第十七届亚洲线粒体研究与医学学会年会暨第三届中国生物物理学会线粒体生物学分会年会

——2025 中国·义乌

为加强亚洲线粒体研究学术交流与合作，持续推动线粒体医学创新驱动发展，第第十七届亚洲线粒体研究与医学学会年会暨第三届中国生物物理学会线粒体生物学分会年会将于 2025 年 10 月 23—26 日在浙江省义乌市举行（10 月 23 日报到）。本次大会以“线粒体与人类健康”为主题，围绕遗传性线粒体疾病、线粒体质量控制、信号转导、代谢、免疫、衰老、基因治疗与基因检测、临床遗传咨询等领域，设置主会场和多个专题分会场，以特邀报告、专题报告、学术墙报展和论文交流等多种形式开展学术交流，同时大会将举办针对遗传性线粒体疾病的专题医患交流会。

大会由中国生物物理学会线粒体生物学分会、浙江大学医学院附属第四医院、良渚实验室、暨南大学生命科学技术学院共同主办，浙江大学“一带一路”国际医学院、浙江大学国际健康研究院、浙江省遗传学会、义乌市科学技术协会、浙江大学遗传学研究所承办。目前已邀请了来自中国、日本、韩国、新加坡、澳大利亚等亚太地区及英国、法国、美国等国家和地区的 100 余位国内外知名专家进行学术交流。

一、 会议时间和地点

会议时间：2025 年 10 月 23 日报到，24日-26 日会议

会议地点：浙江义乌国际博览中心酒店

报到地点：浙江义国际博览中心酒店一楼大厅（浙江省义乌市宗泽

东路 57 号）

二、 会议安排

大会主题：线粒体与人类健康

学术报告：会议报告拟分大会特邀报告、专题报告和青年科学家报告，大会报告人由学术委员会推荐，青年科学家报告人由导师推荐或自荐进行遴选，欢迎广大青年科学家积极报名参会。

会议语言：英语。

会议摘要：请到会议网站 http://www.chinese-mit.org 提交摘要。大会接受线粒体及相关领域论文英文摘要，字数不超过 500 字，不使用图表。

学术墙报：规格为 120cm（高）×90cm（宽），英文。请到会议网站 http://www.chinese-mit.org 提交海报，参会者自行打印海报交由会务组。会议组委会将评选“最佳墙报奖”。

三、 会议注册

通过会议网站 http://www.chinese-mit.org 填写相关信息注册或会议现场注册

会议注册费

参会代表	注册费
正式代表（会员）	RMB 2000
正式代表（非会员）	RMB 3000
学生（会员）	RMB 1000
学生（非会员）	RMB 1500

会员指中国生物物理学会线粒体生物学分会会员、浙江省遗传学会会员。

学生代表：指在读本科生和研究生，报到时请携带学生证。

注：1. 注册费包含：会议期间餐费（中、晚餐，由会务组统一安排）、茶歇费和资料费等；收费标准以实际付款时间为准； 2. 发票领取：提前缴费代表请带好身份证在报道注册或参会期间领取。3.此次会议委托“杭州浙大同力后勤集团有限公司第一分公司”组织收取会议注册费，并开具相关增值税发票。

费用缴纳方式

1）网站在线支付；

2）支付宝支付：zhejiangyichuan@qq.com；

3）银行账号支付—户名：浙江省遗传学会；中国银行杭州紫金港支行；3883 5832 7553（附言：ASMRM2025 + 交款人姓名或注册 ID 号）；

4）现场交付。

住宿费和交通费自理。

四、 会议酒店

浙江义乌国际博览中心酒店

地址：浙江省义乌市宗泽东路 57 号

联系电话： 0579-85798888

酒店信息请关注大会网站更新及注册后注意接收会务组通知。

五、 公司赞助与参展

大会期间将同期将举办相关仪器、设备和新技术展览、展示，欢迎相关公司积极赞助或参加此次会议。赞助形式有：展位、欢迎晚宴、会议资料包等，详情请咨询会务组。

六、 会议联系人

余抗抗，方合志

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E-mail：genetics2022@zju.edu.cn

有关大会的其他具体事宜，将在下一轮通知中说明，请及时关注会议网站 http://www.chinese-mit.org。

浙江省遗传学会（公章）

第十七届亚洲线粒体研究与医学学会年会暨

第三届中国生物物理学会线粒体生物学分会年会大会组委会

PROGRAM

Thursday October 23rd, 2025

10:00-18:00 Registration

18:00-20:00 Session Chair: Zhihui Feng and Meng Wang

18:00-18:15 Qinghai Zhang, The Fourth Affiliated Hospital of Zhejiang University School of Medicine
Ablation of Mto1 in zebrafish exhibited hypertrophic cardiomyopathy manifested by mitochondrion RNA maturation deficiency

18:15-18:30 Tasneem Qaqor, University of Osaka
Single-cell and spatial transcriptomics to identify mitochondrial disease progression and treatment targets

18:30-18:45 Kaili Ma, Suzhou Institute of Systems Medicine
Succinate preserves CD8+ T cell stemness to augment antitumor immunity

18:45-19:00 Xueqiang Wang, University of Health and Rehabilitation Sciences
Alternate Day Fasting Confers Metabolic Benefits via Suppressing Hepatic Mitochondrial Complex II Assembly

19:00-19:15 Weiwei Zou, The First Affiliated Hospital of Anhui Medical University
Light-activated mitochondrial fission through optogenetic control of mitochondria-lysosome contacts

19:15-19:30 Yan Bai, Yunnan University
Mitochondria-associated condensates maintain mitochondrial homeostasis and promote lifespan

19:30-19:45 Liming Wang, Hunan University
The paradoxical regulation of mitophagy and pyroptosis by phosphatase PTEN-L and kinase PINK1

19:45-20:00 Bin Fang, Xiamen University
Mitochondrial Quality Optical Control

20:00-22:00 Session Chair: Chenyang Duan and Liang Zhang

20:00-20:15 Meiling Wang, Xiamen University

Deficiency of microglia-derived Spp1 exacerbates brain aging by impairing mitochondrial complex I function

20:15-20:30 Tingting Fu, Nanjing University

Mitochondrial quality control and adipose tissue homeostasis

20:30-20:45 Li Mi, Westlake University

Computational design of a high-precision mitochondrial DNA cytosine base editor

20:45-21:00 Jiacong Yan, The First People Hospital of Yunnan Province

Essential role of DGUOK in female fertility through mitochondrial regulation

21:00-21:15 Cheng Ai, The Fourth Affiliated Hospital of Zhejiang University School of Medicine

Vitamin A treatment restores vision failures arising from Leber's hereditary optic neuropathy–linked mtDNA mutation

21:15-21:30 Shihao Yao, The Fourth Affiliated Hospital of Zhejiang University School of Medicine

Mechanism of phenotypic heterogeneity of pathogenic mutations in mitochondrial ADP/ATP carrier based on protein structure

21:30-21:45 Zhipeng Nie, Zhejiang University International School of Medicine

Mutation of CRYAB encoding a conserved mitochondrial chaperone and antiapoptotic protein causes hereditary optic atrophy

21:45-22:00 Huisen Zhan, Zhejiang University

MELAS-associated $tRNA^{Leu(UUR)}$ 3243A>G mutation reshapes mitochondrial integrity via distinct fission signatures

Friday October 24th, 2025

08:00-08:15 Opening Remarks/Group Photo **Min-Xin Guan**

08:15-10:40 Session Chair: Min-Xin Guan and Xingguo Liu

08:15-08:40 Michal Minczuk, University of Cambridge

The potential of mitochondrial genome engineering

08:40-09:00 Koji Okamoto, Osaka University

09:00-09:20 Mito Takayuki, Kyushu University

Mosaic Dynamics of Mitophagy in Mitochondrial Disease and Its Contribution to Disease Progression

09:20-09:40 Jin Han, Inje University

Cereblon-mediated endoplasmic reticulum stress in diabetic cardiomyopathy

09:40-10:00 Tsu-Kung Lin, Chang Gung Memorial Hospital

Mitochondrial Targeting Therapy in Parkinson's Disease

10:00-10:20 David A. Stroud, University of Melbourne

Untargeted proteomics enables ultra-rapid variant prioritisation in mitochondrial and other rare diseases

10:20-10:40 Erich Gnaiger, Medical University of Innsbruck/Oroboros Instruments

Redox regulation of coenzyme-Q, mitochondrial membrane potential, and calcium uptake under hypoxia

10:40-10:50 Refreshment Break

10:50-12:30 Session Chair: Zhiyin Song and Tsu-Kung Lin

10:50-11:10 Chun-Hong Chen, NHRI

Dosmit CISD1/mitoNEET: A Novel Regulator of Mitochondrial Dynamics and Vesicular Trafficking in Aging

11:10-11:30 Xuemei Tong, Shanghai Jiao Tong University

Pentose metabolism and mitochondrial function in T cells

11:30-11:50 Liufu Deng, Shanghai Jiao Tong University

Mitochondria-ensured Immune Surveillance Regulates Cross-priming in Tumor Immunology

11:50-12:10 Guideng Li, Institute of Systems Medicine, Chinese Academy of Medical Sciences

Mitochondrial remodeling as a metabolic strategy to preserve T cell stemness and enhance anti-tumor immunity

12:10-13:30 Lunch

12:30-13:30 ASMRM Administrative Committee Meeting

13:30-15:30 Session Chair: Du Feng and Juan Liu

13:30-13:50 Hanming Shen, University of Macau

Novel regulatory mechanisms of mitophagy by focusing on PINK1

13:50-14:10 Kah-Leong LIM, Nanyang Technological University

Mitochondrial dysfunction in Parkinson's disease

14:10-14:30 Yih-Cherng Liou, National University of Singapore

Beyond Translation: Unveiling DAP3' Role in Apoptosis and Calcium Signaling

14:30-14:50 Jia Chen, ShanghaiTech University

Development and Application of Base Editors

14:50-15:10 Erwei Zuo, Agricultural Genomics Institute at Shenzhen, CAAS

High-fidelity Gene Editing Technology

15:10-15:20 Refreshment Break

15:20-16:40 Session Chair: Bin Shen and Min Jiang

15:20-15:40 Jiazhi Hu, Peking University

The stability of mitochondrial during genome editing

15:40-16:00 Liang Chen, Lingang Laboratory

Development of high-performance mitochondrial base editors for generation and correction of mtDNA disease models

16:00-16:20 Yunbo Qiao, Shanghai Jiao Tong University

Genome Editing-based Functional Annotation of Nuclear and Mitochondrial Genomics in Development and Diseases

16:20-16:40 Min Jiang, Westlake University

Lessons Learned from mtDNA Maternal Transmission

16:40-18:10 Session Chair: Xingguo Liu

16:40-17:10 Fangfang Hu, *Cell Research*

17:10-17:40 Wenjing Mu, *Nature Communications*

17:40-18:10 Huan Guo, *Mitochondrial Communications*

18:10-19:30 Welcome Dinner

19:30-21:30 Meet the Editor

Saturday October 25th, 2025

08:00-10:30 Session Chair: Jianwei Sun and Bin Lu

08:00-08:25 Min-Xin Guan, Zhejiang University

Mitochondrial diseases: Lessons from for Leber's hereditary optic neuropathy

08:25-08:45 Alan Yueh-Luen Lee, NHRI

Mitochondrial signaling orchestrates vesicles, organelle crosstalk, and metabolism in the tumor immune microenvironment

08:45-09:05 Xingguo Liu, Guangzhou Institutes of Biomedicine and Health, CAS

Glucose restriction induces degeneration of neurons with mitochondrial DNA depletion by altering ER-mitochondria calcium transfer

09:05-09:25 Xianhua Wang, Peking University

Dual roles of MTNAP1 in regulating mtDNA homeostasis

09:25-09:45 Song Gao, Sun Yat-sen University

Mitochondrial fusion and T cell immunotherapy

09:45-10:05 Xun Wang, Institute of Systems Medicine, CAMS

Roles of Mitochondrial ETC in Liver Regeneration

10:05-10:25 Jianwei Sun, Yunnan University

The Wnt/β-catenin-P2-HNF4α feedback loop facilitates colorectal tumorigenesis and malignancy

10:25-10:35 Refreshment Break

10:35-12:35 Session Chair: Chuanzhu Yan and Haishan Jiang

10:35-10:55 Zhiyin Song, Huazhong University of Science and Technology

The role and mechanism of mitochondrial nucleic acid release in EMCV-induced myocarditis

10:55-11:15 Xuefeng Zhu, North China University of Science and Technology

Molecular mechanisms of mitochondrial DNA replication

11:15-11:35 Juan Liu, Second Military Medical University

Mitochondrial fusion potentiates dendritic cell migration in autoimmunity

11:35-11:55 Shuijie Li, Harbin Medical University

Targeting novel hypoxia factor S2 supresses hepatocellular carcinoma tumorigenesis through resorting mitochondria function

11:55-12:15 Tatsuhisa Tsuboi, Tsinghua Shenzhen International Graduate School

Cytoplasmic mRNA localization defines protein distribution in a mitochondrial graph-like network

12:15-12:35 Yafang Hu, Southern Medical University

Mechanism of neuronal mitochondria dysfunction in Mohr-Tranebjaerg syndrome

12:35-13:30 Lunch

12:35-13:30 Chinese-Mit Administrative Committee Meeting

13:30-15:50 Session Chair: Chao Tong and Zhenji Gan

13:30-13:50 Chonglin Yang, Yunnan University

13:50-14:10 Shuai Chen, Nanjing University

Rabs as mitochondrial receptors for lipid droplets in skeletal muscle

14:10-14:30 Chao Tong, Zhejiang University

A negative regulator of mitochondrial complex I assembly adapts respiration to cellular energy demand

14:30-14:50 Guang Lu, Sun Yat-sen University

STING-OPTN axis bridges mitophagy and cell fate decisions

14:50-15:10 Linhao Ruan, Huazhong University of Science and Technology

Mitochondria Associated Proteostasis

15:10-15:30 Wen Yang, Shanghai Jiao Tong University

The mitochondrial DNAJC co-chaperone TCAIM reduces a-ketoglutarate dehydrogenase protein levels to regulate metabolism

15:30-15:50 Chao Zuo, Nanjing University of Science and Technology

Non-interferometric Quantitative Phase Imaging and Diffraction Tomography Microscopy Techniques and Instruments

15:50-16:00 Refreshment Break

16:00-18:20 Session Chair: Jiacong Yan and Dongmei Ji

16:00-16:20 Hongying Sha, Fudan University

From Heteroplasmy to Reversion: Key Scientific Issues in the Safety of Mitochondrial Replacement Therapy

16:20-16:40 Hongguang Xia, Zhejiang University

Mitochondrial homeostasis and diseases

16:40-17:00 Yinan Ma, Peking University First Hospital

Genetic counselling and prenatal diagnosis in mitochondrial diseases

17:00-17:20 Linpeng Li, Guangzhou Medical University

The role of lactate and lactylation during the pluripotency and totipotency development

17:20-17:40 Dongmei Ji, The First Affiliated Hospital of Anhui Medical University

Preimplantation genetic testing for mitochondrial DNA (PGT-MT) blocks the progression of mitochondrial DNA genetic diseases

17:40-18:00 Wenzhi Li, Shanghai Ninth People's Hospital

Approach Selection and Technical Optimization in Mitochondrial Replacement Therapy

18:00-18:20 Liang Yang, Guangzhou Institutes of Biomedicine and Health, CAS

NAD+ dependent UPRmt activation underlies intestinal aging caused by mitochondrial DNA mutations

18:20-19:00 Dinner

19:00-21:30 Poster Session

Sunday October 26th, 2025 **Huayue Hall 1**

08:30-10:10 Session Chair: Lin Li and Cong Yi

08:30-08:50 Bin Lu, University of South China

Mitochondrial Matrix Proteostasis In Aging And Disease

08:50-09:10 Guobing Chen, Jinan University

Anti-aging drug development and its mechanisms research targeting mitophagy

09:10-09:30 Huan Ma, Zhejiang University

Cognitive aging and its sex-specific regulation: mechanisms and insights

09:30-09:50 Lianfeng Wu, Westlake University

Developmental Programming of Lifelong Health and Longevity: Mitochondrial Basis and Beyond

09:50-10:10 Lin Li, Xiamen University

Mitochondrial anti-aging

10:10-10:30 Liming Wu, The Fourth Affiliated Hospital of Zhejiang University School of Medicine

The role of Glycosylation in Cancer Immunotherapy

10:30-10:40 Refreshment Break

10:40-12:00 Session Chair: Linpeng Li and Xun Wang

10:40-11:00 Chuanxian Wei, Sino-French Hoffmann Institute, Guangzhou Medical University

Mitochondrial α-ketoglutarate Couples Cellular Metabolism to Developmental Growth via Hydroxylation-Dependent Degradation of Yorkie

11:00-11:20 Chenyang Duan, Chongqing Medical University

Mechanistic Insights and Therapeutic Interventions of Mitochondrial Communication Dysregulation in Sepsis Progression

11:20-11:40 Jie Wang, Xi'an Jiaotong University

Homozygous C1QBP-L275F Mutation Drives Cardiac Hypertrophy

via Mitochondrial Dysfunction and Ferroptosis Activation

11:40-12:00 Yuchun Li, Kunming Institute of Zoology, CAS

Into and out of East Asia: evidence from mitochondrial genomes

12:00-13:30 Closing Remarks and Lunch

Sunday October 26th, 2025 **Huayue Hall 2**

08:30-10:10 Session Chair: Yanchun Ji and Kunqian Ji

08:30-08:45 Yanchun Ji, Children's Hospital, Zhejiang University School of Medicine

Leber's hereditary optic neuropathy–associated ND1 3733G>C mutation ameliorates the mitochondrial quality control and cellular homeostasis

08:45-09:00 Kunqian Ji, Shandong University

Lactate and histone lactylation mediate a multi-organ crosstalk by upregulating myokine GDF15 in mitochondrial myopathy

09:00-09:15 Ruoyu Duan, Beijing Children's Hospital

Identification of a newly implicated pathogenic gene in Leigh Syndrome

09:15-09:30 Wenjun Wang, Jinan University

SENP6 Maintains Mitochondrial Homeostasis by Regulating Mitochondrial Protein Import Through deSUMOylation of TOM40

09:30-09:45 Yan Lin, Shandong University

Queuine ameliorates mitochondrial dysfunction caused by Q modification-associated mt-tRNA variants

09:45-10:00 Wei Wang, The First Affiliated Hospital of Nanchang University

Myopathies with ragged-red fiber

10:00-10:15 Wenwen Xi, University of South China

Tid1 Drives Non-Alcoholic Fatty Liver Disease via Mitochondrial Damage-Dependent Ferroptosis in Mice

10:15-10:30 Zidong Jia, The Fourth Affiliated Hospital of Zhejiang University School of Medicine

Pseudouridine modifications in mitochondrial tRNA

10:30-10:40 Refreshment Break

10:40-12:00 Session Chair: Zidong Jia and Qinghai Zhang

10:40-10:55 Feilong Meng, Children's Hospital, Zhejiang University School of Medicine

Deafness-associated tRNA^{Phe} mutation impaired mitochondrial and cellular integrity

10:55-11:10 Busu Li, Qilu hospital of Shandong Province

Single-fiber proteomics reveals fiber-specific compensatory responses in mitochondrial myopathy

11:10-11:25 Qian Liu, Jinan University

ME2 suppresses PINK1-Parkin-mediated mitophagy by stabilizing ATAD3A via competitive interaction with TRIM25

11:25-11:40 Xia Tian, The First Medical Center of Chinese PLA General Hospital

Sepsis-Induced Vascular Endothelial Cell Injury: The Crucial Role of Mitochondrial Quality Control

11:40-11:50 Chao Chen, The Fourth Affiliated Hospital of Zhejiang University School of Medicine

Deficient TRMU reprograms the mitochondrial transcription and RNA processing

11:50-12:00 Xiao He, The Fourth Affiliated Hospital of Zhejiang University School of Medicine

Deficient mitochondrial tRNA modifications reprogram liver tissue-specific electron transport chains