



2021 ISLBDL

# 第三届奶畜泌乳生物学国际研讨会

The 3<sup>rd</sup> International Symposium on Lactation Biology of Dairy Livestock

November 20–21, 2021



Zhejiang University  
Hangzhou China



## The 3<sup>th</sup> International Symposium on Lactation Biology of Dairy Livestock

### Organizers

College of Animal Sciences Zhejiang University

College of Animal Science and Technology, Northwest A&F University

### Sponsors

China Agriculture (Dairy) Research System (CARS-36)

Dairy Goat Professional Committee of Chinese Dairy Association

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November 20<sup>th</sup> -21<sup>st</sup>, 2021

Hangzhou, China



## 奶畜泌乳生物学国际研讨会

**主办单位：**浙江大学动物科学学院

西北农林科技大学动物科技学院

**支持单位：**国家农业（奶业）产业技术体系

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11月20-21日，2021

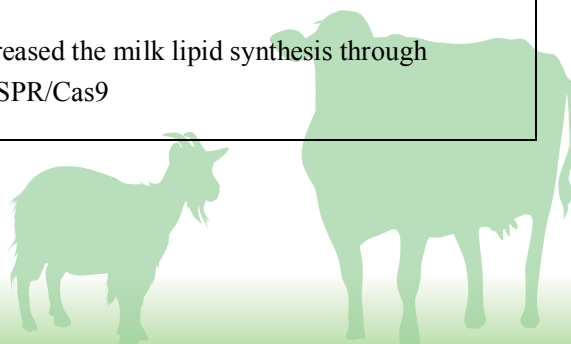
浙江大学

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## Meeting Programme

Saturday, November 20 <sup>th</sup>	
09:15-09:30	<b>Welcome and opening remarks</b> (Chaired by <b>Hong-Yun Liu</b> ) <b>Prof. Yi-Zhen Wang</b> (Dean of College of Animal Sciences, Zhejiang University) <b>Prof. Jun Luo</b> (Vice President of Northwest A&F University)
<b>Session 1</b> : Chaired by <b>Sha Tao</b> (University of Georgia, USA) <b>Chong Wang</b> (Zhejiang A&F University)	
09:30-10:00	<b>Keynote 1</b> Circadian clocks and their role in regulation of metabolic balance and mammary development and lactation performance of dairy cows <b>Theresa M. Casey</b> (Purdue University, USA)
10:00-10:30	<b>Keynote 2</b> Regulation of mammary gland development and function by environmental factors <b>Jimena Laporta</b> (University of Wisconsin-Madison, USA)
10:30-10:45	<b>Young Scientist O1</b> Regenerative involution of the mammary gland in ruminants <b>Heng-Bo Shi</b> (Zhejiang University)
10:45-11:00	<b>Young Scientist O2</b> Genetic effects and functional analyses of key genes affecting milk fat and protein synthesis in dairy goats <b>Cong Li</b> (Northwest A&F University)
11:00-11:10	<b>Coffee Break</b>
<b>Session 2</b> : Chaired by <b>Meng-Zhi Wang</b> (Yangzhou University) <b>Di-Ming Wang</b> (Zhejiang University)	
11:10-11:25	<b>Young Scientist O3</b> MRCK $\alpha$ mediates Met- and Leu-stimulated $\beta$ -casein synthesis in bovine mammary epithelial cells via targeting mTOR <b>Fang Wang</b> (Institute of Agricultural Sciences, CAAS)
11:25-11:40	<b>Young Scientist O4</b> Selenium attenuates NO-induced oxidative stress in bovine mammary epithelial cells through modulation of thioredoxin reductase 1/MAPK signalling pathway <b>Yong-Mei Guo</b> (Inner Mongolia Agricultural University)
11:40-11:55	<b>Young Scientist O5</b> Mammary gland delivery of nanoparticles and its potential application for nutrition <b>Jie Cai</b> (Zhejiang University)
12:00-13:30	<b>Lunch</b>
<b>Session 3</b> : Chaired by <b>Su-Mei Yan</b> (Inner Mongolia Agriculture University) <b>Ke Zhao</b> (Zhejiang Academy of Agricultural Science)	
14:00-14:30	<b>Keynote 3</b> Effects of high blood concentration of fatty acids on lactation performance in ketosis cows <b>Xin-Wei Li</b> (Jilin University)
14:30 -14:45	<b>Young Scientist O6</b> Deficiency of stearoyl-CoA desaturase 1 decreased the milk lipid synthesis through lipidomics in a goat model generated by CRISPR/Cas9 <b>Hui-Bin Tian</b> (Northwest A&F University)



14:45-15:00	<b>Young Scientist O7</b> Molecular mechanism of ketosis dairy cows mammary gland injury and prevention <b>Xu-Dong Sun</b> (Heilongjiang Bayi Agricultural University)
15:00-15:12	<b>Student O1</b> Systemic and mammary inflammation around dry-off and parturition of dairy cow <b>Jing Gao</b> (University of Georgia, USA)
15:12-15:24	<b>Student O2</b> Knockout SCD1 using CRISPR/Cas9 affects ICM formation during mouse embryo development via Ferroptosis pathway <b>Hui-Min Niu</b> (Northwest A&F University)
15:24-15:40	<b>Coffee Break</b>
<b>Session 4: Chaired by Hui-Zeng Sun (Zhejiang University) Cong Li (Northwest A&amp;F University)</b>	
15:40-15:52	<b>Student O3</b> Effect of conjugated linoleic acid on milk fat globule size , phospholipids composition and protein <b>Meng-Lu Zhang</b> (Henan Agricultural University)
15:52-16:04	<b>Student O4</b> Study on the Mechanism of Lactoferrin Synthesis and Its Immune function <b>Yue-Xin Shao</b> (Northwest A&F University)
16:04-16:16	<b>Student O5</b> Role of sortilin 1 (SORT1) on fatty acid-mediated lipid metabolism in primary calf hepatocytes <b>Shuang Wang</b> (Heilongjiang Bayi Agricultural University)
16:16-16:28	<b>Student O6</b> Functional research of Coat milk diet consumption on glucose metabolism in STZ-induced diabetic mice by metabolome and transcriptome <b>Xiao-Ying Chen</b> (Northwest A&F University)
16:28-16:40	<b>Student O7</b> Research on the rhythm of milk fat synthesis and the mechanism of period 2 to bovine mammary epithelial cells <b>Yi-Shu Wang</b> (Yangzhou University)
16:40-16:52	<b>Student O8</b> The molecular mechanism of 5-HT regulating calcium and energy metabolism in peripartal mammary gland of dairy goats through 5-HTR2A-CAM signalling axis <b>Zhi-Fei Zhang</b> (Northwest A&F University)



Sunday, November 21 <sup>st</sup>	
<b>Session 5</b> Chaired by <b>Zhong-Hua Wang</b> (Shandong Agricultural University) <b>Heng-Bo Shi</b> (Zhejiang University)	
09:00-09:30	<b>Keynote 4</b> Biosynthesis and regulation of milk quality <b>Jia-Qi Wang</b> (Institute of Agricultural Sciences, CAAS)
09:30-10:00	<b>Keynote 5</b> Super-enhancer: The key to dominant expression of milk genes in mammary gland <b>Chao-Chen Wang</b> (Zhejiang University)
10:00-10:15	<b>Young Scientist O8</b> Effects of short and long heat stress on liver and mammary gland metabolism and production performance in lactating goats <b>Lian-Bin Xu</b> (Zhejiang University)
10:15-10:28	<b>Student O9</b> Single-cell transcriptomic analysis reveals gene expression landscape of rumen cells in lactating dairy cows <b>Jia-Jin Wu</b> (Zhejiang University)
10:28-10:40	<b>Coffee Break</b>
<b>Session 6</b> Chaired by <b>Chuang Xu</b> (Heilongjiang Bayi Agricultural University) <b>Ping Wang</b> (Northwest A&F University)	
10:40-10:52	<b>Student O10</b> Amino acid supplementation enhances milk protein synthesis by regulating mTORC1 signalling in bovine mammary epithelial cells <b>Xin-Yue Lu</b> (Inner Mongolia University)
10:52-11:04	<b>Student O11</b> Both leucine and isoleucine starvation inhibit the activation of mTORC1 in bovine mammary epithelial cells <b>Shi-Zhe Zhang</b> (Shandong Agricultural University)
11:04-11:16	<b>Student O12</b> Effects of methionine on lactation performance of dairy goats fed with low protein diet <b>Bing-Qing Han</b> (Zhejiang University)
11:16-11:28	<b>Student O13</b> Effects of dietary protein level of female donkeys during late pregnancy on milk composition and amino acid content in colostrum and regular milk <b>Li Li</b> (Inner Mongolia Agricultural University)
11:28-11:43	<b>Young Scientist O9</b> The effect and mechanism of methionyl-methionine dipeptide on bovine mammary epithelial cell inflammation <b>Wei Lan</b> (Zhejiang University)
11:43-11:50	<b>Summary and Award Ceremony</b> (Chaired by <b>Hong-Yun Liu</b> ) Prof. <b>Jian-Xin Liu</b> (Zhejiang University) Prof. <b>Huai-Ping Shi</b> (Northwest A&F University)



## 会议微信群二维码：



### 会议链接

腾讯视频会议：<https://meeting.tencent.com/dm/zntlRBUUI6Vc>

会议 ID：459 5253 9168

会议密码：123456



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