



The 4th China-Japan-Korea Joint Symposium on Animal Reproduction

Theme: "Current Status and Future of Animal Reproduction Research in
China-Japan-Korea"

Venue: Nanjing New Century Hotel, Nanjing, China

Date: August 18-20, 2016

Program for August 18 (Thursday)

Registration Open	8:00-20:00
Welcome party	18:00

Program for August 19 (Friday)

Registration Open	7:30-8:30
Opening Remarks	8:30-9:20

Chair: Jian-Hui Tian

Shi-En Zhu(Chairperson, Reproduction Branch of Chinese Association of Animal Science and Veterinary Medicine)

Kei-ichiro MAEDA(President, Society for reproduction and development of Japan)

Bohsuk YANG (President, Korean Society of Animal Reproduction)

Leader of Chinese Association of Animal Science and Veterinary Medicine

Leader of Nanjing Agricultural University, China

Group Photo	9:20-9:45
Coffee/Tea Break	9:45-10:00
Session 1 Gametes, Embryos & Animals in Reproduction	10:00-12:00

Chair: Shao-Rong Gao and Kazuhiro KIKUCHI

CJK-1: Zeng-Ming Yang (South China Agricultural University, China)

Endometrial receptivity and decidualization

CJK-2: Kei Miyamoto(University of Cambridge, UK; Kindai University, Japan) **The improved culture condition for mouse nuclear transfer embryos**

enables highly efficient nuclear reprogramming

CJK-3: Inchul Choi (Chungnam National University, Republic of Korea)

Tight junction regulation during early mammalian embryo development

Lunch Break 12:00-13:30

Session 2 Cells in Reproduction 13:30-15:30

Chair: Hai-Bin Wang and Hakhyun Ka

CJK-1: Katsuhiko Hayashi (Kyushu University, Japan)

Reconstitution of oogenesis in dish using mouse embryonic stem cells

CJK-2: Shao-Rong Gao (Tongji University, China)

Epigenetic regulation in early embryo development and somatic cell reprogramming

CJK-3: Minjung Yoon (Kyungpook National University, Republic of Korea)

The attempt to produce horses using spermatogonial stem cell transplantation techniques

Session 3 Molecules in Reproduction 15:45-17:45

Chair: Zeng-Ming Yang and Jun-You Li

CJK-1: Lee Poongyeon (Animal Biotechnology Division, NIAS, Republic of Korea)

Current status of animal transgenic research in NIAS

CJK-2: Nahoko Ieda (Kyushu University, Japan)

Kisspeptin neurons as a master regulator of mammalian reproduction

CJK-3: Hai-Bin Wang (Institute of Zoology, Chinese Academy of Sciences, China)

Roadmap to embryo implantation

Closing Ceremony 17:45-18:00

Chair: Jian-Hui Tian

Shi-En Zhu (Chairperson, Reproduction Branch of Chinese Association of Animal Science and Veterinary Medicine)

Farewell Party 18:00

Chair: Shi-En Zhu and Feng Wang

Program for August 20 (Saturday)

Post-conference professional and social events

CONTENTS

ENDOMETRIAL RECEPTIVITY AND DECIDUALIZATION	
.....	Zeng-Ming Yang, South China Agricultural University (1)
THE IMPROVED CULTURE CONDITION FOR MOUSE NUCLEAR TRANSFER EMBRYOS ENABLES HIGHLY EFFICIENT NUCLEAR REPROGRAMMING	
.....	Kei Miyamoto, University of Cambridge (2)
TIGHT JUNCTION REGULATION DURING EARLY MAMMALIAN EMBRYO DEVELOPMENT.....	Inchul Choi, Chungnam National University (3)
RECONSTITUTION OF OOGENESIS IN DISH USING MOUSE EMBRYONIC STEM CELLS.....	Katsuhiko Hayashi, Kyushu University (4)
EPIGENETIC REGULATION IN PRE-IMPLANTATION EMBRYO DEVELOPMENT	Shao-Rong Gao, Tongji University (5)
THE ATTEMPT TO PRODUCE HORSES USING SPERMATOGONIAL STEM CELL (SCC) TRANSPLANTATION TECHNIQUES	Minjung Yoon, Kyungpook National University (6)
CURRENT STATUS OF ANIMAL TRANSGENIC RESEARCH IN NIAS	Lee Poongyeon, National Institute of Animal Science (8)
KISSPEPTIN NEURONS AS A MASTER REGULATOR OF MAMMALIAN REPRODUCTION	Nahoko Ieda, Nagoya University (9)
SHP2 IS ESSENTIAL FOR NORMAL EMBRYO IMPLANTATION IN MICE.....	Haibin Wang, Chinese Academy of Sciences (10)
NEW METHOD FOR CRYOPRESERVATION OF MESENCHYMAL STEM CELLS USING POLYCAPROLACTONE (PCL) SCAFFOLD.....	Dong-Mok Lee, Korea Institute of Industrial Technology, Gyeongbuk (11)
LONG-TERM CRYOPRESERVATION OF SPERMATOGONIAL STEM CELLS	Yong-An Lee, Chung-Ang University (12)
EFFECTS OF ISOPROTERENOL AND MELATONIN SUPPLEMENTATION ON IN VITRO DEVELOPMENT OF PORCINE PARTHENOGENETIC OOCYTES	Da Un Jeong, Gyeongnam National University of Science and Technology (13)
EFFECTS OF OVARY STATUS AND TRANSFERRED CLONED EMBRYO NUMBER ON THE EFFICIENCY OF PIG CLONING	Mi-Ryung Park, National Institute of Animal Science, RDA, Republic of Korea (14)
KNOCK-IN OF HUMAN FGF2 GENE IN THE BOVINE BETA-CASEIN GENE LOCUS	

- USING CRISPR/CAS9 NUCLEASE-MEDIATED HOMOLOGOUS RECOMBINATION..**
..... Young-Hee Jeong, Chonnam National University (15)
- TAUROURSODEOXYCHOLIC ACID IMPROVES PRE-IMPLANTATION DEVELOPMENT OF PORCINE SCNT EMBRYO BY ENDOPLASMIC RETICULUM STRESS INHIBITION** Tao Lin, Chungnam National University (16)
- PROGESTERONE INFLUENCES CYTOPLASMIC MATURATION IN PORCINE OOCYTES DEVELOPING IN VITRO** Bao Yuan, Jilin University (17)
- TAUROURSODEOXYCHOLIC ACID ENHANCES PRE-IMPLANTATION EMBRYOS DEVELOPMENT AFTER ICSI OF EVAPORATIVELY DRIED BOAR SPERMATOZOA** Xiao Xia Li, Chinese Academy of agricultural Sciences (18)
- CDK2 IS REQUIRED FOR THE DNA DAMAGE RESPONSE DURING EARLY EMBRYONIC DEVELOPMENT OF PORCINE PARTHENOTES**
..... HaiYang Wang, Chungbuk National University (20)
- COMPARATIVE PROTEOMICS ANALYSIS OF HUMAN AND BOVINE COLOSTRUM MILK.....** Jae Eun Lee, Chungnam National University (21)
- CHARACTERIZATION OF PORCINE OCT4 UPSTREAM REGULATORY REGION STRUCTURE AND FUNCTION.....** Seung-Hun Kim, Seoul National University (22)
- CAN HUMANIZED MICE PREDICT DRUG "BEHAVIOR" IN HUMANS?**
..... Xu D, Stanford University (23)
- EXPRESSION OF MEMBRANE PROGESTERONE RECEPTORS PROGESTIN AND ADIPONECTIN RECEPTORS IN THE UTERINE ENDOMETRIUM DURING THE ESTROUS CYCLE AND PREGNANCY IN PIGS.....** Minjeong Kim, Yonsei University (25)
- MELATONIN PROMOTES FATTY ACID SYNTHESIS IN PORCINE OOCYTES**
..... Jun-Xue Jin, Seoul National University (26)
- OVEREXPRESSION OF REPROGRAMMING FACTORS ON PORCINE STEM CELLS DERIVED FROM EMBRYO** Tae-Yeong Park, Seoul National University (27)
- EFFECTS OF MICROBUBBLED WATER SUPPLY ON TOTAL EGG PRODUCTION RATE, EGG WEIGHTS, AND BODY WEIGHT IN EARLY LAYING HENS**
..... Dong-Mok Lee, Korea Institute of Industrial Technology (28)
- PORCINE LARGE FOLLICULAR FLUID IMPROVES OOCYTE MATURATION AND EMBRYO DEVELOPMENT ON IN VITRO MATURATION OF PIGS**
..... Ji-Eun Park, Kangwon National University (29)
- PORCINE POOR COCS COULD BE RESCUED BY CULTURE WITH GOOD COCS**
..... So Yeon Kim, Chungnam National University (30)

- DIETARY-INDUCED CHRONIC HYPOTHYROIDISM NEGATIVELY AFFECTS RAT FOLLICULAR DEVELOPMENT AND OVULATION RATE: IS THERE A ROLE FOR OXIDATIVE STRESS?** Li Meng, Wageningen University (31)
- DNA DOUBLE-STRAND BREAKS DISRUPTED THE SPINDLE ASSEMBLY IN PORCINE OOCYTES** HaiYang Wang, Chungbuk National University (32)
- OXIDATIVE DAMAGE IN GOAT OOCYTES DURING IN VITRO MATURATION** Zhengrong Zhou, Jiangsu University (33)
- TRANSGENESIS OF HUMANIZED FAT1 PROMOTES N-3 POLYUNSATURATED FATTY ACID SYNTHESIS AND EXPRESSION OF GENES INVOLVED IN LIPID METABOLISM IN GOAT CELLS** Yixuan Fan, Nanjing Agricultural University (34)
- MOUSE INBRED STRAIN OFFSPRING PRODUCED BY INTRACYTOPLASMIC SPERM INJECTION (ICSI) WITH OOCYTES FROM FEMALES AT AGE OF 3-4 WEEKS** Jie Zhu, the University of Inner Mongolia (35)
- ROLES OF lncRNA IN THE EFFECTS OF NUTRITION ON DEVELOPMENT OF TESTIS DURING SEXUAL MATURATION OF HU SHEEP**
- Hua Yang, Nanjing Agricultural University (36)
- EFFECT OF PPARC1A OVEREXPRESSION OR SILENCING ON MITOCHONDRIAL APOPTOSIS OF GOAT GRANULOSA CELLS**
- Guo-Min Zhang, Nanjing Agricultural University (37)
- NON-INVASIVE ASSESSMENT OF CULTURE MEDIA FROM GOAT CLONED EMBRYOS ASSOCIATED WITH SUBJECTIVE MORPHOLOGY BY GC-MS BASED METABOLOMIC ANALYSIS** Yan-Li Zhang, Nanjing Agricultural University (38)
- FUNCTIONAL SNPs OF INCENP AFFECT SEMEN QUALITY BY ALTERNATIVE SPLICING MODE AND BINDING AFFINITY WITH THE TARGET BTA-MIR-378 IN CHINESE HOLSTEIN BULLS** Juan Liu, Shandong Academy of Agricultural Science (39)
- ZEARALENONE EXPOSURE IMPAIRS MOUSE PRIMORDIAL FOLLICLE FORMATION IN VITRO** Guo-Liang Zhang, Qingdao Agricultural University (41)
- EXOGENOUS ROS SHORT-TERM PRETREATMENT SHEEP IN VITRO MATURED CUMULUS OOCYTE COMPLEXES IMPROVES EMBRYO DEVELOPMENT**
- Tong Zhang, Inner Mongolia Agricultural University (43)
- MULTI-TRANSGENIC PIGS SECRETING B-GLUCANASE, XYLANASE AND PHYTASE IN SALIVA FOR IMPROVING NUTRIENT UTILIZATION AND EXCRETA POLLUTION CONTROL** Xian-Wei Zhang, South China Agricultural University (44)
- EFFECTS OF DIET AND L-ARGININE TREATMENT ON NO/PGC-1A SIGNALING**

PATHWAY DURING THE ESTROUS CYCLE IN HU SHEEP	Yixuan Guo, Nanjing Agricultural University (45)
METABOLOMIC PROFILING IN UMBILICAL VENOUS PLASMA REVEALS EFFECTS OF DIETARY RUMEN-PROTECTED ARGININE OR N-CARBAMYLGLUTAMATE SUPPLEMENTATION IN NUTRIENT RESTRICTION HU SHEEP DURING PREGNANCY	Lingwei Sun, Nanjing Agricultural University (46)
GENERATION AND EVALUATION OF MYOSTATIN KNOCK-OUT RABBITS AND GOATS USING CRISPR/CAS9 SYSTEM	Ri-Hong Guo, Nanjing Agricultural University (48)
MELATONIN SYNTHESIZED BY MITOCHONDRIA IN MICE OOCYTE TO AMELIORATEITS FUNCTION AND IMPROVE OOCYTE'S QUALITY	Jing Wang, China Agricultural University (49)
REPRODUCTIVE AXIS GENE REGULATION OF PHOTOSTIMULATION AND PHOTOREFRACTORINESS OF YANGZHOU GOOSE GANDERS.....	Huanxi Zhu, Jiangsu Academy of Agricultural Sciences (50)
THE EFFECTS OF DOWNREGULATING SUV39H1/H2 GENE EXPRESSION ON DEBAO PIG FIBROBLAST CELL GROWTH.....	Xiao-Li Dai, Guangxi University (52)
CONCENTRATION OF AMH AND mRNA EXPRESSION OF FOUR TGF-B FAMILY GENES IN RELATION TO DIFFERENT FOLLICULAR DIAMETER IN BUFFALO	Yaping Wang, Huazhong Agricultural University (53)
OVEREXPRESSION OF KDM4D LEADS TO LOSS OF DNA METHYLATION AT ICRS OF XIST AND OCT4 IN GOAT FIBROBLAST CELLS.....	Mingtian Deng, Nanjing Agricultural University (55)
FHL2/TGF-A/EGFR FORMED AN AUTOCRINE LOOP TO REGULATE KGN CELL PROLIFERATION	Fan Lin, Huazhong Agricultural University (56)
THE CHARACTERS OF BOVINE INDUCED PLURIPOTENT STEM CELLS DERIVED FROM FOUR YAMANAKA FACTORS	Lixia Zhao, Inner Mongolia University (58)
ISOZYGOUS AND SELECTABLE MARKER-FREE MSTN KNOCKOUT CLONED PIGS GENERATED BY THE COMBINED USE OF CRISPR/CAS9 AND CRE/LOXP.....	Yanzhen Bi, Hubei Academy of AgroSciences (60)
THE STUDY OF H3K27 ACETYLATION IN PORCINE IMMATURE OOCYTES WITH DIFFERENT CHROMATIN CONFIGURATION	Zhang Ling, Fuyang Normal University (62)
DMD-MODIFIED PIG GENERATED BY ZYGOTE INJECTION WITH CAS9/SGRNA	

- RESULTED IN MUSCLE DYSTROPHY** Heng Zhao, Shanghai Tech University (64)
- EFFECT OF BODY CONDITION ON FOLLICLE GENE EXPRESSION IN ESTROUS GOATS** Zi-Yu Wang, Nanjing Agricultural University (66)