

## **Dr.Öğr.Üyesi MD. MAHMODUL HASAN SOHEL**

### **Kişisel Bilgiler**

**İş Telefonu:** [+90 352 207 6666](tel:+903522076666) Dahili: 13671

**E-posta:** sohel@erciyes.edu.tr

**Web:** <https://avesis.erciyes.edu.tr/sohel>

**Posta Adresi:** Betül – Ziya EREN Genome and Stem Cell Center Room no 209 Erciyes University Talas / Kayseri 38039 Turkey

### **Uluslararası Araştırmacı ID'leri**

ScholarID: 8TdOTccAAAAJ&hl=en

ORCID: 0000-0003-2224-085X

Publons / Web Of Science ResearcherID: I-5063-2019

ScopusID: 55319441400

Yoksis Araştırmacı ID: 230246

### **Eğitim Bilgileri**

Yüksek Lisans, Bangladesh Agricultural University, Faculty Of Animal Husbandry, Department Of Animal Breeding And Genetics, Bangladeş 2007 - Devam Ediyor

Doktora, Rheinische Friedrich-Wilhelms-Universitaet Bonn, Institute Of Animal Sciences, Breeding And Genetics Group, Almanya 2010 - 2013

### **Yabancı Diller**

Almanca, A1 Başlangıç

İngilizce, C1 İleri

Bengal, C1 İleri

### **Yaptığı Tezler**

Doktora, Exosomal and non-exosomal circulatory miRNAs in bovine follicular fluid: potential role of exosomal miRNAs in oocyte development , Rheinische Friedrich-Wilhelms-Universitaet Bonn, Animal Science, Molecular Genetic, 2013

Yüksek Lisans, Identification of Types of Buffaloes in Kanihari Buffalo Pocket of Mymensingh, Banglades Agricultural University, Agriculture, Animal Breeding And Genetic, 2008

### **Araştırma Alanları**

Sağlık Bilimleri, Veteriner Bilimleri, Klinik Bilimler, Veteriner Doğum ve Jinekoloji, Zootekni ve Hayvan Besleme , Biyometri, Tarımsal Bilimler, Ziraat, Zootekni ve Hayvan Besleme, Genetik, Moleküler Genetik

### **Akademik Unvanlar / Görevler**

Yrd.Doç.Dr., Erciyes Üniversitesi, Veteriner Fakültesi, Zootekni ve Hayvan Besleme, 2019 - Devam Ediyor

Yrd.Doç.Dr., Erciyes Üniversitesi, Zootekni, 2015 - 2018

## Verdiği Dersler

GROWTH AND METABOLISM OF DOMESTIC ANIMALS, Doktora, 2019 - 2020

## Yönetilen Tezler

- Ayvaz A., Sohel M. M. H., Impact of ethanol induced oxidative stress on follicular and uterine cells in female reproductive system, Yüksek Lisans, M.ABDULKAREEM(Öğrenci), Devam Ediyor
- Sohel M. M. H., Çınar M. U., Investigating the expression of immune genes in response to lipopolysaccharide (LPS) and lipoteichoic acid (LTA) stimulation in sheep lungs, Doktora, A.QASIM(Öğrenci), 2019
- Sohel M. M. H., Examination of the expression of the genes of immune system in response to Mannheimia haemolytica bacteria stimulation in lung cells, Yüksek Lisans, S.ADIL(Öğrenci), 2019
- Sohel M. M. H., Akbulut M., Role of microRNAs in abortion caused by diabetes mellitus in mice model, Yüksek Lisans, KIBRAHIM(Öğrenci), 2018
- SOHEL M. M. H., Ethanol induced changes in the expression of antioxidant genes in granulosa and endometrial fibroblast cells., Yüksek Lisans, M.Aldolamee(Öğrenci), 2017
- Ayvaz A., Sohel M. M. H., Impact of ethanol induced oxidative stress on follicular and uterine cells in female reproductive system, Yüksek Lisans, M.ABDULKAREEM(Öğrenci), 2017
- Sohel M. M. H., Tesfaye D., Sulforaphane protects bovine granulosa cells from oxidative stress via activation of Nrf2-mediated response pathway, Yüksek Lisans, L.Linares(Öğrenci), 2014

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. The extent of the abundance of exosomal and non-exosomal extracellular miRNAs in the bovine follicular fluid  
Sohel M. M. H., Hoelker M., Schellander K., Tesfaye D.  
REPRODUCTION IN DOMESTIC ANIMALS, cilt.57, sa.10, ss.1208-1217, 2022 (SCI-Expanded)
- II. Novel Insight into the Potential Role of Acylglycerophosphate Acyltransferases Family Members on Triacylglycerols Synthesis in Buffalo  
Ma X., Duan A., Lu X., Liang S., Sun P., SOHEL M. M. H., Abdel-Shafy H., Amin A., Liang A., Deng T.  
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, cilt.23, sa.12, 2022 (SCI-Expanded)
- III. Cellular and Transcriptional Adaptation of Bovine Granulosa Cells Under Ethanol-Induced Stress In Vitro  
Sohel M. M. H., Salman M. A., AYVAZ A.  
ALCOHOL AND ALCOHOLISM, cilt.56, sa.4, ss.383-392, 2021 (SCI-Expanded)
- IV. Differential protein input in the maternal diet alters the skeletal muscle transcriptome in fetal sheep  
SOHEL M. M. H., AKYÜZ B., KONCA Y., ARSLAN K., GÜRBULAK K., ABAY M., KALİBER M., ÇINAR M. U.  
MAMMALIAN GENOME, cilt.31, ss.309-324, 2020 (SCI-Expanded)
- V. Macronutrient modulation of mRNA and microRNA function in animals: A review  
Sohel M. M. H.  
ANIMAL NUTRITION, cilt.6, ss.258-268, 2020 (SCI-Expanded)
- VI. Circulating microRNAs as biomarkers in cancer diagnosis  
Sohel M. M. H.  
Life Sciences, cilt.248, 2020 (SCI-Expanded)
- VII. Oxidative stress modulates the expression of apoptosis-associated microRNAs in bovine granulosa cells in vitro

- Sohel M. M. H., Akyüz B., Konca Y., Arslan K., Sarıözkan S., Çınar M. U.  
 CELL AND TISSUE RESEARCH, cilt.376, ss.295-308, 2019 (SCI-Expanded)
- VIII. **Sulforaphane protects granulosa cells against oxidative stress via activation of NRF2-ARE pathway**  
 Sohel M. M. H., Amin A., Prastowo S., Linares-Otoya L., Hoelker M., Schellander K., Tesfaye D.  
 CELL AND TISSUE RESEARCH, cilt.374, sa.3, ss.629-641, 2018 (SCI-Expanded)
- IX. **Concentration dependent antioxidative and apoptotic effects of sulforaphane on bovine granulosa cells in vitro.**  
 Sohel M. M. H., Konca Y., Akyuz B., Arslan K., Sariozkan S., Cinar M. U.  
 Theriogenology, cilt.97, ss.17-26, 2017 (SCI-Expanded)
- X. **Potential role of microRNAs in mammalian female fertility**  
 Tesfaye D., Salilew-Wondim D., Gebremedhn S., Sohel M. M. H., Pandey H. O., Hoelker M., Schellander K.  
 REPRODUCTION FERTILITY AND DEVELOPMENT, cilt.29, ss.8-23, 2017 (SCI-Expanded)
- XI. **Appropriate concentration of Hydrogen Peroxide and Sulforaphane for granulosa cells to study oxidative stress in vitro**  
 Sohel M. M. H., Çınar M. U., Kaliber M., Arslan K., Sarıözkan S., Akyüz B., Konca Y.  
 Journal Of Biotechnology, cilt.231, sa.1, ss.524, 2016 (SCI-Expanded)
- XII. **Controlled ovarian hyperstimulation induced changes in the expression of circulatory miRNA in bovine follicular fluid and blood plasma**  
 NOFERESTI S. S., Sohel M. M. H., Hoelker M., SALILEW-WONDIM D., THOLEN E., LOOFT C., RINGS F., NEUHOFF C., SCHELLANDER K., TESFAYE D.  
 JOURNAL OF OVARIAN RESEARCH, cilt.8, 2015 (SCI-Expanded)
- XIII. **Exosomal and Non-Exosomal Transport of Extra-Cellular microRNAs in Follicular Fluid: Implications for Bovine Oocyte Developmental Competence**  
 Sohel M. M. H., Hoelker M., Noferesti S. S., Salilew-Wondim D., Tholen E., Looft C., Rings F., Uddin M. J., Spencer T. E., Schellander K., et al.  
 PLOS ONE, cilt.8, sa.11, 2013 (SCI-Expanded)
- XIV. **Characterization and importance of microRNAs in mammalian gonadal functions**  
 Hossain M. M. H., Sohel M. M. H., Schellander K., Tesfaye D.  
 CELL AND TISSUE RESEARCH, cilt.349, sa.3, ss.679-690, 2012 (SCI-Expanded)
- XV. **Circulatory microRNA signatures in follicular fluid in relation to the growth status of bovine oocytes.**  
 SOHEL M. M. H., Salilew-Wondim D., Höller M., Rings F., Schellander K.  
 Reprod. Fertil. Dev., cilt.25, ss.251-252, 2012 (SCI-Expanded)

## Diger Dergilerde Yayınlanan Makaleler

- I. **A reliable and easy method to isolate a pure population of bovine granulosa cells from slaughterhouse ovaries for in vitro studies**  
 Sohel M. M. H.  
 Journal of Advanced Biotechnology and Experimental Therapeutics, cilt.2, sa.1, ss.17-22, 2019 (Scopus)
- II. **Effects of easy soluble carbohydrate and bacterial inoculant supplementations on silage quality of frosted maize**  
 KONCA Y., BÜYÜKKILIÇ BEYZİ S., Gallardo Paffetti M. A., ÜLGER İ., SOHEL M. M. H.  
 Acta Scientiarum. Animal Sciences, cilt.40, ss.1-7, 2018 (Scopus)
- III. **Impacts of Macronutrients on Gene Expression: Recent Evidence to Understand Productive and Reproductive Performance of Livestock**  
 Sohel M. M. H., Konca Y., Çınar M. U.  
 Turkish Journal of Agriculture -Food Science and Technology, cilt.6, sa.2, ss.203-212, 2018 (Hakemli Dergi)
- IV. **Choice of samples in extracellular microRNA research: Which fraction is better- exosomal or nonexosomal?**

- Sohel M. M. H.  
Journal of Advanced Biotechnology and Experimental Therapeutics, cilt.1, ss.11-16, 2018 (Scopus)
- V. **Extracellular/Circulating MicroRNAs: Release Mechanisms, Functions and Challenges**  
Sohel M. M. H.  
Achievements in the Life Sciences, cilt.10, sa.2, ss.175-186, 2016 (Hakemli Dergi)
- VI. **IDENTIFICATION OF TYPES OF BUFFALOES AVAILABLE IN KANIHARI BUFFALO POCKET OF MYMENSINGH DISTRICT**  
SOHEL M. M. H., AMIN M. R.  
Research in Agriculture, Livestock and Fisheries, cilt.2, sa.1, ss.109-115, 2015 (Hakemli Dergi)
- VII. **Advancement in molecular genetics to understand the molecular reproduction of livestock – follicular development**  
SOHEL M. M. H., ÇINAR M. U.  
Research in Agriculture, Livestock and Fisheries, cilt.1, sa.1, ss.47-60, 2014 (Hakemli Dergi)

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Investigating the mRNA expression of IL-8 in Response to Lipopolysaccharide (LPS) and Lipoteichoic Acid (LTA) Stimulation in Sheep Alveolar Macrophages**  
Sohel M. M. H., Çınar M. U.  
11th INTERNATIONAL ANIMAL SCIENCE CONGRESS, Kayseri, Türkiye, 20 - 22 Ekim 2019, ss.79-80
- II. **The Expression of IL-1 $\beta$  gene In Response to Mannheimia haemolytica Bacteria in Sheep Alveolar Macrophages in vitro**  
Sohel M. M. H.  
11th INTERNATIONAL ANIMAL SCIENCE CONGRESS, Kayseri, Türkiye, 20 - 22 Ekim 2019, cilt.1, ss.159-160
- III. **Intracellular drug delivery by exosomes: Present condition and future perspectives**  
Sohel M. M. H.  
1. International 6. Veterinary Pharmacology and Toxicology Congress, Kayseri, Türkiye, 4 - 07 Eylül 2019, ss.214-223
- IV. **High and low protein input in maternal diet alters the expression of genes in fetal skeletal muscle in sheep**  
Çınar M. U., Akyüz B., Konca Y., Arslan K., Gürbulak K., Abay M., Kaliber M., Sohel M. M. H.  
European Biotechnology Congress, Athens, Yunanistan, 26 - 28 Nisan 2018, cilt.280
- V. **Toll Like Receptor 1 (tlr1 1380 G/a) Snp Was Associated With Paratuberculosis Susceptibility In Holstein And Indigenous Crossbred Cattle In Turkey**  
Çınar M. U., Akyüz B., Hızlısoy H., Sohel M. M. H., Arslan K., Aksel E. G., Gümüşsoy K. S.  
International Agricultural Science Congress, Van, Türkiye, 9 - 12 Mayıs 2018
- VI. **Maternal high protein diet changes the expression of growth and development related miRNAs in fetal skeletal muscle.**  
Sohel M. M. H., Akyüz B., Konca Y., Arslan K., Gürbulak K., Abay M., Kaliber M., Çınar M. U.  
International Agricultural Science Congress, Van, Türkiye, 9 - 12 Mayıs 2018, ss.1
- VII. **Time and dose-dependent effectsof oxidative stress induced by hydrogen peroxide in ovarian granulosacells**  
Sohel M. M. H., Konca Y., Çınar M. U.  
The International Congress on Advances in Bioscience and Biotechnology (ICABB), Sarajevo, Bosna-Hersek, 25 - 29 Kasım 2017, ss.1
- VIII. **Identifying Candidate MicroRNAs in MicroRNA-AMPK Gene Interaction Regulating Lipid Accumulation of Bovine Granulosa Cell Luteinization: An In Silico Study**  
PRASTOWO S., AMİN A., SOHEL M. M. H.  
1st International Conference on Tropical Agriculture, 25 - 26 Ekim 2016
- IX. **Ethanol induced changes in the expression of selected genes downstream to Nrf2 pathway in**

### **granulosa cells in vitro**

Sohel M. M. H., Ayvaz A.

International Congress on Advances in Bioscience and Biotechnology, Sarajevo, Bosna-Hersek, 25 - 29 Ekim 2017, ss.47

- X. **In-silico identification of microRNAs potentially targeting the PGC1? gene that regulates bovine mitochondrial biogenesis**

Prastowo S., Widyas N., Ratriyanto A., Sohel M. M. H.

2nd UGM International Conference on Tropical Agriculture, Yogyakarta, Endonezya, 26 - 27 Ekim 2017, cilt.1, sa.1, ss.1-5

- XI. **Reaktif Oksijen Türlerinin (ROT) Zaman ve Doz Bağlılığı ve ROT'un Hidrojen Peroksitle İndüklenmiş Oksidatif Strese Maruz Bırakılmış Granuloza Hücrelerinde Yaşama Gücüne ve Sitotoksiteye Etkisi**

SOHEL M. M. H., ÇINAR M. U.

II. Yaşam Bilimleri Kongresi, Kayseri, Türkiye, 23 - 25 Şubat 2017, ss.101

- XII. **REAKTİF OKSİJEN TÜRLERİNİN (ROT) ZAMAN VE DOZ BAĞLILIĞI VE ROT'UN HİDROJENPEROKSİTE İNDÜKLENMİŞ OKSİDATİF STRESE MARUZ BIRAKILMIŞ GRANULOZAHÜCRELERİNDE YAŞAMA GÜCÜNE VE SİTOTOKSİTEYE ETKİSİ**

SOHEL M. M. H., ÇINAR M. U.

2. YAŞAM BİLİMLERİ KONGRESİ, Türkiye, 23 - 25 Şubat 2017

- XIII. **Activation of Nrf2-Antioxidant Pathway in Response to Different Concentration of Sulforaphane in granulosa cells**

Sohel M. M. H., Konca Y., Arslan K., Sariözkan S., Akyüz B., Çınar M. U.

INTERNATIONAL CONFERENCE ON BIOLOGICAL SCIENCES (ICBS), Konya, Türkiye, 21 - 26 Ekim 2016, ss.21

- XIV. **Extracellular miRNA: A new era of miRNA research**

SOHEL M. M. H., KONCA Y., ÇINAR M. U.

9. Ulusal Zootekni Kongresi, Konya, Türkiye, 3 - 05 Eylül 2015, cilt.1, sa.1, ss.100

- XV. **Relative abundance of extra-cellular miRNAs in bovine follicular fluid: Implication for cell-cell communication**

SOHEL M. M. H., SalilewWondim D., Hoelker M., Noferesti S. S., Rings F., Schellander K., Tesfaye D.

4th Mammalian Embryo Genomics Meeting, Kanada, 9 - 11 Ekim 2013

- XVI. **Relative abundance of extra-cellular miRNAs in bovine follicular fluid: Implication for cell-cell communication during oocyte growth**

Sohel M. M. H.

4th Mammalian Embryo Genomics Meeting, Quebec, Kanada, 9 - 11 Ekim 2013, cilt.1, sa.1, ss.1

## **Düger Yayınlar**

- I. **Identifying Candidate MicroRNAs in MicroRNA-AMPK Gene Interaction Regulating Lipid Accumulation of Bovine Granulosa Cell Luteinization: An In Silico Study**

Prastowo S., Amin A., SOHEL M. M. H.

Sunum, ss.431-438, 2017

## **Desteklenen Projeler**

ÇINAR M. U., SOHEL M. M. H., NAJI A. Q., Yükseköğretim Kurumları Destekli Proje, Investigating the Expression of Immune Genes in Response to LPS and LTA Stimulation in Sheep Lungs, 2017 - 2019

AKBULUT M., AL-MASHHADANI K. I. I., SOHEL M. M. H., Yükseköğretim Kurumları Destekli Proje, Fare modellerinde Diabetes mellitus tarafından sebep olunan gebelik kayıplarında microRNALARın rollerinin araştırılması, 2017 - 2019  
AYVAZ A., SOHEL M. H., SALMAN M. A., Yükseköğretim Kurumları Destekli Proje, Etanol kaynaklı oksidatif stresin dışı üreme organı Foliküler ve uterus hücreleri üzerine etkisi, 2016 - 2017

SOHEL M. M. H., KONCA Y., ÇINAR M. U., SARIÖZKAN S., AKYÜZ B., ARSLAN K., Yükseköğretim Kurumları Destekli Proje, Altered miRNA and gene expression is associated with the survival of ruminant granulosa cells under oxidative stress, 2015 - 2017

### Bilimsel Dergilerdeki Faaliyetler

Journal of Advanced Biotechnology and Experimental Therapeutics, Yardımcı Editör/Bölüm Editörü, 2018 - Devam Ediyor  
Erciyes Tarım ve Hayvan Bilimleri Dergisi, Değerlendirme Kurul Üyesi, 2017 - Devam Ediyor

### Bilimsel Kuruluşlardaki Üyelikler / Görevler

Bangladesh Society for Molecular Immunology and Advanced Biotechnology, Üye, 2018 - Devam Ediyor  
European Biotechnology Thematic Network Association, Üye, 2016 - 2016  
International Embryo Technology Society, Üye, 2014 - 2015

### Bilimsel Hakemlikler

LIFE SCIENCES, SCI Kapsamındaki Dergi, Kasım 2019  
Journal of Advanced Biotechnology and Experimental Therapeutics , Diğer İndekslerce Taranan Dergi, Ağustos 2019  
PLOS ONE, SCI Kapsamındaki Dergi, Mayıs 2019  
ANIMAL GENETICS, SCI Kapsamındaki Dergi, Mayıs 2019  
ANNALS OF AGRICULTURAL AND ENVIRONMENTAL MEDICINE, SCI Kapsamındaki Dergi, Kasım 2018  
JOURNAL OF NEUROSCIENCE RESEARCH, SCI Kapsamındaki Dergi, Temmuz 2018  
PLOS ONE, SCI Kapsamındaki Dergi, Mart 2018  
Journal of Advanced Biotechnology and Experimental Therapeutics, Diğer Dergiler, Ocak 2018  
Life Sciences, SCI Kapsamındaki Dergi, Kasım 2017  
Cell and Tissue Research, SCI Kapsamındaki Dergi, Ağustos 2017  
Journal of Ovarian Research, SCI Kapsamındaki Dergi, Mayıs 2016  
BMC Genomics, SCI Kapsamındaki Dergi, Kasım 2015  
PLOS ONE, SCI Kapsamındaki Dergi, Temmuz 2015  
Research in Agriculture, Livestock, and Fisheries, Diğer Dergiler, Mayıs 2015  
Plos One, SCI Kapsamındaki Dergi, Aralık 2014

### Metrikler

Yayın: 40  
Atıf (WoS): 390  
Atıf (Scopus): 390  
H-İndeks (WoS): 9  
H-İndeks (Scopus): 8

### Kongre ve Sempozyum Katılımı Faaliyetleri

International Agricultural Science Congress, Katılımcı, Van, Türkiye, 2018  
European Biotechnology Congress 2018, Katılımcı, Athens, Yunanistan, 2018  
8th International Agricultural Student Congress, Davetli Konuşmacı, Niğde, Türkiye, 2018

2nd UGM International Conference on Tropical Agriculture, Katılımcı, Yogyakarta, Endonezya, 2017  
International Congress on Advances in Bioscience and Biotechnology, Katılımcı, Sarajevo, Bosna-Hersek, 2017  
II. Yaşam Bilimleri Kongresi, Katılımcı, Kayseri, Türkiye, 2017  
INTERNATIONAL CONFERENCE ON BIOLOGICAL SCIENCES, Katılımcı, Konya, Türkiye, 2016  
1st International Conference on Tropical Agriculture, Katılımcı, Endonezya, 2016  
European Biotechnology Congress, Katılımcı, Litvanya, 2016  
Erciyes University Child Hospital, Davetli Konuşmacı, Kayseri, Türkiye, 2016  
9. Ulusal Zootekni Bilim Kongresi, Davetli Konuşmacı, Konya, Türkiye, 2015  
9. Ulusal Zootekni Bilim Kongresi, Katılımcı, Konya, Türkiye, 2015  
4th Mammalian Embryo Genomics Meeting, Katılımcı, Quebec, Kanada, 2013  
Deutsche Gesellschaft für Züchtungskunde eV (DGfZ), Katılımcı, Halle, Almanya, 2012  
3rd Embryo Genomics Meeting, Katılımcı, Bonn, Almanya, 2011

## Burslar

University of Bonn Ph.D. Scholarship Award, Fulbright Programı, 2010 - Devam Ediyor

## Ödüller

SOHEL M. M. H., Best Oral Presentation, International Congress on Advances in Bioscience and Biotechnology, Ekim 2017  
SOHEL M. M. H., Second Best Oral Presentation, European Biotechnology Congress 2016, Mayıs 2016