



ICMRC 2024

第五届国际华人骨科研究大会

The 5th International Chinese Musculoskeletal Research Conference

5/31/2024 福建·泉州泉商希尔顿酒店

8:00 — 18:00	Registration		
12:00 — 18:00	Clinical Session		
18:00 — 21:00	Presidential Dinner (Invite only)		
6/1/2024			
8:15 — 8:45	O	Opening Ceremony	
8:45 — 11:30	P1	Plenary Session I	
11:30 — 13:15	Poster Session I, Lunch Break, and Special Satellite Meeting		
13:15 — 14:15	A	Concurrent A1	Concurrent A2 Concurrent A3
14:15 — 14:30	Short Break		
14:30 — 16:00	B	Concurrent B1	Concurrent B2 Concurrent B3
16:00 — 16:15	Tea/Coffee Break		
16:15 — 17:45	C	Concurrent C1	Concurrent C2 Concurrent C3
6/2/2024			
8:15 — 11:00	P2	Plenary Session II	
11:00 — 12:45	Poster Session II and Lunch Break		
12:45 — 14:05	D	Concurrent D1	Concurrent D2 Concurrent D3
14:05 — 14:20	Short Break		
14:20 — 15:50	E	Concurrent E1	Concurrent E2 Concurrent E3
15:50 — 16:05	Tea/Coffee Break		
16:05 — 17:35	F	Concurrent F1 (Youth session)	Concurrent F2 (Meet editors) Concurrent F3
17:35 — 18:00	Short Break and Conference Room Setup		
18:00 — 18:30	Award and Closing Ceremony		

Program may be subject to change.

May 31, 2024

8:00 — 18:00	Registration 福建·泉州泉商希尔顿酒店
12:00 — 18:00	Clinical Session 会议室1+2 (郑和厅+哥伦布厅)
18:00 — 21:00	Presidential Dinner (Invite only)
<p>The International Chinese Musculoskeletal Research Conference (ICMRC) is a biennial international academic conference organized by the International Chinese Musculoskeletal Research Society (ICMRS). The ICMRC aims to promote basic and translational orthopedic research and to improve the diagnosis, treatment, and comprehensive prevention of major musculoskeletal diseases through academic dialogue, research collaboration among domestic and foreign colleagues, and ICMRS collaborative centers. Following the success of previous ICMRCs in Suzhou, Changsha, Shihezi, and Shenzheng, the 5 ICMRC (ICMRC-2024) will be held in Jinjiang, a historic yet vibrant city in southern China, from May 31 to June 3, 2024. ICMRS, the National Orthopaedic Research Centre at Shanghai Jiao Tong University Sixth People's Hospital, Fujian Jinjiang People's Hospital, and HEMIN Foundation will jointly host this conference.</p> <p>The ICMRC-2024 will be chaired by ICMRS president Professor Guozhi Xiao and Professors Changqing Zhang, Jean Jiang, Changsheng Liu, Xing Ma, and Ming Chen. The theme of this meeting is "Embracing Cutting-edge Cell and Molecular Biotechnologies and Material Sciences to Advance Basic and Translational Orthopedic Research." The conference will cover topics including musculoskeletal development and aging, joint biology and osteoarthritis, mechanobiology and biomechanics, bone metabolism and osteoporosis, nerve regulation of bone, joint disorders, and pain, bone tumor, intervertebral disc and spine degeneration, tendon and ligaments, muscle, biomaterials, tissue engineering and regenerative medicine, drug development and clinical applications. Leading scientists from the United States, Canada, Australia, European countries, Hong Kong, and Mainland China will be invited to share their exciting findings and insights. This conference will feature exciting programs, including presentations, symposia, and best abstract and young investigator awards, to facilitate the discussion of state-of-the-art musculoskeletal research and clinical applications.</p> <p>Welcome to ICMRC-2024!</p>	

June 1, 2024

8:15 — 8:45		Opening ceremony		Moderators		TBN	TBN	Quanshang Grand Ballroom (1&2&3)	
8:45 — 11:30		Plenary Session I		Moderators		Yixian Qin	Jean Jiang	Quanshang Grand Ballroom (1&2&3)	
8:45 — 9:15	P1-1	Changsheng Liu	Shanghai University	Biomaterials and bone defect repairing					
9:15 — 9:45	P1-2	Tamara Alliston	University of California San Francisco	Osteocytic mechanisms of age-related bone fragility and joint disease					
9:45 — 10:00		Tea/Coffee Break							
10:00 — 10:30	P1-3	Xu Cao	Johns Hopkins University	Skeletal interoception regulates weight bearing bone: implication of joint disease and pain					
10:30 — 11:00	P1-4	Eben Alsberg	University of Illinois Chicago	Engineering scaffold-free tissue constructs via modular assembly, cell-only bioprinting and 4D strategies					
11:00 — 11:30	P1-5	Changqing Zhang	The Sixth People's Hospital of Shanghai Jiaotong University	Application of costal cartilage in cartilage repair					
11:30 — 12:30		Poster Session I		#1-101, 3rd floor, Quanshang Grand Ballroom Foyer (三楼东商宴会厅·序厅); #102-245, 5th floor, Vasco Da Gama & James Cook & Francis Drake (五楼达·伽马厅+库克厅+德雷克厅)					
12:30 — 13:15		Lunch Break		Special Satellite Meeting: Musculoskeletal Health in Space and Translation on Ground (Bartholmeu Dias Hall 迪亚士厅)					
13:15 — 14:15		Cocurrent session A1:		Bone biology 1 (* invited talk)		Zhenlin Zhang	Yiping Li	Jiang Peng	Grand Ballroom 1 (宴会厅1)
				Moderators					
13:15 — 13:35	A1-1	Xiaochun Bai*	Southern Medical University	An integrated multi-omics analysis reveals osteokines involved in the global regulation					
13:35 — 13:55	A1-2	Weiguo Zou*	Shanghai Institute of Biochemistry and Cell Biology, CAS	The identification and functional study of Itm2a-positive periosteal/tendon stem cells					
13:55 — 14:00	A1-3	Hui Li	Shenzhen Institutes of Advanced Technology, CAS	Deficiency of PRDM2 protects mice against microgravity-induced bone loss					
14:00 — 14:05	A1-4	Youliang Ren	University of Rochester	Real time fluorescent microscopy assessment of PAD4-Mediated NETosis and NET Degradation by S. aureus nuclease					
14:05 — 14:10	A1-5	Ce Dou	Southwest Hospital, Third Military Medical University,	The role of osteoclast-derived apoptotic bodies in bone health and disease					
14:10 — 14:15	Q&A								
13:15 — 14:15		Cocurrent session A2:		Joint biology and osteoarthritis 1 (* invited talk)		Di Chen	Tao Yang	Qiang Xie	Grand Ballroom 3 (宴会厅3)
				Moderators					
13:15 — 13:35	A2-1	Di Chen*	Shenzhen Institute of Advanced Technology, CAS	Key signaling circuits driving osteoarthritis progression					
13:35 — 13:55	A2-2	Dongquan Shi*	Nanjing University Drum Tower Hospital	Activating TRPV1 with infrared hyperthermia for treat osteoarthritis					
13:55 — 14:00	A2-3	Biao Kuang	Second Affiliated Hospital of Chongqing Medical University	Panaxatriol exerts anti-senescence effects and alleviates osteoarthritis and cartilage repair fibrosis by targeting Uf1					
14:00 — 14:05	A2-4	Xue Hao	Xi'an Jiaotong University,	ZBTB20 promotes cartilage degradation via direct suppression of Pten and activation of PI3K/AKT-NF-kB signaling in early osteoarthritis					
14:05 — 14:10	A2-5	Xiaofeng Liu	Shanghai 6th People's Hospital/Shanghai Jiao Tong Univ	Sulfatase regulated chondrocytes metabolism as a therapeutic target In treating osteoarthritis					
14:10 — 14:15	Q&A								
13:15 — 14:15		Cocurrent session A3:		Mechanobiology and biomechanics (* invited talk)		Xinping Zhang	Weiguo Zuo	Weibo Xia	Conference Room 1&2&3 (麦哲伦+郑和厅+哥伦布厅)
				Moderators					
13:15 — 13:35	A3-1	Edward Guo*	Columbia University	Subchondral bone and osteoarthritis					
13:35 — 13:55	A3-2	Jiliang Li*	Indiana University School of Medicine	Mechanotransduction in living bone					
13:55 — 14:00	A3-3	Chao Liu	Southern University of Science and Technology	Mechanobiological regulation of angiogenesis-osteogenesis coupling for the enhancement of bone regeneration					
14:00 — 14:05	A3-4	Dezhi Zhao	University of Texas Health Science Center	Connexin 43 hemichannels with prostaglandin release in osteocytes regulate bone responses to mechanical stimulation and disuse					
14:05 — 14:10	A3-5	Shaoyi Wang	Shandong University	Mechanical overloading induces GPX4-regulated chondrocyte ferroptosis in osteoarthritis via Piezo1 channel facilitated calcium influx					
14:10 — 14:15	Q&A								
14:15 — 14:30		Short break							

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14:30 — 16:00		Cocurrent session B1:		Bone biology 2 (* invited talk)			
		Moderators		Lin Chen	Liyun Wang	Lianfu Deng	Grand Ballroom 1 (宴会厅1)
14:30 — 14:50	B1-1	Yixian Qin*	Stony Brook University	Magnetic actuation of Piezo1 superparamagnetic Fe oxide-gold nanoparticles: a novel dual acting on osteogenesis and anti-osteopenia			
14:50 — 15:10	B1-2	Ling Qin (HK)*	The Chinese University of Hong Kong	Magnesium as "energy generator" in bone regeneration			
15:10 — 15:30	B1-3	Tingting Tang*	Shanghai Jiaotong University the Ninth People's Hospital	3D bioprinting for orthopedic research			
15:30 — 15:35	B1-4	Mengrui Wu	Zhejiang University	Merlin regulates cartilage development and homeostasis through the primary cilia-Hedgehog signaling pathway			
15:35 — 15:40	B1-5	Chen He	Xiangya Hospital of Central South University	Macrophage derived exosomes regulate skeletal stem/progenitor cells lineage fate and skeletal aging in obesity			
15:40 — 15:45	B1-6	Yi Fan	Sichuan University	Critical role of PTH1R in craniofacial bone development and remodeling			
15:45 — 15:50	B1-7	Ziyi Chen	The Chinese University of Hong Kong	CFTR-deficiency accelerates skeletal muscle aging by impairing autophagy and myogenesis			
15:50 — 15:55	B1-8	Keming Chen	The 940th Hospital of Joint Logistic Support Force	A novel osteogenic peptide obtained by screening PeptiBoom 3D structure peptide library			
15:55 — 16:00	Q&A						
14:30 — 16:00		Cocurrent session B2:		Nerve regulation (* invited talk)			
		Moderators		Xu Cao	Shiqing Feng	Rongrong Zhu	Grand Ballroom 3 (宴会厅3)
14:30 — 14:50	B2-1	Hongbin Lu*	Xiangya Hospital of Central South University	Insights and foresights in rotator cuff healing: mechanical stimulations and neural regulations			
14:50 — 15:10	B2-2	Jiake Xu*	Shenzhen Institute of Advanced Technology, CAS	Novel angiogenic factors in bone microenvironment and their potential translation in bone repair			
15:10 — 15:30	B2-3	Kelvin Yeung*	Hongkong University	Central nervous system-skeletal axis mediated bone regeneration can be achieved by multiple cations therapy in bone			
15:30 — 15:35	B2-4	Tongzhou Liang	The Chinese University of Hong Kong,	Systemic supplementation of magnesium attenuates bone loss via acting on central nervous system			
15:35 — 15:40	B2-5	Chengjun Li	Xiangya Hospital, Central South University	Kdm6a-CNN1 axis orchestrates epigenetic control of trauma-induced SCMECs senescence to balance neuroinflammation			
15:40 — 15:45	B2-6	Sihan Tong	Shanghai 6th People's Hospital/Shanghai Jiao Tong Univ	Fibroblast-like synoviocytes-derived netrin-1 induce sensory innervation and hip pain			
15:45 — 15:50	B2-7	Yang Chen	The First Affiliated Hospital of Fujian Medical University	Bacteria tames nociceptive neurons to suppress macrophage responses in chronic infection			
15:50 — 15:55	B2-8	Haiqi Ding	Fujian Medical University	Wireless optogenetic targeting nociceptors helps host cells win the competitive colonization in implant-associated infections			
15:55 — 16:00	Q&A						
14:30 — 16:00		Cocurrent session B3:		Intervertebral disc and spine (* invited talk)			
		Moderators		Jie Shen	Tingting Tang	Zhihong Hu	Conference Room 1&2&3 (麦哲伦+郑和厅+哥伦布厅)
14:30 — 14:50	B3-1	Lei Yang*	Hebei University of Technology	Mechno-bioengineering for musculoskeletal repair and regeneration			
14:50 — 15:10	B3-2	Rongrong Zhu*	Tongji University	Construction and mechanism study of bioactive materials for the repair of intervertebral disc degeneration			
15:10 — 15:30	B3-3	Lei Cheng*	Qilu Hospital of Shandong University	Treatment strategies for upper cervical spinal stenosis			
15:30 — 15:35	B3-4	Jiangbo Guo	Soochow University	Biomimetic nanovesicles alleviate compression-induced intervertebral disc degeneration via integration with mechanically responsive miR-1249			
15:35 — 15:40	B3-5	Zhongyin Ji	Sir Run Run Shaw Hospital, Zhejiang University	Mrgprb2-mediated mast cell activation aggravates modic changes by regulating the immune niches			
15:40 — 15:45	B3-6	Bo Gao	Air Force Medical University	Discovery of mechanical sensitive NP sub-population and essential role of PIEZO1 in regulating IVD homeostasis and degeneration			
15:45 — 15:50	B3-7	Di Wang	Air Force Medical University	Phosphorylation of KRT8 by overloading-activated PKN impairs autophagosome initiation and contributes to disc degeneration			
15:50 — 15:55	B3-8	Chao Yu	Zhejiang University	Silencing circATXN1 in aging nucleus pulposus cell alleviates intervertebral disc degeneration via correcting progerin mislocalization			
15:55 — 16:00	Q&A						
16:00 — 16:15				Tea/Coffee Break			

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16:15 — 17:45		Cocurrent session C1:		Bone biology 3 (* invited talk)			
		Moderators		Lidan You	Xiaochun Bai	Chunli Song	Grand Ballroom 1 (宴会厅1)
16:15 — 16:35	C1-1	Jean Jiang*	University of Texas Health Science Center at San Antonio	Connexin channels in bone mechanotransduction, hemostasis, and cancer bone metastasis			
16:35 — 16:55	C1-2	Xinping Zhang*	Rochester University	Image musculoskeletal tissue and its microenvironment via multiphoton microscopy			
16:55 — 17:15	C1-3	Jie Shen*	Washington University, USA	Fracture Nonunion: New Insights into Mechanism and Therapy			
17:15 — 17:20	C1-4	Jiahui Huang	Harvard Univ School of Dental Medicine	PTPN11 in odontoblasts is required for ameloblastogenesis and enamel formation			
17:20 — 17:25	C1-5	Shiju Song	Air Force Medical University	Descendants of hypertrophic chondrocytes promote long bone linear growth and injury repair through regulating angiogenesis			
17:25 — 17:30	C1-6	Min Guan	Shenzhen Institute of Advanced Technology, CAS	Nuclear receptor ESRRA-mediated cellular metabolism in bone cell			
17:30 — 17:35	C1-7	Xiangxi Kong	Zhejiang University	NDR2 is critical for the osteoclastogenesis by regulating ULK1-mediated mitophagy			
17:35 — 17:40	C1-8	Jianguo Tao	Westlake University	Multi-omics integration reveals candidate determinants of bone mineral density and the role of azin1 in bone homeostasis			
17:40 — 17:45	Q&A						

16:15 — 17:45		Cocurrent session C2:		Tendon, ligaments, muscle and meniscus (* invited talk)			
		Moderators		James Wang	Weili Fu	Xiao Chen	Grand Ballroom 3 (宴会厅3)
16:15 — 16:35	C2-1	Minghao Zheng*	The University of Western Australia	Biomechanics of subcellular organelles determine tendo homeostasis			
16:35 — 16:55	C2-2	Peng Shang*	Northwestern Polytechnical University	Moderate static magnetic field: a clinical trial of wearable device used in treatment of postmenopausal osteoporosis and its laboratory basis			
16:55 — 17:15	C2-3	Jinjin Ma*	South China University of Technology	A novel osteogenic peptide obtained by screening PeptiBoom 3D structure peptide library			
17:15 — 17:20	C2-4	Qinwen Ge	Zhejiang University The First Affiliated Hospital	Phosphatase PPM1A promotes bone formation via regulating fatty acid metabolism mediated by TGF- β /Smad2 signaling in osteoblast			
17:20 — 17:25	C2-5	Zi Yin	Zhejiang University	Spatiotemporal transcriptomic atlas reveals hierarchical cellular interaction during tendon development			
17:25 — 17:30	C2-6	Weiliang Shen	The Second Affiliated Hospital, Zhejiang University	Precise diagnosis and treatment for rotator cuff tendinopathy			
17:30 — 17:35	C2-7	Delin Liu	Shanghai 6th People's Hospital/Shanghai Jiao Tong Univ	Osteocytes mitochondrial homeostasis regulate age-dependent osteoporosis and sarcopenia			
17:35 — 17:40	C2-8	Jie Shi	Shandong University	Single cell transcriptomics reveals the mechanism of mechanical stress promoting hyperplasia of ligamenta flavum			
17:40 — 17:45	Q&A						

16:15 — 17:45		Cocurrent session C3:		Biomaterials 1 (* invited talk)			
		Moderators		Liming Bian	Williams Lu	Jiang Chang	Conference Room 1&2&3 (麦哲伦+郑和厅+哥伦布厅)
16:15 — 16:35	C3-1	Yin Xiao*	Griffith University	Engineering fibrin clot structure for improved bone regeneration			
16:35 — 16:55	C3-2	Fudi Wang*	Zhejiang University	Bone, iron metabolism, and ferroptosis			
16:55 — 17:15	C3-3	Huiqi Xie*	West China Hospital of Sichuan University	Extracellular matrix materials for tissue engineering: from research to product			
17:15 — 17:20	C3-4	Hao Chen	Yangzhou University	Local No Release Rejuvenates Senescent Lepr+ Cells To Remodel The Aged Bone Marrow Microenvironment			
17:20 — 17:25	C3-5	Yisi Liu	Soochow University	Piezoelectric biocrystal hydrogels catalyze the regeneration of intervertebral discs degenerationc			
17:25 — 17:30	C3-6	Shunxiang Xu	The Chinese University of Hong Kong	Magnesium-Containing Dressings Promote Deep Wound Healing Via Activating Fascia Mobilization And Neurovascular Interaction			
17:30 — 17:35	C3-7	Shibo Liu	Jilin University	Ca-PEI-Cu Bone Screws Promote Vascularization and Ligament-bone Healing Process After Ligament Reconstruction			
17:35 — 17:40	C3-8	Xu He	Medical College of Soochow University	M1 macrophage-targeted hydrogel microspheres for osteoarthritis treatment via biologically- and physically-coupled			
17:40 — 17:45	Q&A						

June 2, 2024

8:15 — 11:00		Plenary Session I I		Moderators		Minghao Zheng	Qin Ling (HK)	Quanshang Grand Ballroom (1&2)	
8:15 — 8:45	P2-1	Regis J. Okeefe	Washington University, USA			Targeting Dnmt3b and Abat in the Regulation of Osteoarthritis			
8:45 — 9:15	P2-2	Chuanju Liu	Yale University			How a Small Number of Sodium Channels in Chondrocytes Significantly Impacts Osteoarthritis			
9:15 — 9:45	P2-3	Lidan You	University of Torato			Bone Mechanobiology On-a-Chip			
9:45 — 10:00						Tea/Coffee Break			
10:00 — 10:30	P2-4	David Ke	Angitia Biopharmaceuticals			New Drug Discovery and Development for Bone Diseases.			
10:30 — 11:00	P2-5	Ling Qin (USA)	University of Pennsylvania			Regulation of bone turnover and hematopoiesis by bone marrow adipoprogenitors			
11:00 — 12:00						Poster Session II #1-101, 3rd floor Quanshang Grand Ballroom Foyer (三楼泉商宴会厅·序厅); #102-245, 5th floor, Vasco Da Gama & James Cook & Francis Drake (五楼达·伽马厅+库克厅+德雷克厅)			
12:00 — 12:45						Lunch Break			
12:45 — 14:05		Cocurrent session D1:		Bone biology 4 (* invited talk)					
				Moderators		Chuanju Liu	Yongjun Wang	Liming Cheng	Grand Ballroom 1 (宴会厅1)
12:45 — 13:05	D1-1	Yiping Li*	Tulane University School of Medicine			The Function of Osteoclast Genes in Immune Cells—the Discovery in Osteoimmunology			
13:05 — 13:25	D1-2	Liyun Wang*	University of Delaware			Yoda1-Augmented Exercise to Improve Skeletal Health in Metastatic Breast Cancer			
13:25 — 13:45	D1-3	Li Chen*	Guilin Medical University			KIAA1199 (CEMIP), a secreted protein regulating bone and fat formation and whole-body energy metabolism			
13:45 — 13:50	D1-4	Baoqiang Yang	Northwestern Polytechnical University			Role Of Cx43 In Bone Homeostasis Maintenance Of Bone Marrow Mesenchymal Stem Cells			
13:50 — 13:55	D1-5	Long Guo	Xi'an Jiaotong University Health Science Center			ERI1 mutations cause a new type of skeletal dysplasia in human			
13:55 — 14:00	D1-6	Jian Chen	Zhejiang University			RKIP regulates bone homeostasis by mediating the differentiation fate of bone niche macrophages			
14:00 — 14:05	Q&A								
12:45 — 14:05		Cocurrent session D2:		Tissue engineering and regenerative medicine (* invited talk)					
				Moderators		Lei Yang	Huiling Cao	Shiwu Dong	Grand Ballroom 3 (宴会厅3)
12:45 — 13:05	D2-1	Hongwei Ouyang*	Zhejiang University			TBN			
13:05 — 13:25	D2-2	Bing Yue*	Renji Hospital of Shanghai Jiaotong University			Advances in clinical repair technology for articular cartilage injuries			
13:25 — 13:45	D2-3	Ping Zhang*	Tianjin Medical University			Application of endogenous stem cells in the treatment of bone and joint diseases			
13:45 — 13:50	D2-4	Jiawei Lu	University of Pennsylvania			Tracing muscle mesenchymal progenitors in fracture healing			
13:50 — 13:55	D2-5	Huan Liu	Wuhan University			Ablation Of Mir338 Rescued Bone Defects Caused by Runx2 Haploinsufficiency			
13:55 — 14:00	D2-6	Sixiong Lin	The First Affiliated Hospital of Sun Yat-sen Univ			Vinculin Controls The B-Catenin Protein Level In Mesenchymal Stem Cells To Promote Bone Formation			
14:00 — 14:05	Q&A								
12:45 — 14:05		Cocurrent session D3:		Joint biology and osteoarthritis 2 (* invited talk)					
				Moderators		Liu Yang	Ed Guo	Xizhi Guo	Conference Room 1&2&3 (麦哲伦+郑和厅+哥伦布厅)
12:45 — 13:05	D3-1	William Lu*	Hongkong University			Phantom-less QCT-derived AI technology for soft and hard tissues evaluations for elderly Bone fractures detection and Prevention			
13:05 — 13:25	D3-2	Quan Yuan*	Sichuan University West China School of Stomatology			RNA modifications and skeletal homeostasis			
13:25 — 13:45	D3-3	Wei Yao*	Zhongshan LaiBo RuiChen BioMedicine Co., Ltd			Connection of Alzheimer's disease and osteoarthritis			

13:45 — 13:50	D3-4	Yiyang Ma	Shanghai 6th People's Hospital/Shanghai Jiao Tong Un	Targeting parkin-regulated metabolomic change in cartilage in the treatment of osteoarthritis
13:50 — 13:55	D3-5	Chunchun Xue	Shanghai University of Traditional Chinese Medicine	Reactive oxygen species-mediated M1 macrophage-dependent nanomedicine remodels inflammatory microenvironment
13:55 — 14:00	D3-6	Rui Peng	Jinan University	Brd4 Regulated Txnip Expression Dictates Synovial Glycolysis In Osteoarthritis
14:00 — 14:05	Q&A			

14:05 — 14:20 Short Break

14:20 — 15:50	Cocurrent session E1:		Tissue crosstalk (* invited talk)		
		Moderators	Wentian Yang	Quan Yuan	Baojie Li
			Grand Ballroom 1 (宴会厅1)		
14:20 — 14:40	E1-1	Hong Zhou*	University of Sydney, Australia	Glucocorticoids and circadian rhythms in skeletal health	
14:40 — 15:00	E1-2	Gang Li*	The Chinese University of Hong Kong	Cranial Bone Maneuver Ameliorates Alzheimer's Disease Pathology via Enhancing Meningeal Lymphatic Drainage Function	
15:00 — 15:20	E1-3	Fan Yang*	Shenzhen Institute of Advanced Technology, CAS	Central neural regulation of bone metabolism and underlying mechanism	
15:20 — 15:25	E1-4	Tailin He	Southern University of Science and Technology	The bone-liver interaction modulates immune and hematopoietic function through Pinch-Cxcl12-Mbl2 pathway	
15:25 — 15:30	E1-5	Zan Li	Xiamen University	Bone controls browning of white adipose tissue and protects from diet-induced obesity via Schnurri-3-regulated SLIT2 secretion	
15:30 — 15:35	E1-6	Xing Li	Hebei Medical University	Age-Related Decline Of Traf3 Expression In Skeletal Muscle Causes Sarcopenia And Remotely Stimulates Bone Loss	
15:35 — 15:40	E1-7	Jianlong Li	Nanfeng Hospital, Southern Medical University	Tumor-derived extracellular vesicles and particles induce liver metabolic dysregulation	
15:40 — 15:45	E1-8	Jing Xie	Southern Medical University	Bone Transport Induces The Release Of Factors With Multi-Tissue Regenerative Potential For Diabetic Wound Healing	
15:45 — 15:50	Q&A				

14:20 — 15:50	Cocurrent session E2:		Joint biology and osteoarthritis 3 (* invited talk)		
		Moderators	Hong Zhou	Dongquan Shi	Yue Ding
			Grand Ballroom 3 (宴会厅3)		
14:20 — 14:40	E2-1	Hui Xie*	Xiangya Hospital of Central South University	Intermittent fasting targets osteocyte neuropeptide Y to relieve knee osteoarthritis	
14:40 — 15:00	E2-2	Liao Cui*	Guangdong Medical College	Unlocking therapeutic potential of salvianolic acids and their Nanoformulations in rheumatoid arthritis: Mechanisms&Challenges	
15:00 — 15:20	E2-3	Junjie Gao*	Shanghai 6th People's Hospital/Shanghai Jiao Tong Un	Osteocyte mitochondria regulate angiogenesis of transcortical vessels	
15:20 — 15:25	E2-4	Hui Li	Xiangya Hospital of Central South University	Melatonin is a potential novel analgesic agent for osteoarthritis: evidence from cohort studies in humans and pre-clinical research	
15:25 — 15:30	E2-5	Siyue Tao	Zhejiang University	Dual-targeted Therapy Based On The Macrophage Niche In Rheumatoid Arthritis	
15:30 — 15:35	E2-6	Yuhang Liu	Shanghai Jiao Tong University	Targeted knockdown of PGAM5 in synovial macrophages efficiently alleviates osteoarthritis	
15:35 — 15:40	E2-7	Dawei Cai	Nanjing University	β -Hydroxybutyric Acid Delays Progression of Osteoarthritis via Nrf2 Pathway	
15:40 — 15:45	E2-8	Huilian Yang	Sichuan University	Conditional Knockout of SHP2 in Mice Reveals Its Indispensable Role in Osteogenic Maturation and Bone Mineral Homeostasis	
15:45 — 15:50	Q&A				

14:20 — 15:50	Cocurrent session E3:		Biomaterials 2 (* invited talk)		
		Moderators	Gang Li	Yin Xiao	Qiang Yang
			Conference Room 1&2&3 (麦哲伦+郑和厅+哥伦布厅)		
14:20 — 14:40	E3-1	Jian Yang*	Westlake University	Metabolissugenic Citrate Biomaterials for Regenerative Engineering	
14:40 — 15:00	E3-2	Haobo Pan*	Shenzhen Institute of Advanced Technology, CAS	Silicon based Life Materials and Regeneration Mechanisms	
15:00 — 15:20	E3-3	TBN			
15:20 — 15:25	E3-4	Li Guo	Shanxi Medical University	Novel multifunctional delivery system for chondrocytes and articular cartilage based on carbon quantum dots	
15:25 — 15:30	E3-5	Jiaying Li	Soochow University	Transformation of arginine into zero-dimensional nanomaterial endows the material with antibacterial and osteoinductive activity	
15:30 — 15:35	E3-6	Yu Liu	University of Macau	A non-degradable glycan material replacing the ecm to alleviate intervertebral disc degeneration	
15:35 — 15:40	E3-7	Chenyu Wu	Wenzhou Medical University	Screening strategy identified idebenone loaded ROS-responsive nano-polyphenolic vesicle for spinal cord injury therapy	
15:40 — 15:45	E3-8	Hongwei Shao	The Chinese University of Hong Kong	Metabolic Reprogramming for Attenuating Inflammatory Bone Loss: The Potential of Magnesium-Based Biomaterials	
15:45 — 15:50	Q&A				

15:50 — 16:05 Tea/Coffee Break

16:05 — 17:35 Cocurrent session F1: Meet the Editors						
Moderators			Hui Yang	Yixian Qin	Zhifeng Yu	Grand Ballroom 1 (宴会厅1)
16:05 — 16:15	F1-1	Hui Yang	Sichuan University West China School of Stomatology	Bone Research: A Rising Star In Bone Field		
16:15 — 16:25	F1-2	Yixian Qin	Stony Brook University	Mechanobiology in Medicine (MBM)		
16:25 — 16:35	F1-3	Ling Qin (HK)	The Chinese University of Hong Kong	Journal of Orthopaedic Translation (JOT)		
16:35 — 16:45	F1-4	Zengwu Shao	Huazhong Univ of Sci and Tech Wuhan Union Hospital	Biomaterials Translational		
16:45 — 16:55	F1-5	Jian Yang	Westlake University	Bioactive Materials		
16:55 — 17:05	F1-6	Ling Qin (USA)	University of Pennsylvania	Journal of Bone and Mineral Research (JBMR)		
17:05 — 17:35	Q&A					
16:05 — 17:35 Cocurrent session F2: Youth (* invited talk)						
F2A			Moderators	Shen Liu	Xianfeng Lin	Xiao Lin
Grand Ballroom 3 (宴会厅3)						
16:05 — 16:15	F2-1	Ren Xu*	Xiamen University	Schnurri-3: building bone and more than osteogenesis		
16:15 — 16:25	F2-2	Yuxiao Lai*	Shenzhen Institute of Advanced Technology, CAS	Functional biomedical materials for Repairing challenging bone defect		
16:25 — 16:35	F2-3	Fengxuan Han*	Soochow University	ROS-regulated materials for bone repair		
F2B			Moderators	Jinghui Huang	Canbin Zheng	Lei Qin
16:35 — 16:45	F2-4	Xue Yao*	Tianjin Medical University General Hospital	Ferroptosis in Spinal Cord Injury		
16:45 — 16:55	F2-5	Zhenxing Wang*	Xiangya Hospital Central South University	Osteocyte-Derived EVs Promote Metabolic Associated Fatty Liver Disease Through Hepatic Steatosis and Immune Activation		
16:55 — 17:05	F2-6	Lijun Wang*	Hainan Medical University	Piezo1 balances the osteogenic-tenogenic plasticity of periosteal progenitor cells through the YAP pathway		
F2C			Moderators	Yangli Xie	Mingliang Ji	Xu Xu
17:05 — 17:15	F2-7	Chao Zheng*	Air Force Medical University	The role of SLC26A2 in skeletal development and degeneration		
17:15 — 17:25	F2-8	Yiyun Wang*	Tongji University/YangZhi Rehabilitation Hospital	Tissue specific stem/progenitor cell subpopulations mediate bone regeneration and repair		
17:25 — 17:35	F2-9	Kai Jiao*	Air Force Medical University	New mechanism of pathological calcification in temporomandibular joint osteoarthritis		
16:05 — 17:35 Cocurrent session F3: Musculoskeletal development and aging (* invited talk)						
Moderators			Xuenong Zou	Weihong Yi	Nan Wu	Conference Room 1&2&3 (麦哲伦+郑和厅+哥伦布厅)
16:05 — 16:25	F3-1	Jian Luo*	Tongji University School of Medicine	GPCRs Regulate Skeletal Development and Diseases		
16:25 — 16:45	F3-2	Tao Yang*	Van Andel Institute	Sumoylation and Chromatin modulators in Skeletal Development and Diseases		
16:45 — 17:05	F3-3	Fengjin Guo*	Second Affiliated Hospital of Chongqing Med Univ	Natural product 10-HDA protects against Osteoarthritis by inhibition of chondrocyte senescence through ASPH targeting		
17:05 — 17:10	F3-4	Yukun Yi	Shanxi Medical University	Effect of Moderate Exercise on the Superficial Zone of Articular Cartilage in Age-Related Osteoarthritis		
17:10 — 17:15	F3-5	Shuangfei Ni	Zhengzhou University	Senescent-like Macrophages Mediates Angiogenesis for Endplate Sclerosis via IL-10 secretion in Male Mice		
17:15 — 17:20	F3-6	Ke Lu	Shenzhen Institute of Advanced Technology, CAS	From clinical diagnosis to basic research: human and mouse genetic evidence for association of RUNX2 variants with scoliosis		
17:20 — 17:25	F3-7	Bo Gao	The Chinese University of Hong Kong	Impaired Glycine Neurotransmission Causes Adolescent Idiopathic Scoliosis		
17:25 — 17:30	F3-8	Xiaowei Liu	Tongji University	ELF1-METTL3/YTHDF2-m6A-E2F3-MCM6 signalling axis accelerates the senescence of nucleus pulposus cells to promote IVDD		
17:30 — 17:35	Q&A					
17:35 — 18:00 Short break						
18:00 — 18:30 Award and Closing Ceremony						
			Bin Li	Xiaoling Zhang	Hang Lin	Quanshang Grand Ballroom (1&2)
<i>Program may be subject to change.</i>						