of donor animals
- Actively participated in weekly scientific discussions.

Kunhar Poultry Breeders, Mansehra, Pakistan- as a **Farm Manager**

May 2002-December 2002

- Poultry broiler breeder farm management.
- Worked on composition of feed ingredients for poultry feed.
- Worked with feed manufacture mill.
- Worked on controled and treatment of different poultry diseases
- Client contact, marketing and sales of feeds.
- Monthly presentation to customers and dealers regarding feeds

Veterinary Research & Disease Investigation Center, Abbottabad, Pakistan-as a **Research Assistant**

April 2001-April 2002

- Worked on poultry clinics and laboratory diagnostic techniques.
- Experience with dissection of poultry birds and diagnosing diseases.
- Working experience with poultry diseases.
- Prescribing medicines for the poultry birds.
- Worked on cell culture and antibiotic sensitivity test.
- Delivered lectures on poultry diseases

NWFP Agricultural University Peshawar, Pakistan

April 1998-May 2001

- Worked on project “Yield and Nutritive Value of Alpine Pastures of Upper Kaghan Valley-Pakistan”.
- Pasture yield estimation.
- Chemical composition of pastures.
- Worked on In-vitro method (Tilley and Terry).
- Worked on In vitro dry matter digestibility of pastures.
- Delivered lectures to the Bachelor students in animal nutrition.
- Worked on “Effect of Aflatoxins on the Performance of Domestic Animals”.

NWFP Agricultural University Peshawar, Pakistan

July 1993-February 1998

- Exposure to agricultural, animal breeding and animal nutrition sectors.
- Regular visit to Veterinary Research Centre Peshawar, Pakistan.
- Visit to Surazai Farm, Peshawar, Pakistan (Artificial Insemination Centre).
- Regular visit to university broiler poultry farm.

Education

- University of Bonn, Germany. 2005-2011

PhD/Promotion in Agriculture.

Focus: Animal Nutrition (Mycotoxin)

Title: Ruminal Degradation of Ochratoxin A-In Vitro Investigations at Varying Rations and Rumen Microbial Populations.

- NWFP Agricultural University Peshawar, Pakistan. 1998-2001
Master of Science in Animal Husbandry.
Focus: Animal Nutrition
Title: Yield and Nutritive Value of Alpine Pastures in Upper Kaghan Valley, Pakistan
- NWFP Agricultural University Peshawar, Pakistan. 1993-1998
Bachelor of Science in Animal Husbandry.
Focus: Animal Nutrition

Trainings

**Dairy Cattle Farm
Haus Riswick-
Germany.
January-2011**

- Training in animal housing systems, mechanical milking, feeding and feed conservation systems.

**Layer Breeder Farm
Remscheid-Germany.
January-2011**

- Training in breeders rearing systems, hatchery and automatic eggs transferring systems.

**Poultry Slaughter
House, Delbrueck-
Schoening-Germany.
January-2011**

- Training in anesthesia, automatic slaughtering, cleaning and packaging of broilers.

Award Honors

- Got 3th position in The faculty of Animal Husbandry and Veterinary Sciences in Bachelor (Hons) during session 1993-1998.
- Got 2nd position in The faculty of Animal Husbandry and Veterinary Sciences in M. Sc (Hons) during session 1999-2000.
- Completed Master (Hons) with scholarship from Higher Education Commission, Ministry of Pakistan.
- Got Certificate of Excellent Teaching in spring semester-2013 by QEC (Quality Enhancement Center, The University of Agriculture Peshawar-Pakistan).
- Got Certificate of Excellent Teaching in Fall semester-2014 by QEC (Quality Enhancement Center, The University of Agriculture Peshawar-Pakistan).

Computer Skills

- Working experience with computer application software packages like FCC, MS Word, MS Excel, MS Power Point, Graphics, Graph Pad Prism and End note program. The National Institute of Electronics-The Ministry of Science and Technology- Islamabad

Statistical Skills

- Working experience in SPSS and SAS statistical packages (this has given me confidence that I can rapidly learn new skills when required to do so.
- Working experience with polynomial contrasts and orthogonal contrasts.
- Working experience with general linear model (GML).
- Experience in analyzing and interpreting data.
- Confident and determined decision power of applying statistical model/design to a set of data.

Spoken Languages

- Intensive German Language Course Certificate (B1 level) (71% Marks) from National University of Modern Languages, Islamabad, Pakistan. January 2003-June 2003 and interaction with German society 2004- till now.
- Diploma in English Language from Pakistan Institute of Modern Languages, Rawalpindi, Pakistan. November 2003- April 2004.
- TOEFL Course from National University of Modern Languages, Islamabad, Pakistan. August 2003-October 2003.
- English (advanced), German (intermediate), Arabic (basic), Urdu (native), Hindi and Punjabi (advanced).

Conferences and Workshops

- Proceedings of the Society of Nutrition Physiology, Goettingen, Germany. Poster Presentation. 15th- 17th March, 2011.
- Participation in National Seminar on Scope of Rural Development in Khyber Pakhtunkhawa (May 29-30, 2013) at Research & Disease Investigation Centre, Missile Chowk, Abbottabad. Delivered presentation on Overview of Backyard Poultry Farming in KPK.
- International Livestock Dairy & Poultry Congress (April, 9-10, 2013) in Awane-Iqbal Lahore.
- Proceedings of the Society of Nutrition Physiology, Goettingen, Germany. Poster Presentation. 15th- 17th March, 2011.
- Proceeding of the Society of Nutrition Physiology, Goettingen, Germany. 9th -11th March, 2010.
- 32nd Mycotoxin Workshop at DTU. 14th- 16th June, 2010, Lyngby, Copenhagen, Denmark.
- Proceedings of the Society of Nutrition Physiology,

Important Research Publications

- Goettingen, Germany. 2007, 2008 and 2009.
- Poster presentation on Yield and Nutritive Value of Alpine Pasture in Upper Kaghan Valley. International Workshop on Dairy Science Park (DSP)-Nov, 18-20, 2013. The University of Agriculture Peshawar-Pakistan.
 - International Poultry Expo- 2013. Expo Center Lahore. Pakistan.
 - Abstract submitted on "Relative contribution of different rumen microbial co-cultures to gas, short chain fatty acids and ammonium production from different rations using Hohenheim gas test in vitro system" to Proceeding of the Society of Nutrition Physiology, Goettingen, Germany. 2014. **Mobashar, M.**, Hummel, J., and K.-H., Südekum.
1. **Mobashar, M.**, Blank, R., Hummel, J., Westphal, A., Tholen, E., and K.-H., Südekum (2012). Ruminal ochratoxin A degradation- contribution of different microbial populations and influence of diet. *Animal Feed Science and Technology*, 2012, Vol, 171, 85-97.
 2. **Mobashar, M.**, Hummel, J., Blank, R and K.-H., Südekum (2010). Ochratoxin A in ruminants-A review on its degradation by gut microbes and effects on animals (A Review). *Toxins* 2010, 2, 809-839.
 3. Blank, R., Loof, M., **Mobashar, M.**, Westphal, A., K.-H, Südekum (2010). Ochratoxin A in dairy goats (abstract) has been presented in 32nd Mycotoxin Workshop at DTU, Lyngby, Copenhagen, Denmark.
 4. A. Can, J. Hummel, **M. Mobashar**, U. Boeser, and K.-H. Südekum (2009). Comparison of sheep ruminal fluid with sheep and horse faeces as inoculums for in vitro gas production measurements. *J. App. Anim. Res.* 35: 143-148.
 5. **Mobashar, M.**, Hummel, J., and K.-H., Südekum. Relative contribution of different rumen microbial co-cultures to gas, short chain fatty acids and ammonium production from different rations using Hohenheim gas test in vitro system (under review for *Animal Feed Science and Technology*).
 6. **Mobashar, M.**, Habib. G., Khan. S and Qureshi, M.S. Yield and nutritive value of Alpine Pasture in Upper Kaghan Valley-Pakistan, 2013. (Submitted to International Workshop on Dairy Science Park (DSP)-2013).
 7. Abdel-Wareth, A.A.A., Hassanein, H.H.M., **Mobashar, M.** Production performance and egg quality of laying hens fed different dietary levels of enzymatic growth promoters under tropical conditions, 2013. (published and presented in International Workshop on Dairy Science Park-2013).
 8. Amjed Ali, Sarzamin Khan, **Muhammad Mobashar**, Muhammad Inam, Iftikhar Ahmed, Nazir Ahmed Khan and Mubarak Ali, , Hamayun Khan. (2013). Effect of different levels of organic acids supplementation on feed intake, milk yield and milk composition of dairy cows during thermal stress. *Greener Journal of Agricultural Sciences*. Vol. 3

(11): 762-768.

9. Sarzamin Khan, Asad Sultan, Aaqil Muhammad, Naila Imtiaz, **Muhammad Mobashar**, Hamayun Khan, Mohammad Saleem, Mohammad Inam and Rafiullah (2013). Lower ileal microflora and growth performance of broilers supplemented with organic acid blend (Aciflex®) during starter Phase. **Greener Journal of Agricultural Sciences. Vol. 3 (12): 794-800.**
10. **Mobashar, M.**, Hummel, J., and K.-H., Südekum (2014). Relative contribution of different rumen microbial co-cultures to gas, short chain fatty acids and ammonium production from different rations using Hohenheim gas test in vitro system. Abstract submitted to Proceeding of the Society of Nutrition Physiology, Goettingen, Germany. 2014.
11. Ziaul Islam, Sarzamin Khan, **Muhammad Mobashar** (2013). Comparison of commercial and rural poultry eggs in term of external and internal egg quality. (Submitted to Archives Journal of Animal Nutrition).
12. Zahid Ali Shah, Iftikhar Ahmed, M.S. Khan, **Muhammad Mobashar**, Hamayun Khan (2013). Comparative anthelmintic efficacy of *Caesalpinia crista*, *Nigella sativa* and Oxfendazole in broilers with experimentally induced *Ascaridia galli* infection. (Submitted to Archives Journal of Animal Breeding).
13. Zakir Hussain, Sarzamin Khan, **Muhammad Mobashar** (2013). A study on Pregnancy Diagnosis in Dairy Animals Through Inhibition of Seed Germination. (Submitted to Archives Journal of Animal Breeding).
14. Shams-ul-Hayat, Sarzamin Khan, **Muhammad Mobashar** (2013). Comparative Study on Natural Mating and Artificial Insemination in Japanese Quails (*Coturnix japonica*). Submitted to Asian-Australian Journal of Animal Science and got submission no. 14021.
15. Sarzamin Khan, Shah Hussain, **Muhammad Mobashar**, Asad Sultan, Naila Imtiaz, Munib Hussain (2013). Incidence of antibiotic residues in poultry products in District Peshawar-Pakistan. Submitted to Journal of Agriculture and Food Science.
16. Wajid Ali Khan, Sohail Ahmad, Iftikhar Ahmed, Sarzamin Khan, **Muhammad Mobashar** (2013). Validation of ISAG recommended STR markers in ascertaining parentage in local and Holstein Friesian cattle. (submitted to Archives Journal of Animal Breeding).
17. Sarzamin Khan, Momin Khan, Asad Sultan and **Muhammad Mobashar** (2014). Effect of various Semen Extenders on Quails Eggs Fertility and Hatchability. Submitted to Asian-Australian Journal of Animal Science and got submission no. 14034.
18. Sarzamin Khan, Shoaib Khan, Rafiullah, Asad Sultan and **Muhammad Mobashar** (2014). Effect of Stocking Density on Performane, Oxidative Stress and

Behaviour of Broiler Reared in Cages during summer. Submitted to Asian-Australian Journal of Animal Science and got submission no. 14033.

Membership of Associations/Organizations-

1. Member of Alumni, The University of Agriculture, Peshawar. 04.04. 13-continue.
2. Member of Blood Donor Society, The University of Agriculture, Peshawar. 1997- 1999.
3. Member of Board of Studies in the Department of Poultry Science
4. Member of Board of Studies in the Department of Livestock Management.
5. Active member of Technical committee and Press, Dairy Science Park (DSP-2013).

Research Projects

1. Effect of *Aspergillus niger*, *Aspergillus oryzae* and their combination on biodegradation of aflatoxin B1 in broiler feed. **0.5 million (approved by HEC)**
2. Hygienic status of poultry eggs consumed in District Peshawar is **(approved and funded by RI)**.
3. Hygienic status of poultry meat consumed in District Peshawar is **(approved and funded by RI)**.
4. Comparative studies on biological degradation of aflatoxins B1 and B2 in poultry birds. **2.57 million (Submitted to ALP)**.
5. Rising of backyard poultry production through nutritional innovations strategy in District Peshawar. **1.5 million (submitted to Endowment Fund-AUP)**.
6. Establishment of Blast Freezing Poultry Processing Model in the Department of Poultry Science, The University of Agriculture Peshawar. **(approved by Dost, 2.5 million)**.

References

References can be provided on request please.