

Curriculum Vitae



1. Name : **MD. ABUL HASHEM**
2. Father's name : Md. Nayeb Ali Sarker
3. Date of birth : January 12, 1966
4. Present address (with telegram office) : Professor, Department of Animal Science,
Faculty of Animal Husbandry, Bangladesh
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E-mail: hashem_mdabul@yahoo.com
5. Permanent address : Village & Post Office: Baschara, Thana &
District: Jamalpur, BANGLADESH
6. Nationality : Bangladeshi by birth
7. Religion : Islam
8. Marital status : Married
9. Educational qualification :

| Name of Examination and Duration | Board/University | Year of Passing | Division/Class obtained |
|--|--|---------------------|------------------------------|
| Secondary School Certificate (S.S.C.), 10 years | Dhaka | 1981 | First |
| Higher Secondary Certificate (H.S.C.), 2 years | Dhaka | 1983 | First |
| Bachelor of Science in Animal Husbandry [B.Sc.A.H.(Honours)], 4 years | Bangladesh Agricultural University, Mymensingh | 1988 (held in 1991) | First Class (First position) |
| Master of Science (Animal Husbandry) in Animal Science [M.Sc.(A.H) in Animal Science], 1 | Bangladesh Agricultural University, Mymensingh | 1989 (held in 1994) | First Class (First position) |

| | | | |
|--|---|------------------------------|-------------|
| year | | | |
| Diploma in Endangered Species Management | University of Kent, U.K. | 2001 | Distinction |
| PhD In Cell and Developmental Biology | Seoul National University, South Korea | 2006 | - |
| Postdoctoral Research Associate, Molecular Embryology | Animal Biotechnology Institute, South Korea | January 2007 to August 2007 | - |
| Postdoctoral Research Associate, Cellular and Molecular Biology | College of Pharmacy, Ewha Womans University, Seoul, South Korea | August 2007 to February 2008 | - |
| Postdoctoral Fellow of Alexander von Humboldt Foundation, Cellular and Molecular Biology | Institute of Animal Science, University of Bonn, Germany | July 2008 to June 2009 | |

10. Occupation and Experience (Starting from present one):

| Position held | Organization | Period of Service |
|---------------------|--|------------------------|
| Professor | Bangladesh Agricultural University, Mymensingh | 26-07-2009 to To date |
| Associate Professor | Bangladesh Agricultural University, Mymensingh | 26-7-2005 to 25-7-2009 |
| Assistant Professor | Bangladesh Agricultural University, Mymensingh | 7-4-1997 to 25-7-2005 |
| Lecturer | Bangladesh Agricultural University, Mymensingh | 16-8-1994 to 6-4-1997 |
| Part-time Teacher | Bangladesh Agricultural University, Mymensingh | 7-7-1992 to 15-8-1994 |

Completed Research Projects:

1. Heat stress on the physiological and productive traits in sheep and goat. Funded by BAURES, 2011.
2. Equipment grants from Alexander von Humboldt Foundation, Euro 20000.00 in 2011.
3. Use of anabolic steroids and feed additives in small scale cattle fattening in Bangladesh. Funded by UGC, 2012.

4. Factors affecting as indicator of heat tolerance and adaptability of buck. Funded by BAURES, 2012-2013.
5. Expression of autosomal and sex-linked traits in bovine cloned, in vitro fertilized and parthenogenetic embryos. Funded by AvH, Germany, 2008-2009.
6. A Rapid and Sensitive Screening System for Human Type I Collagen, Funded by KOSEF, South Korea, 2007-2008.

Number of MS students at present supervising: 15 students are supervising at present.

Number of PhD students at present supervising: One PhD student.

Worked as Examiner of PhD and MS Thesis, Papers and with different Projects

1. A rapid vitrification of buffalo oocytes and in vitro maturation (MS Thesis Co-Supervisor, 2015)
2. Effect of dibutyryl cyclic adenosine monophosphate on growth and survival of buffalo oocytes (MS Thesis Co-Supervisor, 2014)
3. *In Vitro* Culture of Goat Embryo (A PhD Thesis Examiner and defence committee member dated June 2014)
4. Optimization of in vitro maturation and fertilization of oocytes in the bovine in Bangladesh (Ministry of Education, Bangladesh, April 2011)
5. Establishment of genome resource bank for wildlife conservation in Bangladesh (Ministry of Education, Bangladesh, May 2011)
6. Effect of fresh and frozen semen on in vitro fertilization and subsequent development of goat embryos (Paper Reviewer, 2011)
7. In vitro maturation of Buffalo oocytes and fertilization by cattle spermatozoa (Paper Reviewer, 2011)
8. Microarray and single nucleotide polymorphism study in candidate genes for carcass and meat quality of cattle in Bangladesh (Biotech Agricultural Research Project, June 2010)
9. Red Chittagong Cattle Breed Improvement and Conservation Project (Bangladesh Livestock Research Institute, Savar, Dhaka, Bangladesh as Consultant, 2010-2011)
10. Genetic Variation on the Control of Resistance to Infectious Diseases in Small Ruminants for Improving Animal Productivity (IAEA, December 2009)
11. Study on follicular development of black Bengal goats during winter and summer season (MS Thesis Examiner)
12. Effect of production system on early folliculogenesis of Black Bengal goat (MS Thesis Examiner)
13. Productive performances and ovarian follicular development in Black Bengal goats with different levels of dietary energy (MS Thesis Examiner)

On-going research project:

1. Validation of good practices of on-farm lamb production systems. Working as PI since 2018, Funded by KG, BARC, Bangladesh.
2. Adoption of embryo transfer technology for indigenous buffalo in Bangladesh Working as PI and Co-PI since 2017, Funded by BAS-USDA.

Participation in Foreign Countries on Seminars:

1. Participated in a Summit on Industrializing cell-based meats held in San Francisco, USA from 5-7 February 2019.
2. Participated in seminar on International symposium on nutrition and human health held at Texas A & M University from November 2-3, 2018, USA.
3. Participated in 38th annual meeting of Society for the Study of Reproduction (BOR) at Quebec in Canada from 23rd July to 28th July 2005 for the presentation of poster entitled, “Effect of potassium simplex optimization medium and NCSU23 supplemented with beta mercaptoethanol and amino acids of in vitro fertilized porcine embryos”
4. Presented a seminar talk on Application of somatic cell nuclear transfer in domestic animals, therapeutic and wildlife conservation” at the Peking University, Beijing, China in the first week of October 2006.

Participation in Home Countries on Training:

Participated in a training course “Teaching Methodology” held in Graduate Training Institute, Bangladesh Agricultural University, Mymensingh, Bangladesh from April 15-May 04, 1995.

Participated in a training course “Technical Report Writing” held in Graduate Training Institute, Bangladesh Agricultural University, Mymensingh, Bangladesh from April 13-20, 1996.

Training workshop on “Application of GIS in agricultural development planning” organized by Bangladesh Agricultural University Research System (BAURES)-BGD/95/006 GIS project of Bangladesh Agricultural Research Council (BARC) and held in BAU from 10-11 Aug 1999.

Participated in a training course “HR management” held in Dhaka, Bangladesh conducted by bdjob.com, Bangladesh on 8 September, 2006.

Participated at first international conference organized by Bangladesh Society for Animal Production Education and Research (BSAPER) on 21st June 2008 at Bangladesh Agricultural University, Mymensingh, Bangladesh.

Development and application of decision support tools to conserve and sustainably use genetic diversity in indigenous livestock and wild relatives funded by UNEP-GEF-ILRI-FAnGR Asia project held at BARC Auditorium, Dhaka on 07 January 2016.

List of Publications of Dr. Md. Abul Hashem

- Rana MS, **Hashem MA**, Akhter S, Habibullah M, Islam MH, Biswas RC. 2014. Effect of heat stress on carcass and meat quality of indigenous sheep of Bangladesh. *Bang. J. Anim. Sci.* 43 (2): 147-153
- Hashem MA**, Hossain MM, Mohammadi-Sangcheshmeh A, Cinar U, Schellander K, Tesfaye D and Hoelker M. 2013. Differential response of IVP, parthenogenetic and nuclear transfer derived bovine embryos upon environmental heat stress-implications for expression of autosomal and X-linked genes. *Bang. J. Anim. Sci.* 42 (1): 1-10 DOI: <http://dx.doi.org/10.3329/bjas.v42i1.15759>
- Rashid MM, Hossain MM, Azad MAK and **Hashem MA**. 2013. Long term cyclic heat stress influences physiological responses and blood characteristics in indigenous sheep. *Bang. J. Anim. Sci.* 42 (2): 96-100.
- Hashem MA**, Jun KY, Lee E, Lim S, Park Choo HY, Kwon Y. 2008. A Rapid and Sensitive Screening System for Human Type I Collagen with the Aim of Discovering Potent Anti-Aging or Anti-Fibrotic Compounds. *Mol. Cells*: 625-630
- McElroy SL, Kim JH, Kim S, Jeong YW, Lee EG, Park SM, Hossein MS, Koo OJ, **Hashem MA**, Jang G, Kang SK, Lee BC, Hwang WS. 2008. Effects of culture conditions and nuclear transfer protocols on blastocyst formation and mRNA expression in pre-implantation porcine embryos. *Theriogenology*. 2008 Mar 1;69(4):416-25
- Hashem MA**, Bhandari DP, Kang SK, Lee BC. 2007. Cell cycle analysis and interspecies nuclear transfer of *in vitro* cultured skin fibroblasts of the Siberian tiger (*Panthera tigris altaica*). *Molecular Reproduction and Development*. 74(4):403-11.

Hashem MA, Bhandari DP, Hossein MS, Jeong YW, Kim S, Kim JH, Koo OJ, Park SM, Lee EG, Park SW, Keun SK, Lee BC. 2007. Effect of essential and non-essential amino acids in NCSU23 medium of in vitro fertilized porcine embryos. Asian-Australasian Journal of Animal Sciences, Vol, 20, No.5: 693

Hashem MA, Lee EC, Hossein MS, Kang SK, Lee BC. 2007. Treatment of donor cells and its effect on nuclear transfer of endangered goral-porcine reconstructed embryos development. Reproduction, Fertility and Development. Vol 19(1):138-9

Hossein MS, **Hashem MA**, Jeong YW, Lee MS, Kim S, Kim JH, Koo OJ, Park SM, Lee EG, Park SW, Kang SK, Lee BC, Hwang WS. 2007. Temporal effects of alpha-tocopherol and l-ascorbic acid on in vitro fertilized porcine embryo development. Animal Reproduction Science. 100(1-2):107-17.

Mohammad Shamim Hossein, Yeun Wook Kim, Seon Mi Park, Ok Jae Koo, Md Abul Hashem, Dilip P Bhandari, Yeon Woo Jeong, Sue Kim, Ji Hye Kim, Eugene Lee, Sun Woo Park, Sung Keun Kang*, Byeong Chun Lee, Woo Suk Hwang. 2007. Antioxidant Favors the Developmental Competence of Porcine Parthenogenotes by Reducing Reactive Oxygen Species Asian-Aust. J. Anim. Sci. Vol. 20 No. 3 : 334.

Hashem MA, Bhandari DP, Kang SK, Lee BC, Hwang WS. 2006. Cell cycle analysis of in vitro cultured goral (*Naemorhedus caudatus*) adult skin fibroblasts. Cell Biology International. 30((9): 698-703.

Hashem MA, Hossein MS, Jeong YW, Kim S, Kim JH, Lee SH, Koo OJ, Park SM, Lee EG, Kang SK, Lee BC, Hwang WS. 2006. Effect of potassium simplex optimization medium and NCSU23 supplemented with beta mercaptoethanol and amino acids of in vitro fertilized porcine embryos. The Journal of Reproduction and Development. 52(5):591-9.

Eugene Lee, So Hyun Lee, Sue Kim, Yeon Woo Jeong, Ji Hye Kim, Ok Jae Koo, Seon Mi Park, **M.A. Hashem**, MS Hossein, Hye Young Son, Chang Kyu Lee, Woo Suk Hwang Sung Keun Kang, Byeong Chun Lee. 2006. Analysis of Nuclear

Reprogramming in Cloned Miniature Pig Embryos by expression of Oct-4 and Oct-4 Related Genes. *Biochem Biophys Res Commun.* 6;348(4):1419-28

Sue Kim, So Hyun Lee, Ji Hye Kim, Jeong YW, **M. A. Hashem**, Okjae Koo, Seon Mi Park, Eu Gene Lee, Hossein MS, Sung Keun Kang, Byung Chun Lee, Woo Suk Hwang. 2006. Anti-apoptotic effect of insulin-like growth factor (IGF)-I and its receptor in porcine preimplantation embryos derived from in vitro fertilization and somatic cell nuclear transfer. *Mol Reprod Dev.* 73(12):1523-1530.

Ji Hye Kim, So Hyun Lee, Sue Kim, Yeon Woo Jeong, Ok Jae Koo, **M. A. Hashem**, Seon Mi Park, Eu Gene Lee, MS Hossein, Sung Keun Kang, Byeong Chun Lee and Woo Suk Hwang. 2006. Embryotrophic effects of ethylenediaminetetraacetic acid and hemoglobin on in vitro porcine embryos development. *Theriogenology.* 66(2):449-55

ABSTRACTS and PRESENTATIONS

M.A. Hashem, Hossein MS, Jeong YW, Kim S, Kim JH, Lee SH, Koo OJ, Park SM, Lee EG, Kang SK, Lee BC, Hwang WS. 2005. Effect of potassium simplex optimization medium and NCSU23 supplemented with beta mercaptoethanol and amino acids of in vitro fertilized porcine embryos. Presented as poster in 2005 SSR meetings, 24-27 July, Quebec, Canada

M.A. Hashem, Bhandari DP, Kang SK, Lee BC, Hwang WS. 2006. Cell cycle analysis in in vitro cultured adult skin fibroblasts of endangered goral (*Naemorhedus caudatus*.) Presented as poster in 2006 IETS meeting, January 7-11 at Orlando, Florida in USA.

Lee SH, Kim S, Jeong YW, Kim JH, Koo OJ, Lee EG, Park SM, **M.A Hashem**, Hossein MS, Jang G, Jeon HY, Kang SK, Lee BC, Hwang WS. Nuclear transfer condition affect blastocyst formation and messenger RNA expression patterns in cloned porcine embryos. Presented as poster in 2005 SSR meetings, 24-27 July, Quebec, Canada

Eugine Lee, So Hyun Lee, Sue Kim, Yeon Woo Jeong, Ji Hye Kim, Ok Jae Koo, Seon Mi Park, **M.A. Hashem**, MS Hossein, Hye Young Son, Chang Kyu Lee, Sung Keun Kang, Byeong Chun Lee and Woo Suk Hwang. 2005. Analysis of Nuclear Reprogramming in Cloned Miniature Pig Embryos by Reactivation of Oct-4 and Oct-4 Related Genes. Presented as poster in 2006 IETS meeting, January 7-11 at Orlando, Florida in USA.

Hashem MA, Lee EC, Hossein MS, Kang SK, Lee BC, Hwang WS. 2006. Treatment of donor cells and its effect on nuclear transfer of endangered goral-porcine reconstructed embryos. Accepted and published for poster presentation for 2007 IETS meeting, held at Kyoto from January 6 to 9, 2007 in Japan.

Members of Professional Organization

1. Society for the study of reproduction (SSR), USA.
2. International Embryo Transfer Society (IETS), USA.
3. Journal of Reproduction and Development, Japan.
4. Asian-Australasian Journal of Animal Sciences, South Korea.
5. Cell Biology International, U.K.
6. Solitaires, DWCT, U.K.
7. Bangladesh Journal of Animal Science, Bangladesh.
8. Progressive Agriculture, Bangladesh.
9. Bangladesh Association for Biotechnology and Genetic Engineering (BABGE).

Hands-on Experiences

1. In vitro maturation of bovine and porcine embryos,
2. Artificial Insemination in bovine and porcine.
3. Cryopreservation of semen, somatic cell and other cells.
4. Cell culture and cell transfection with gene of interest
5. In vitro fertilization of bovine and porcine.
6. Somatic cell nuclear transfer
7. Embryo transfer.
8. C-Sec
9. Molecular techniques (Genomic DNA and RNA extraction, Cloning and RT-PCR, Real-Time PCR, electrophoresis, western blotting, etc.)
10. Immuno staining and Confocal laser scan microscopy
11. Common Laboratory techniques including maintenance of equipments.
12. Experience on project planning, development, coordination, implementation, monitoring, evaluation, report writing and presentation.

Country visited: China, Malaysia, Singapore, Australia, India, United Kingdom, United Arab Emirates, Tanzania, South Africa, South Korea, Canada, Germany, Luxemburg, France, Netherland. Belgium, Kuwait.

Personal information

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|--------------------|----------------|---------------|-----------------------|------------------|----------|----------|
| Height | 174.0 cm | Weight | 70.0 kg | Vision | (L) 1.75 | (R) 1.75 |
| Blood group | 0 ⁺ | Hobby | Reading and Traveling | Specialty | N/A | |

Awards:

- Recipient of KRF scholarship (2003/06 – 2006/06) for pursuing doctoral studies at Seoul National University, Korea
- Recipient of Brain Korea – 21 scholarship (2007/13 – 2008/02) for pursuing post-doctoral studies at Institute of Animal Biotechnology, Department of Animal Science in CNU, Korea
- Recipient of Alexander von Humboldt Foundation Fellowship (2008/07 – 2009/06) for pursuing post-doctoral studies at Institute of Animal Science University of Bonn, Germany.
- Recipient of Alexander von Humboldt Foundation equipment grant award (2011) Euro 20000.00 by AvH, Germany.
- Recipient of Durrell Wildlife Conservation Award (2001/01 – 2001/04) for pursuing Diploma studies at University of Kent at Canterbury, U.K

References:

1. Prof. Dr. Karl Schellander, Animal Breeding and Husbandry Group, Institute of Animal Science, University of Bonn, Endenicher Allee 15, 53115 Bonn, Germany, Tel.: 0228/73-2240 Fax: 0228/73-2284 E-Mail: karl.schellander@uni-bonn.de (Postdoctoral Supervisor).
2. Dr. Youngjoo Kwon, Associate Professor, College of Pharmacy, Ewha Womans University, Seoul, 120-750, Korea Tel: 82-2-3277-4653 Fax: 82-2-

3277-2851 E-mail: ykwon@ewha.ac.kr Homepage: <http://ykwon.ewha.ac.kr>
(Postdoctoral Supervisor).

3. Byeong-Chun Lee, DVM, Ph.D. Professor, Dept. of Theriogenology and Biotechnology, College of Veterinary Medicine, Seoul National University 56-1 Shillim-dong, Kwanak-ku, Seoul 151-742, Korea
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4. Dr Tim Wright, **Durrell Wildlife Conservation Trust**, Les Augr's Manor, La Profonde Rue, Trinity, Jersey JE3 5BP Channel Islands, United Kingdom
Tim.Wright@durrell.org Aye-aye EEP coordinator and international studbook holder, Alaotran gentle lemur EEP coordinator and international studbook holder, Madagascar giant jumping rat international studbook holder.
5. Dr. A.K. Fazlul Huq Bhuiyan, Professor, Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh. Tel: 8801715-047767 Fax: 88091-61510 E-mail: bhuiyanbau@gmail.com
6. Dr. M. Mujaffar Hossain, Professor, Department of Animal Science, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh. Tel: 8809161240 Fax: 8809155810 E-mail: mmh_bau2009@yahoo.com

DECLARATION

I hereby declare that the above given particulars are true to my Knowledge.

Yours sincerely,

Date: 18.02.2018



Signature of the applicant
(Md. Abul Hashem, PhD)