



Salma Abdelsalam Hashem Abu Hafsa

Associate Professor

Acting Head of Livestock Research Dept

<p><b>PERSONAL INFORMATION</b></p>	<p>Full Name: Affiliations:  Address:  Mobile No.: E-mail: Important links:</p>	<p>Salma Abdelsalam Hashem Abdelgelil Abu Hafsa Livestock Research Dept, Arid Lands Cultivation Research Institute, City of Scientific Research and Technological Applications, New Borg El-Arab, Alexandria 21934, Egypt.  City of Scientific Research and Technological Applications, New Borg El-Arab, Alexandria 21934, Egypt.  00201000313649 hashim_salma@yahoo.com</p>
<p><b>EDUCATION</b></p>	<ol style="list-style-type: none"> <li>1) <b>Ph.D.</b>, poultry production entitled “<i>Studies on the effect of locally prepared probiotic bacteria (Bacillus subtilis) on broilers performance</i>”, Department of Animal and Fish Production, Faculty of Agriculture (Saba-Bacha), Alexandria University, Alexandria, Egypt, (2012).</li> <li>2) <b>M.Sc.</b>, poultry production entitled “<i>Effect of Flock Age and Dietary Fat on Production and Reproduction Performance in Japanese quail</i>”, Department of Animal and Fish Production, Faculty of Agriculture (Saba-Bacha), Alexandria University, Alexandria, Egypt, (2003).</li> <li>3) <b>B.Sc.</b>, in Fish farming, Department of Animal and Fish Production, Faculty of Agriculture (Saba-Bacha), Alexandria University, Alexandria, Egypt, (1999). General Grade: Very Good.</li> </ol>	
<p><b>ACTIVITIES</b></p>	<p><b>Scientific Activities</b></p> <p><b><u>Workshops and Training</u></b></p> <ol style="list-style-type: none"> <li>1. Attended the workshop "From Lab to Industry". October 16<sup>th</sup>, 2019. City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.</li> <li>2. Participated in a workshop "Marine Biotechnology for Sustainable Development", December 25 – 26, 2018, Marine Environment Division, National Institute of Oceanography and Fisheries, Alexandria branch, Alexandria Egypt.</li> <li>3. Participated in a training program "Biodiversity: Applications on measurement and statistical analysis of biological data", June 25<sup>th</sup>, 2018, City of Scientific Research and Technological Applications, SRTA-City in cooperation with Arab society for fungal conservation, Alexandria, Egypt.</li> </ol>	

4. Participated in the international conference "Agriculture for Life, Life for Agriculture", June 7-9, 2018, University of Agronomic Science and Veterinary Medicine of Bucharest, Bucharest Romania.
5. Participated in a workshop "Writing project proposals", January 30 – February 1, 2018, SRO & SPACE center, Faculty of Agriculture, Alexandria, Egypt.
6. Participated in a Bloodborne Pathogen Training, October 31<sup>st</sup>, 2016 organized by Prestige Department of poultry Science, North Carolina State University, USA.
7. Participated in a Laboratory Biological Safety Training, October 6<sup>th</sup>, 2016 organized by Prestige Department of poultry Science, North Carolina State University, USA.
8. Participated in a training workshop "Climate change and Agricultural sectors: impacts, vulnerability and adaptation", May 25<sup>th</sup>, 2016 organized by Alexandria Research Centre for Adaptation, Egypt.
9. Attended the workshop "Nutritional and Therapeutic Uses of Honey Bee Products" 1- Honey Bee. May 24<sup>th</sup>, 2016. Arid Lands Cultivation Research Institute (ALCRI), City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.
10. Attended the workshop "Moringa, its Food and Medical Importance". May 11<sup>st</sup>, 2016. Arid Lands Cultivation Research Institute (ALCRI), City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.
11. Attended the workshop "Towards A good Research". May 5<sup>th</sup>, 2016, held at the Medical Technology Center, Medical Research Institute, Alexandria University, Egypt.
12. Attended to workshop in December 1<sup>st</sup>, 2014 "Data analysis and modeling by using Co-Stat statistical software" Arid Lands Cultivation Research Institute (ALCRI), City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.
13. Training in May 20 - 22, 2013 "Training of trainers on cultivation and development of *JatrophaCurcas*", held in City of Scientific Research and Technological Applications, Alexandria, Egypt. Under the framework of JatroMed project co-funded by the European commission and the partner countries.
14. Attended to workshop in November 5-7, 2012 "International Workshop on Recent Strategies of Animal Production" Organized by the Department of Animal Production, Faculty of Agriculture, Alexandria University, Egypt.
15. Attended to workshop in September 2-11, 2012 "Bioassays of Medicinal Plants" organized by Medical Biotechnology Department, Genetic Engineering and Biotechnology Research Institute, City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.
16. Attended to workshop in July 9-11, 2012 "Adulteration and Detection of Meat Species-Specific Using Molecular Genetic Techniques" organized by Nucleic Acid Research Department, Genetic Engineering and Biotechnology Research Institute, City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.
17. Attended to workshop in June 25-27, 2012 "Detection of Pathogenic Bacteria in

Water and Food" Organized by The Environmental Biotechnology Department, Genetic Engineering and Biotechnology Research Institute, City of Scientific Research and Technological Applications, SRTA-City, Alexandria, Egypt.

18. Training session in (2012) "New protein resources for animal nutrition" Animal Production Research Institute (APRI), Agriculture Research Center, Ministry of Agriculture, Egypt, 9 Nadi Al-Saeed St., Al-Doki, Giza, Egypt.
19. Training session in (2012) "Ways to make traditional and non-traditional ration for different animal ages as a part of graduated youth project" at Nobarria station, Animal Production Research Institute (APRI), Agriculture Research Center, Ministry of Agriculture, Egypt, 9 Nadi Al-Saeed St., Al-Doki, Giza, Egypt.
20. Training session in (2012) "Feeding farm animals at, the Saharen zone" at Nobarria station, Animal Production Research Institute (APRI), Agriculture Research Center, Ministry of Agriculture, Egypt, 9 Nadi Al-Saeed St., Al-Doki, Giza, Egypt.
21. Training course in August 23 to September 24, 2010 "Introduction to Molecular Biology Techniques" at Iowa State University, USA.
22. Training course in April 29, 2010 "Fire Safety and Extinguisher Training" at Iowa State University, USA.
23. Training course in April 29, 2010 "Autoclave Training" at Iowa State University, USA.
24. Training course in April 29, 2010 "Hazardous Materials Shipping Awareness Training" at Iowa State University, USA.
25. Training session in April 26 - 27, 2009 "Breeding and feeding rabbits" funded by the social development fund, Faculty of Agriculture (Shatby), Alexandria University, Alexandria, Egypt.

**Participation in conferences and symposia:**

- 1- The 10<sup>th</sup> International Poultry Conference, November, 26-29, 2018 Sharm-Elsheikh, Egypt.
- 2- The 7<sup>th</sup> International Conference "Agriculture for Life, Life for Agriculture" June, 6 – 9 2018, Bucharest, Romania.
- 3- The 17<sup>th</sup> International Conference on Probiotics in Veterinary Medicine, April, 8-9, 2015 Dubai, UAE.
- 4- The 5<sup>th</sup> International scientific conference on small ruminant production, March, 10-15, 2015, Sharm-El Shiekh, Egypt.
- 5- The 5<sup>th</sup> American Rabbit congress "Sustainable rabbit production for food security in America. September 8 – 11, 2014, Mexico.
- 6- The International Conference on Optimizing Productivity of Ruminants, Poultry and Fishes & the 7<sup>th</sup> International Conference on Rabbit Production in Hot Climate, September 8-12, 2014, Marsa-Allam City, Egypt.
- 7- The 14<sup>th</sup> Scientific Conference on Animal Nutrition, November 26-29, 2013 Hurghada City, Egypt.

	<p>8- Annual Meeting Scientific Program, (IFT 2012), June 25 -28, 2012, in Las Vegas, USA.</p> <p><b>Administrative Activities</b></p> <ul style="list-style-type: none"> <li>• Acting Head of Livestock Research Department, Arid Lands Cultivation Research Institute, City of Scientific Research and Technological Applications since January 1, 2020.</li> </ul> <p><b>Extra-curriculum Activities</b></p> <p><b><u>Professional Memberships</u></b></p> <ol style="list-style-type: none"> <li>1. Member of Agricultural Career Syndicate</li> <li>2. The Egyptian Poultry Science Association</li> <li>3. World Poultry Science Association</li> <li>4. Member of the Egyptian Nutrition and Ration Assembly</li> <li>5. Member of the Egyptian Rabbit Science</li> <li>6. Member of the Arab Society of Animal Wealth</li> </ol> <p><b><u>Volunteer work</u></b></p> <ul style="list-style-type: none"> <li>• A volunteer as a spokesperson in the Bedouin community at the Al-Hilali workshop "Bedouin Self-Documentation of Intangible Cultural Heritage: From Smartphone Applications to Cloud Computing." November 14-15, 2017, Organized by Informatics Research Institute, City of Scientific Research and Technological Applications, (SRTA-City), Alexandria, Egypt.</li> </ul>
<p><b>GRANTS &amp; AWARDS</b></p>	<p><b><u>Grants</u></b></p> <ul style="list-style-type: none"> <li>• Granted a fully funded post-doc. scholarship sponsored by the Egyptian Ministry for Higher Education and Scientific Research from September, 2016 to March 2017 at NC State University, USA.</li> <li>• Participant to the research activities in scientific grant from February 1, 2013 to April 30, 2013 at University of Ovidius Constanta, Romania, as provisioned in the Marie Curie Research Project no 295137, FP7-PEOPLE-2011-IRSES.</li> <li>• Granted a fully funded Ph.D. scholarship sponsored by the Egyptian Ministry for Higher Education and Scientific Research from January 2010 to November 2011 at Iowa State University, USA.</li> </ul>

	<p><b><u>Awards</u></b></p> <ul style="list-style-type: none"> <li>• Awarded a certificate of thanks and appreciation for her outstanding effort in the success of the presentation of SRТА-City at the 5<sup>th</sup> Cairo International Exhibition for Innovation, November 8-9, 2018, and awarding SRТА-City the Medal of Academy of Scientific Research and Technology for its outstanding participation in this exhibition.</li> <li>• Achievement award in recognition and appreciation of research contribution and great scientific achievement for her distinguished publication in 2015 from SRТА-City.</li> <li>• Awarded a certificate of thanks and appreciation for the best research in the field of "poultry nutrition", November 26-29, 2013 at The 14<sup>th</sup> Scientific Conference on Animal Nutrition, Hurghada City, Egypt.</li> </ul>
<p><b>LIST OF PUBLICATIONS</b></p>	<p><b><u>Journal publications</u></b></p> <ol style="list-style-type: none"> <li>1. <b>Salma H. Abu Hafsa</b>, Ibrahim, S. A., Eid, Y. Z. and Hassan, A. A. (2020). Effect of dietary Moringa oleifera leaves on the performance, ileal microbiota and antioxidative status of broiler chickens. <i>Journal of Animal Physiology and Animal Nutrition</i> 104, 529–538.</li> <li>2. Hassan, A., <b>Abu Hafsa, S. H.</b>, Elghandour, M. M. Y., Ravi Kanth Reddy, P., Salem, M. Z. M., Anele, U.Y., Pandu Ranga Reddy, P., Salem, A.Z.M. (2020). Influence of <i>Corymbia citriodora</i> leaf extract on growth performance, ruminal fermentation, nutrient digestibility, plasma antioxidant activity and faecal bacteria in young calves. <i>Animal Feed Science and Technology</i> 261, 114394.</li> <li>3. Hassan, A. A., <b>Salma H. Abu Hafsa</b>, Mona M. M. Y. Elghandour, Reddy, P. R. K., Cedillo Monroy, J. and Salem, A. Z. M. (2019). Dietary Supplementation with sodium bentonite and coumarin alleviates the toxicity of aflatoxin B1 in rabbits. <i>Toxicon journal</i> 171, 35-42.</li> <li>4. Elghandour, M. M. Y., Tan, Z. L., <b>Abu Hafsa, S. H.</b>, Adegbeye, M. J., Greiner, R., Ugbogu, E. A., Cedillo Monroy, J. and Salem, A. Z. M. (2019). <i>Saccharomyces cerevisiae</i> as a probiotic feed additive to non and pseudo-ruminant feeding: a review, <i>Journal of Applied Microbiology</i> 128, 658—674.</li> <li>5. Elghandour, M. M. Y., Khusro, A., Adegbeye, M. J., Tan, Z., <b>Abu Hafsa, S. H.</b>, Greiner, R., Ugbogu, E. A., Anele, U.Y. and Salem, A. Z. M. (2019). Dynamic role of single-celled fungi in ruminal microbial ecology and activities: a review, <i>Journal of Applied Microbiology</i> 128, 950-965.</li> <li>6. Abdel-Azeem, A. S.; A. A. Hassan and <b>Salma H. Abu Hafsa</b> (2019). Body Weight Response, Milk Production and Lipid Peroxidation of Rabbit Does to Multi-Nutrient Block Supplementation during Summer Conditions. <i>J. Animal and Poultry Prod., Mansoura Univ.</i>, 10, 157- 163.</li> <li>7. Abdel-Azeem S. A.; M. M. Basyony and <b>Salma H. Abu Hafsa</b> (2019). Feed Intake, Antioxidant Properties and Litter Performance Affected by Multi-Nutrient Block Additive of Rabbit Does during Prevailing Heat Stress in Egypt. <i>J. Animal and Poultry Prod., Mansoura Univ.</i>, Vol.10, 133- 139.</li> </ol>

8. **Salma H. Abu Hafsa**, Zeweil, H. S.; S. Zahran; M. H. Ahmed; W. Dosoky and N. A. Rwif (2019). Effects of dietary supplementation with green and brown seaweeds on laying performance, egg quality, and blood lipid profile and antioxidant capacity in laying Japanese quail. *Egypt.Poult. Sci.* Vol. 39, 41-59.
9. A. S. Abdel-Azeem, A. A. Hassan, M.M. Basyony and **Salma H. Abu Hafsa** (2018). Rabbit growth, carcass characteristic, digestion, caecal fermentation, microflora, and some blood biochemical components affected by oral administration of anaerobic probiotic (ZAD®). *Egyptian J. Nutrition and Feeds* 21, 693-710.
10. Hassan, A. A.; Yacout, M.H.; Khalel, M. S.; **Salma H. Abu Hafsa**; Ibrahim, M. A. R.; Dorina Nicoleta Mocuta, Adrian Turek Rahoveanu and Lorena Dediu, (2018). Effects of some herbal plant supplements on growth performance and the immune response in Nile Tilapia (*oreochromis niloticus*). 7<sup>th</sup> International Conference "Agriculture for Life, Life for Agriculture" 6th – 9th June 2018, Bucharest, Romania, Vol. 1: (1), 134-141. DOI: 10.2478/alife-2018-0020.
11. **Salma H. Abu Hafsa**, S. A. Ibrahim (2018). Effect of Dietary Polyphenol-Rich Plant from Grape Seed on Growth Performance, Antioxidant Capacity and Ileal Microflora in Broiler Chicks. *Journal of Animal Physiology and Animal Nutrition* 102, 268–275.
12. Rizk; Y. S., Inas I. Ismail; **Salma H. Abu Hafsa**; Abeir A. Eshera; and F. A. Tawfeek (2017). Effect of dietary green tea and dried seaweed on productive and physiological performance of laying hens during late phase of production. *Egypt. Poult. Sci.* Vol 37, 685-706.
13. **Salma H. Abu Hafsa**, Salam A. Ibrahim, Ayman A. Hassan (2017). Carob pods (*Ceratonia siliqua L.*) improved growth performance, antioxidant attributes and caecal characteristics in growing rabbits. *Journal of Animal Physiology and Animal Nutrition* 101, 1307–1315.
14. **Abu Hafsa, S. H.**; Salem, A. Z. M.; Hassan, A. A.; Kholif, A. E.; Elghandour, M.M.Y.; Lopez, S. (2016). Digestion, growth performance and caecal fermentation in growing rabbits fed diets containing three different browse species. *World Rabbit Sci.*, 24, 283-293.
15. Hassan, A. A., A. Z. M. Salem, A. E. Kholif, M. Samir, M.H. Yacout, **S. H. Abu Hafsa**, G. Mendoza, M. M. Y. Elghandour, M. Ayala, And S. Lopez. (2016) Performance of crossbred dairy Friesian calves fed two levels of *Saccharomyces cerevisiae*: intake, digestion, ruminal fermentation, blood parameters and faecal pathogenic bacteria. *Journal of Agricultural Science* 154 (08), 1488-1498. doi:10.1017/S0021859616000599.
16. Zeweil, H. S.; Y. Z. Eid; S. Zahran; W. Dosoky; **Salma H. Abu Hafsa** and Amal Girges (2016). Effect of different levels of *Aspergillus awamori* as probiotic on the production and egg quality of laying Japanese quail under summer conditions. *Egypt.Poult. Sci.* Vol 36, 53-64.
17. Zeweil, H. S.; M. H. A. Abd El-Rahman; W. M. Dosoky; **Salma H. Abu Hafsa** and A. B. A. Abdulhamid (2016). Effects of ginger and bee propolis on the performance, carcass characteristics and blood constituents of growing Japanese quail. *Egypt. Poult. Sci.* Vol 36, 141-156.
18. Zeweil, H. S.; S. M. Zahran; M. H. A. Abd El-Rahman; W. M. Dosoky; **Salma H. Abu Hafsa** and A. A. Moktar (2016). Effect of using bee propolis as natural supplement on productive and physiological performance of Japanese quail. *Egypt.*

- Poult. Sci. Vol 36, 157-171.
19. **Salma H. Abu Hafsa**, Hassan A. Ayman, Assadi Soumeih elham, Agatha popescu, Dorina mocuta. (2016). Grape Seed (*Vitis Vinifera* L.) Alleviate Reproductive Toxicity Caused By Lindane In New Zealand White Male Rabbits. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 16, 17-28.
  20. El-Badawi, A.Y.; M.H.M.Yacout, **Salma H. Abu Hafsa**, A.A. Hassan, M.S. Khalel, Azza M. Kamal (2015). Application of ozone treatments on growing male rabbits. Global Journal of Animal Science, Livestock Production and Animal Breeding Vol 3, 186-195.
  21. **Salma H. Abu Hafsa**, M.M. Basyony and A.A. Hassan (2015). Effect of Partial Replacement of Soybean Meal with Different Levels of Guar Korma Meal on Growth Performance, Carcass Traits and Blood Metabolites of Broiler Chickens. Asian Journal of Poultry Science 9, 112-122.
  22. **Salma H. Abu Hafsa**, A. Mendonca, B. Brehm-Stecher, A. A. Hassan and S. A. Ibrahim (2015). Probiotic potential and antimicrobial activity of enterococcus faecium isolated from chicken caecal and fecal samples. World Academy of Science, Engineering and Technology International Journal of Biological, Food, Veterinary and Agricultural Engineering Vol 9, (4), 2592-2596.
  23. **Salma H. Abu Hafsa**; A. A. Hassan; L. M. Camacho; A. Z. M. Salem (2014). Replacement of berseem hay by *Salix tetrasperma* on physiological performance of New Zealand White rabbits under subtropical conditions of Egypt. Tropical Animal Health and Production 46, 1119-1125.
  24. Soliman M. S., A. M. El-Okazy and **Salma H. AbuHafsa** (2014). Effect of partially or totally replacing soybean meal by guar korma meal on sheep and cows performance milk production. J. Animal and poultry production, Mansoura uni., vol 5 (2), 43-55.
  25. Hassan, A. A.; Amal M. A. fayed; M. H. M. Yacoyt; A. A. Mahrous; **Salma H. Abu Hafsa** (2013). Partial replacement of Berseem hay by biologically treated potato vines in growing rabbits rations. Egyptian Journal Nutrition and feeds.16 (2), 265-274.
  26. Rabin Gyawali, Salam A. Ibrahim, **Salma H. Abu Hafsa**, Shahnaz Q. Smaqadri, and Yosef Haik (2011). Antimicrobial Activity of Copper Alone and in Combination with Lactic Acid against *Escherichia coli* O157:H7 in Laboratory Medium and on the Surface of Lettuce and Tomatoes. Journal of Pathogens, Volume 2011, Article ID 650968, 9 pages.
  27. Rizk, R. E., H. S. Zeweil, M. A. El-Zayat and **S. A. H. Abu Hafsa** (2006). Effect of flock age and dietary fat on production and reproduction performance in Japanese quail. XII European Poultry Conference, 10-14 September 2006, Verona- Italy.

#### Conference publications

1. Zeweil, H. S.; **Salma H. Abu Hafsa**; S. Zahran; M. H. Ahmed; W. Dosoky; and N. Abdel-Rahman, 2018. Effect of fermented green and brown seaweeds on laying performance and lipid profile of egg yolk in Japanese quail. 10<sup>th</sup> International Poultry Conference, November, 26<sup>th</sup> -29<sup>th</sup>, 2018, Sharm Elsheikh, Egypt.
2. Hassan, A. A.; Yacout, M. H.; Khalel, M. S.; **Salma H. Abu Hafsa**; Ibrahim, M. A.

R.; Dorina Nicoleta Mocuta, Adrian Turek Rahoveanu and Lorena Dediu. **2018**. Effects of some herbal plant supplements on growth performance and the immune response in Nile Tilapia (*Oreochromis niloticus*). 7<sup>th</sup> International Conference "Agriculture for Life, Life for Agriculture" June, 6<sup>th</sup> – 9<sup>th</sup> 2018, Vol. 1: (1), page 134-141, Bucharest, Romania. DOI: 10.2478/alife-2018-0020.

3. **Salma H. Abu Hafsa**, A. Mendonca, B. Brehm-Stecher, A. A. Hassan and S. A. Ibrahim, **2015**. Probiotic potential and antimicrobial activity of *Enterococcus faecium* isolated from chicken caecal and fecal samples. 17<sup>th</sup> International Conference on Probiotics in Veterinary Medicine, April, 8<sup>th</sup> -9<sup>th</sup>, **2015**, 17 (4): 2592-2596 Dubai, UAE.
4. Hassan, A. A.; **Salma. H. Abu Hafsa**; Yacout, M. H.; Khalel, M. S.; Ibrahim, M. A. R. and Dorina Mocuta (**2015**). Effect of feed some shrubs on goat performance and rumen fermentation in dry season. 5<sup>th</sup> International scientific conference on small ruminant production, March, 10<sup>th</sup> -15<sup>th</sup>, **2015**, Sharm El Shiekh, Egypt.
5. **Salma H. Abu Hafsa**; A. Z. M. Salem; A. A. Hassan (**2014**). Growth Performance and Caecal Parameters of Rabbits Fed Three Different Tropical Browse Plants. Congress Proceedings 5<sup>th</sup> American Rabbit congress "Sustainable rabbit production for food security in America". September 8<sup>th</sup> – 11<sup>th</sup>, 2014, Mexico.
6. **Salma H. Abu Hafsa**, (**2014**). Effect of *Bacillus Subtilis* as a probiotic strain on growth performance, carcass characteristics and blood metabolites of broiler chicks. The International Conference on Optimizing Productivity of Ruminants, Poultry and Fishes & the 7<sup>th</sup> International Conference on Rabbit Production in Hot Climate, 8<sup>th</sup>-12<sup>th</sup> September, 2014, Marsa Allam City, Egypt.
7. **Salma H. Abu-Hafsa**, H. S. Zeweil, H. S. Abd El-Hamid, R. M. Reyed, D. A. M. Abd-El-Haleem, (**2013**). Isolation, identification and characterizations of *Bacillus Subtilis* for use as Probiotic in broiler diets. Proceedings of The 14<sup>th</sup> scientific Conference on Animal Nutrition and feeds, November 26-29, 2013, PP. 355-370, Hurgada Egypt.
8. **S. H. Abu Hafsa**, A. Mendonca, B. Brehm-Stecher and S. A. Ibrahim, "Probiotic Properties of *Enterococcus* Strain isolated from chicken caecal and fecal samples" as a poster at (**IFT 2012**) Annual Meeting Scientific Program, June 25<sup>th</sup> -28<sup>th</sup>, 2012, in Las Vegas, USA.
9. **S. H. Abu Hafsa**, A. Mendonca and S. A. Ibrahim, "Evaluation of Four Laboratory Media for Isolation of Potentially Probiotic Strains from Chicken Caecal and Fecal Samples", Presented as a poster at The American Society for Microbiology (**ASM 2012**) 112<sup>th</sup> General Meeting, June 16-19, 2012, in San Francisco, California. USA.