








20th Biotechnology and Biosciences Congress  
May 06-08, 2024 | Four Seasons Hotel Seoul, South Korea  
Organizers and Sponsors

Conference Organizer	
Platinum Sponsor	
Golden Sponsor	
Silver Sponsor	
Silver Sponsor	
Cocktail Sponsor	
Publishing Partner	 <b>ELSEVIER</b>

**Conference Chairs:**

**Prof. Dr. Sae Hun Kim**, Korea University, Korea

**Dr. WOO HAN MIN**, UNGKYUNKWAN UNIVERSITY, Korea

**Conference Secretariat:**

**Prof. Eunji Cheong**, Yonsei University, Korea

**Scientific Committee:**

Byun Soo-Hwan, Hallym University Sacred Heart Hospital, Korea

Sim On, Pusan National University, Korea

Qauli Ali, Kumoh National Institute of Technology, Korea

Kwak Dai-Soon, The Catholic University of Korea, Korea

Ge Xuemei, Nanjing Forestry University, China

Yu Hai-Bin, Quanzhou Normal University, China

Zhou Ruishi, Chinese Academy of Sciences (AIRCAS), China

Kim Eunhye, Korea University, Korea

Chuo Yueh, Chang Gung Memorial Hospital, Taiwan

Wang Anheng, University of Hull, UK

Mou Xingrui, Duke University, USA

Vas Wollis, University College London, UK

Hayashi Koichiro, Kyushu University, Japan

Suire Caitlin, Florida State University, USA

Laurent Alexis, University of Lausanne, Switzerland

Otarigho Benson, Oregon Health and Science University, USA

Dr. Paula Marques Alves, Institute of Experimental Biology and Technology, Portugal

Dr. Georg M. Guebitz, University of Natural Resources and Life Sciences Vienna, Austria

Dr. Miklos S.Z. Kellermayer, Semmelweis University, Hungary

Dr. Patrick Adlercreutz, Lund University, Sweden

Professor Yusuf Chisti, Massey University, New Zealand

## 20<sup>th</sup> Biotechnology and Biosciences Congress-2024 Programme

Monday, 06<sup>th</sup> May 2024

08:00-09:00- Registrations @ Welcome Desk

09:00-09:30- Welcome Reception (Grand Ball Room - Third Floor)

09:30 – 13:00 Keynote Discussions @ Grand Ball Room - Third Floor

Presenting Author	Title of the Talk
Kwak Jihye, MEDIPOST Co., Ltd., Korea	HLA-A2 Promotes the Therapeutic Effect of Umbilical Cord Blood-Derived Mesenchymal Stem Cells in Hyperoxic Lung Injury
Kang Kyungmin, The Catholic University of Korea, Korea	Therapeutic Applications of the CRISPR-Cas System
Ding Zhen, Peking Union Medical College, China	Evaluation of Plan Robustness Using Hybrid Intensity-Modulated Radiotherapy (IMRT) and Volumetric Arc Modulation Radiotherapy (VMAT) for Left-Sided Breast Cancer
Byun Soo-Hwan, Hallym University Sacred Heart Hospital, Korea	Finite Element Analysis of a New Non-Engaging Abutment System for Three-Unit Implant-Supported Fixed Dental Prosthesis
Sim On, Pusan National University, Korea	Stress Distribution on Spinal Cord According to Type of Laminectomy for Large Focal Cervical Ossification of Posterior Longitudinal Ligament Based on Finite Element Method
Qauli Ali, Kumoh National Institute of Technology, Korea	Verification of the Efficacy of Mexiletine Treatment for the A1656D Mutation on Downgrading Reentrant Tachycardia Using a 3D Cardiac Electrophysiological Model
He Qin, Bristol Myers Squibb Company, USA	Improved Titer in Late-Stage Mammalian Cell Culture Manufacturing by Re-Cloning
Kilic Bektas Cemile, Rutgers University, USA	Self-Assembled Hydrogel Microparticle-Based Tooth-Germ Organoids
Pais Ricardo, Bioenhancer Systems, UK	Predictive Modelling in Clinical Bioinformatics: Key Concepts for Startups
Candelo Valeria, Swansea University, UK	Separating and Purifying Mycosporine-like Amino Acids from Cyanobacteria for Application in Commercial Sunscreen Formulations
Tao Fumiya, Yokohama City University, Japan	Rapid and Stable Formation Method of Human Astrocyte Spheroid in a High Viscous Methylcellulose Medium and Its Functional Advantages
Hsiao Chih-Kun, E-Da Hospital, Taiwan	Biomechanical Effect of Hybrid Dynamic Stabilization Implant on the Segmental Motion and Intradiscal Pressure in Human Lumbar Spine

13:00-14:00--- Buffet Lunch @ Restaurant

14:00-17:00--- Sponsors Exhibition @ Grand Ball Room - Third Floor

Tuesday, 07<sup>th</sup> May, 2024

[09:00 – 13:00 Speaker Sessions @ Ara I, Sixth Floor](#)

**Chair: Kang Kyungmin, The Catholic University of Korea, Korea**

**Co-Chair: He Qin, Bristol Myers Squibb Company, USA**

Presenting Author	Title of the Talk
Nakazato Yugo, University of the Ryukyus, Japan	Gut Microbiome Remains Static in Functional Abdominal Pain Disorders Patients Compared to Controls: Potential for Diagnostic Tools
Gul Ijaz, Tsinghua University, China	Phyto-Synthesis, Characterization, and In Vitro Antibacterial Activity of Silver Nanoparticles Using Various Plant Extracts
Liu Xujie, Guangdong University of Technology, China	An Optimized CoBRA Method for the Microfluidic Electrophoresis Detection of Breast Cancer Associated RASSF1 Methylation
Wang Jiaying, Tianjin University of Science and Technology, China	Identification of Coronary Artery Diseases Using Photoplethysmography Signals and Practical Feature Selection Process
Ding Xiaoling, Dalian University of Technology, China	Performance Comparison of Machine Learning Approaches on Hepatitis C Prediction Employing Data Mining Techniques
Xiang Wen-Jing, Soochow University, China	Cervical Net: A Novel Cervical Cancer Classification Using Feature Fusion
Zhao Tianhao, Peking Union Medical College, China	PCL/Graphene Scaffolds for the Osteogenesis Process
Shen Mu, Beijing University of Posts and Telecommunications, China	Formation of Three-Dimensional Spheres Enhances the Neurogenic Potential of Stem Cells from Apical Papilla
Quan Biao, Central South University, China	Statistical Shape Modelling the In Vivo Location of Acetabular Wear in Retrieved Hip Implants
Liu Wenming, Zhejiang University, China	Stiff Extracellular Matrix Promotes Invasive Behaviors of Trophoblast Cells
Koyanagi Anri, Tokyo Medical and Dental University, Japan	Poly(3-mercapto-2-methylpropionate), a Novel $\alpha$ -Methylated Bio-Polythioester with Rubber-like Elasticity, and Its Copolymer with 3-hydroxybutyrate: Biosynthesis and Characterization
Hsiao Yu-Ching, National Cheng Kung University, Taiwan	The Preliminary Results for Evaluating Cocoa Butter Hepatoprotective Effects against Lipid Accumulation and Inflammation in Adult Male Rats Chronically Fed Ethanol

**13:00-14:00--- Buffet Lunch @ Restaurant**

**Breakout Session 1:****09:00 – 13:00 Speaker Sessions @ Ara II, Sixth Floor****Chair: Dr. Daniel Cabrera, Mayo Clinic, USA****Co-Chair: Dr. Amelia Myri Carton, Oxford Health NHS Foundation Trust, United Kingdom**

<b>Presenting Author</b>	<b>Title of the Talk</b>
Zhou Ruishi, Chinese Academy of Sciences (AIRCAS), China	A Novel and Noninvasive Risk Assessment Score and Its Child-to-Adult Trajectories to Screen Subclinical Renal Damage in Middle Age
Wang Fan, Hunan University, China	The Feasibility and Performance of Total Hip Replacement Prediction Deep Learning Algorithm with Real World Data
Gu Kaiyun, Zhejiang University School of Medicine, China	WiFi-Based Detection of Human Subtle Motion for Health Applications
Chen Chih-Chi, Chang Gung University, Taiwan	Assessing Indoor Climate Control in a Water-Pad System for Small-Scale Agriculture in Taiwan: A CFD Study on Fan Modes
Ge Xuemei, Nanjing Forestry University, China	Effects of Running Speeds and Exhaustion on Iliotibial Band Strain during Running
Li Hua-Xiang, Yangzhou University, China	The Effect of Tissue Stromal Vascular Fraction as Compared to Cellular Stromal Vascular Fraction to Treat Anal Sphincter Incontinence
Lin Shuangshuang, Ningbo University, China	Ultrafast PCR Detection of COVID-19 by Using a Microfluidic Chip-Based System
Pang Si, Tongji University, China	Physicochemical and Antioxidant Properties of Nanoliposomes Loaded with Rosemary Oleoresin and Their Oxidative Stability Application in Dried Oysters
Pan Ming-Zhang, Guangxi University, China	Biomechanics Assist Measurement, Modeling, Engineering Applications, and Clinical Decision Making in Medicine
Goo Anthony, Cleveland State University, USA	A Highly Sensitive Urinary Exosomal miRNAs Biosensor Applied to Evaluation of Prostate Cancer Progression
Ahmad Bilal, Hunan University, China	Enhancing Electrocardiogram Classification with Multiple Datasets and Distant Transfer Learning
Pal Rishi, University of Electronic Science and Technology of China, China	A High-Accuracy Detection System: Based on Transfer Learning for Apical Lesions on Periapical Radiograph

**13:00-14:00--- Buffet Lunch @ Restaurant**

**Breakout Session 2:**[09:00 – 13:00 Speaker Sessions @ Soom, Sixth Floor](#)**Chair: Dr. Daniel Cabrera, Mayo Clinic, USA****Co-Chair: Dr. Amelia Myri Carton, Oxford Health NHS Foundation Trust, United Kingdom**

<b>Presenting Author</b>	<b>Title of the Talk</b>
Huang Jin, Wuhan University, China	Hydrogen Dynamics in Hydrated Chitosan by Quasi-Elastic Neutron Scattering
Dong Xu, Sichuan University, China	Identification and Typing of Strains of Wood-Rotting Basidiomycetes by Protein Profiling Using MALDI-TOF MS
Liu Hongshuang, Qilu University of Technology, China	De-Aliasing and Accelerated Sparse Magnetic Resonance Image Reconstruction Using Fully Dense CNN with Attention Gates
He Chen, University of Shanghai for Science and Technology, China	Cardiac Function after Modern Radiation Therapy with Volumetric Modulated Arc Therapy or Helical Tomotherapy for Advanced Left-Breast Cancer Receiving Regional Nodal Irradiation
Ceneviva Lucas, Tokyo Institute of Technology, Japan	Biomechanical Effect of Hybrid Dynamic Stabilization Implant on the Segmental Motion and Intradiscal Pressure in Human Lumbar Spine
Chen Jia-Kun, National Taiwan University, Taiwan	From Bench to Bedside: Clinical and Biomedical Investigations on Hepatitis C Virus (HCV) Genotypes and Risk Factors for Albuminuria
Qi Jing, Army Medical University, China	A Symmetry-Based Superposition Method for Planning and Surgical Outcome Assessment
Zeng Zhipeng, Shenzhen University, China	Biomechanical Analysis of the FlatFoot with Different 3D-Printed Insoles on the Lower Extremities
Deng Pengwei, Chinese Academy of Sciences, China	3D Printing and Its Current Status of Application in Obstetrics and Gynecological Diseases
Chen Wenbin, South China University of Technology, China	Bioinformatics Analysis, Expression Profiling, and Functional Characterization of Heat Shock Proteins in <i>Wolfi-poria cocos</i>
Chen Chen, Xi'an Jiaotong University, China	BM-Net: CNN-Based MobileNet-V3 and Bilinear Structure for Breast Cancer Detection in Whole Slide Images
Tumpa Naz, Pukyong National University, Korea	Evaluation of AMG510 Therapy on KRAS-Mutant Non-Small Cell Lung Cancer and Colorectal Cancer Cell Using a 3D Invasive Tumor Spheroid System under Normoxia and Hypoxia
Wang Xianglei, Beijing University, China	Toward Evaluating Critical Factors of Extubation Outcome with XCSR-Generated Rules
Hsiao Chih-Kun, E-Da Hospital, Taiwan	Current Applications and Future Directions of Lasers in Endodontics: A Narrative Review

**Breakout Session 3:**[09:00 – 13:00 Speaker Sessions @ Soom, Sixth Floor](#)***Submissions are still accepted for this session***

Tuesday, 07<sup>th</sup> May, 2024

[14:00 – 17:00 Speaker Sessions @ Ara I, Sixth Floor](#)

**Chair: Dr. Kwak Jihye, MEDIPOST Co., Ltd., Korea**

**Co-Chair: Hsiao Chih-Kun, E-Da Hospital, Taiwan**

Shimizu Yuji, Nagasaki University Graduate School of Biomedical Sciences, Japan	Soluble Papain to Digest Monoclonal Antibodies; Time and Cost-Effective Method to Obtain Fab Fragment
Nakanishi Akihito, Tokyo University of Technology, Japan	Body Acoustics for the Non-Invasive Diagnosis of Medical Conditions
Kia Cameron, University of Connecticut, USA	An Optimized Method to Decellularize Human Trabecular Meshwork
Feng Pengchao, Qingdao University, China	Synergetic Thermal Therapy for Cancer: State-of-the-Art and the Future
Crouch Devon, University of Liverpool, UK	A Comparison of Computer-Aided Diagnosis Schemes Optimized Using Radiomics and Deep Transfer Learning Methods
Lavrenteva Evgeniia, Dongguk University- Seoul, Republic of Korea	Modular Bioreactor Design for Directed Tendon/Ligament Tissue Engineering
Lai Yue, Shandong University, China	A Transwell-Based Vascularized Model to Investigate the Effect of Interstitial Flow on Vasculogenesis
Wang Kuan, Tongji University, China	Integrated Thermofluid Lumped Parameter Model for Analyzing Hemodynamics in Human Fatigue State
Qiu Chen, Zhejiang University, China	A Review of the Methods of Non-Invasive Assessment of Intracranial Pressure through Ocular Measurement
Hu Xin, Southwest University, China	Bioceramics in Endodontics: Updates and Future Perspectives
Wang Huizhi, Shanghai Jiao Tong University, China	Optimization and Scale-Up of Fermentation Processes Driven by Models
Nakanishi Akihito, Tokyo University of Technology, Japan	Isolation of NELL 1 Aptamers for Rhabdomyosarcoma Targeting
Li Lu, Shanghai University of Sport, China	Present Application and Perspectives of Organoid Imaging Technology
Yang Xiaoyi, Ningbo University, China	Quality Management of Pulmonary Nodule Radiology Reports Based on Natural Language Processing

**Breakout Session 1:**

**14:00 – 17:00 Speaker Sessions @ Ara II, Sixth Floor**

**Chair: He Qin, Bristol Myers Squibb Company, USA**

**Co-Chair: Pais Ricardo, Bioenhancer Systems, UK**

<b>Presenting Author</b>	<b>Title of the Talk</b>
Sengupta Sampad, Imperial College London, UK	Application of a Magnetic Platform in $\alpha$ 6 Integrin-Positive iPSC-TM Purification
Luo Kui, South China University of Technology, China	Biomolecular Pathways of Cryoinjuries in Low-Temperature Storage for Mammalian Specimens
Wang Jianfei, SUNY College of Environmental Science and Forestry, USA	Resorbable Membrane Pouch Technique for Single-Implant Placement in the Esthetic Zone: A Preliminary Technical Case Report
McFerran Aoife, Ulster University, UK	Word Structure Tunes Electrophysiological and Hemodynamic Responses in the Frontal Cortex
Yu Hai-Bin, Quanzhou Normal University, China	Influence of Different Load Conditions on Lower Extremity Biomechanics during the Lunge Squat in Novice Men
Cook Jady, Mississippi State University, USA	Preparation of Polyvinylidene Fluoride&ndash;Gold Nanoparticles Electrospinning Nanofiber Membranes
Matsumoto Takaki, Osaka University, Japan	Hybrid Zero Dynamics Control for Gait Guidance of a Novel Adjustable Pediatric Lower-Limb Exoskeleton
Wang Xuerong, Nanjing Medical University, China	Hemodynamic Effect of Pulsatile on Blood Flow Distribution with VA ECMO: A Numerical Study
Maimaiti Zulipikaer, The Fourth Medical Centre, China	Current and Perspective Sensing Methods for Monkeypox Virus
Milborne Ben, University of Nottingham, UK	Engineering Extracellular Microenvironment for Tissue Regeneration
Khan Safir, University of Science and Technology of China, China	Biological Scaffolds for Congenital Heart Disease
Suire Caitlin, Florida State University, USA	Channel Aperture Characteristics of Carbonate Apatite Honeycomb Scaffolds Affect Ingrowths of Bone and Fibrous Tissues in Vertical Bone Augmentation
Danala Gopichandh, University of Oklahoma, USA	How do Paraspinal Muscles Contract during the Schroth Exercise Treatment in Patients with Adolescent Idiopathic Scoliosis (AIS)?
Wu Dongle, Sun Yat-Sen University, China	Recreating Tissue Structures Representative of Teratomas In Vitro Using a Combination of 3D Cell Culture Technology and Human Embryonic Stem Cells



**Breakout Session 2:****14:00 – 17:00 Speaker Sessions @ Ara II, Sixth Floor****Chair: Julien Mancini, Aix-Marseille University, France  
Co-Chair: Francesco Signorelli, University "Aldo Moro" of Bari, Italy**

<b>Presenting Author</b>	<b>Title of the Talk</b>
Dai Qizheng, Shanghai Jiao Tong University, China	Synthesis of Carrier-Free Paclitaxel;Curcumin Nanoparticles: The Role of Curcuminoids
Al Fahoum Amjed, Yarmouk University, Jordan	Applications of Extracellular Vesicles in Nervous System Disorders: An Overview of Recent Advances
Zheng Yue, Tianjin University, China	A Freeze-Dried Cranberry Powder Consistently Enhances SCFA Production and Lowers Abundance of Opportunistic Pathogens In Vitro
Ye Xinting, Shenzhen Institute of Advanced Technology, China	Spinal Implant Osseointegration and the Role of 3D Printing: An Analysis and Review of the Literature
Yang Qi, Capital Medical University, China	Dose Reduction and Image Quality Optimization of Pediatric Chest Radiography Using a Tungsten Filter
Cao Jialing, Beihang University, China	Response to Mechanical Properties and Physiological Challenges of Fascia: Diagnosis and Rehabilitative Therapeutic Intervention for Myofascial System Disorders
Jin Jianqiao, Jilin University, China	Storable Cell-Laden Alginate Based Bioinks for 3D Biofabrication
Kwak Dai-Soon, The Catholic University of Korea, Korea	Identification of the Factor That Leads Human Mesenchymal Stem Cell Lines into Decellularized Bone
Zou Juan, Xiangtan University, China	Applications of Ultrasound-Mediated Gene Delivery in Regenerative Medicine
Liu Yang, BGI-Shenzhen, China	Dynamic Foam Characteristics during Cultivation of Arthrospira platensis
Collins Matthew, University of East London, UK	Restoration of the Joint Line Configuration Reproduces Native Mid-Flexion Biomechanics after Total Knee Arthroplasty: A Matched-Pair Cadaveric Study
Hu Caihong, Central South University, China	Fusobacterium nucleatum and Malignant Tumors of the Digestive Tract: A Mechanistic Overview
Alquran Hiam, Yarmouk University, Jordan	Industrial Biotechnology Conservation Processes: Similarities with Natural Long-Term Preservation of Biological Organisms
Liu Yi-Yang, National Kaohsiung University of Science and Technology, Taiwan	Analytical Models of Intra- and Extratumoral Cell Interactions at Avascular Stage of Growth in the Presence of Targeted Chemotherapy

**Breakout Session 3:****09:00 – 13:00 Speaker Sessions @ Soom, Sixth Floor****Submissions are still accepted for this session**

Wednesday, 08<sup>th</sup> May, 2024

[09:00 – 13:00 Speaker Sessions @ Ara I, Sixth Floor](#)

**Chair: Jiaqian Qin, Chulalongkorn University, Thailand**

**Co-Chair: Marie-Josée Gervoise-Boyer, France**

Presenting Author	Title of the Talk
Hidalgo Aguilar Alejandro, Durham University, UK	A Surrogate Model Based on a Finite Element Model of Abdomen for Real-Time Visualisation of Tissue Stress during Physical Examination Training
Anitasari Silvia, Taipei Medical University, Taiwan	Optimization of the Fermentative Production of Rhizomucor miehei Lipase in Aspergillus oryzae by Controlling Morphology
Kubar Ameer, Jiangsu University, China	Enhancing Bioenergy Production from the Raw and Defatted Microalgal Biomass Using Wastewater as the Cultivation Medium
Yamaguchi Susumu, Nagasaki University, Japan	Leveraging Multivariable Linear Regression Analysis to Identify Patients with Anterior Cruciate Ligament Deficiency Using a Composite Index of the Knee Flexion and Muscle Force
Zhang Xiaoting, The Chinese University of Hong Kong, China	Review of Bioactivity, Isolation, and Identification of Active Compounds from Antrodia cinnamomea
Nakata Norio, The Jikei University, Japan	Engineered Tissue for Cardiac Regeneration: Current Status and Future Perspectives
Wang Kangning, Guangdong Academy of Sciences, China	Bioengineering Liver Organoids for Diseases Modelling and Transplantation
Rasheed Adnan, Hunan Agricultural University, China	The Effects of Habitual Foot Strike Patterns on the Morphology and Mechanical Function of the Medial Gastrocnemius&ndash;Achilles Tendon Unit
Wang Anheng, University of Hull, UK	De Novo Synthesis of Poly(3-hydroxybutyrate-co-3-hydroxypropionate) from Oil by Engineered Cupriavidus necator
Shrestha Bimi, University of Louisiana, USA	Placenta-Targeted Nanoparticles Loaded with PFKFB3 Overexpression Plasmids Enhance Angiogenesis and Placental Function
Shakoor Sheeba, Nottingham Trent University, UK	The Influence of a Shoe's Heel-Toe Drop on Gait Parameters during the Third Trimester of Pregnancy
Ren Shuang, Peking University Third Hospital, China	A New Mathematical Numerical Model to Evaluate the Risk of Thrombosis in Three Clinical Ventricular Assist Devices
Li Chao, East China University of Science and Technology, China	Woven Vascular Stent-Grafts with Surface Modification of Silk Fibroin-Based Paclitaxel/Metformin Microspheres
Jiang Lincao, Southeast University, China	Advances in Zebrafish for Diabetes Mellitus with Wound Model
Li Junjun, Osaka University Graduate School of Medicine, Japan	Effects of Tapered-Strut Design on Fatigue Life Enhancement of Peripheral Stents

**13:00-14:00--- Buffet Lunch @ Restaurant**

**Breakout Session 3:**

[09:00 – 13:00 Speaker Sessions @ Soom, Sixth Floor](#)

**Submissions are still accepted for this session**

**Breakout Session 1:****09:00 – 13:00 Speaker Sessions @ Ara II, Sixth Floor*****Chair: Dr. Pihlak Rille, University of Manchester, UK******Co-Chair: Dr. Yan Xie, VA Saint Louis Health Care System, USA***

<b>Presenting Author</b>	<b>Title of the Talk</b>
Du Yuan-Hang, Nanjing Normal University, China	The Implications of Sports Biomechanics Studies on the Research and Development of Running Shoes: A Systematic Review
Peng Hsien-Te, Chinese Culture University, Taiwan	A Low Memory Requirement MobileNets Accelerator Based on FPGA for Auxiliary Medical Tasks
Yong Jiawen, Zhejiang University School of Medicine, China	Investigating the Extracellular-Electron-Transfer Mechanisms and Kinetics of Shewanella decolorationis NTOU1 Reducing Graphene Oxide via Lactate Metabolism
Basabrain Mohammed, The University of Hong Kong, China	A Single Active-Site Mutagenesis Confers Enhanced Activity and/or Changed Product Distribution to a Pentalenene Synthase from Streptomyces sp. PSKA01
Huang Qin, Sichuan University, China	Deep Learning for Detecting COVID-19 Using Medical Images
Wang Wei, Capital Medical University, China	Running Velocity and Longitudinal Bending Stiffness Influence the Asymmetry of Kinematic Variables of the Lower Limb Joints
Laurent Alexis, University of Lausanne, Switzerland	Development of a Molecular-Subtype-Associated Immune Prognostic Signature That Can Be Recognized by MRI Radiomics Features in Bladder Cancer
Otarigho Benson, Oregon Health and Science University, USA	A Liquid Metal-Enhanced Wearable Thermoelectric Generator
Li Haoran, Peking University, China	Effects of a Graphene Heating Device on Fatigue Recovery of Biceps Brachii
Li Junzhi, The University of Hong Kong, China	Recent Advance of Strontium Functionalized in Biomaterials for Bone Regeneration
Karadeniz Fatih, Silla University, Republic of Korea	Prediction of the Ibuprofen Loading Capacity of MOFs by Machine Learning
Li Yuan, Beihang University, China	Droplet Microfluidics Enables Tracing of Target Cells at the Single-Cell Transcriptome Resolution
Jianhua Zhang, Clinical Bioinformatics Experimental Center, Henan Provincial People's Hospital, People's Hospital of Zhengzhou University, China	Molecular mechanism of eicosapentaenoic acid regulation of lung cancer by reversible cell membrane electroporation based on network pharmacology
Shenbin Cao, College of Architecture and Civil Engineering, Beijing University of Technology, China	CANDAN process – A novel “4E” technology for nitrogen removal to advance carbon-neutral wastewater treatment
Kailas Moravkar, Principal Research Engineer, Regeron, Inc., Chuncheon, South Korea	Symptomatic management of Epilepsy through intranasal administration of Stiripentol Nano-lipoidal gel

**13:00-14:00--- Buffet Lunch @ Restaurant****Breakout Session 3:****09:00 – 13:00 Speaker Sessions @ Soom, Sixth Floor*****Submissions are still accepted for this session***

**Breakout Session 2:****09:00 – 13:00 Speaker Sessions @ Soom, Sixth Floor****Chair: Laughlin Brady, Mayo Clinic, USA****Co-Chair: Heesen Philip, University of Zurich, Switzerland**

<b>Presenting Author</b>	<b>Title of the Talk</b>
Du Yuan-Hang, Nanjing Normal University, China	The Implications of Sports Biomechanics Studies on the Research and Development of Running Shoes: A Systematic Review
Peng Hsien-Te, Chinese Culture University, Taiwan	A Low Memory Requirement Mobile Nets Accelerator Based on FPGA for Auxiliary Medical Tasks
Yong Jiawen, Zhejiang University School of Medicine, China	Investigating the Extracellular-Electron-Transfer Mechanisms and Kinetics of Shewanella decoloration is NTOU1 Reducing Graphene Oxide via Lactate Metabolism
Basabrain Mohammed, The University of Hong Kong, China	A Single Active-Site Mutagenesis Confers Enhanced Activity and/or Changed Product Distribution to a Pentalenene Synthase from Streptomyces sp. PSKA01
Huang Qin, Sichuan University, China	Deep Learning for Detecting COVID-19 Using Medical Images
Wang Wei, Capital Medical University, China	Running Velocity and Longitudinal Bending Stiffness Influence the Asymmetry of Kinematic Variables of the Lower Limb Joints
Jing Gan, College of Life Science, Yantai University, China	Soy Peptide SOP Stimulates Osteoblast Differentiation by Activating TGF/Smad and p38-MAPK Pathways via Receptor T $\beta$ R I
Haiming Luo, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology, China	Colorimetric and surface-enhanced Raman scattering dual-mode magnetic immunosensor for ultrasensitive detection of blood phosphorylated tau in Alzheimer's disease
Zhongsheng Guo, ISWC, Northwestern A & F University, Yangling, China	Study on high quality production technologies of red plum apricot in semi-arid loess hilly area
Pir Noman Ahmad, Harbin Institute of Technology, Harbin, China	Population Reference-based Structure Variation Detection
Sijia Chen, The Second Affiliated Hospital of Xi'an Jiaotong University, China	Extremely low-frequency electromagnetic field targeting spleens modifies the proportion of splenic immunocytes
Rongkui Su, Central South University of Forestry and Technology, China	Urea-assisted hydrothermal and mechanochemical synthesis of poplar wood-based porous carbon for trace benzene vapor removal
Palamarchuk A.I., Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Sciences, Russian Federation	THE INVESTIGATION OF hTERT ROLE IN CELLULAR SURVIVAL UPON ITS OVEREXPRESSION IN NK CELLS THAT WERE ADDITIONALLY MODIFIED WITH CASPASE 9 BASED SUICIDE CONSTRUCT (iCASP9)
M.A. Streltsova, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Sciences, Russia	NKG2A+NKG2C+ NK CELL EXPANSION STIMULATED BY HLA-E-EXPRESSING FEEDER CELLS
Kovalenko E.I., Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Science	Memory-like NK cell response to hCMV peptide presented in HLA-E
Elena Poimanova, Enikolopov Institute of Synthetic Polymeric Materials of Russian Academy of Sciences, Russian Federation	Biorecognition due to biotin-streptavidin interface by the BTBT-based electrolyte-gated organic field-effect transistors
Yingxue Sun, Harbin Institute of Technology, Shenzhen, China	Bio-flocculant Production and Utilization for Carbon Source Capture from Wastewater

**13:00-14:00--- Buffet Lunch @ Restaurant**

Wednesday, 08th May, 2024

[14:00– 16:00 Poster Sessions @ Ara I, Ground Floor](#)

**Poster Judge 1: Jin Chun-Zhi, Korea Research Institute of Bioscience and Biotechnology (KRIBB), Republic of Korea**

**Poster Judge 2: Kang In-Ae, Sun Moon University, Republic of Korea**

**Poster Judge 3: Ogata Kosuke, Kyoto University, Japan**

**Poster Judge 4: Liu Chuen-Ru, Taipei City Hospital, Taiwan**

Poster No	Presenting Author	Title of the Talk
BTK111	Laurent Alexis, University of Lausanne, Switzerland	Development of a Molecular-Subtype-Associated Immune Prognostic Signature That Can Be Recognized by MRI Radiomics Features in Bladder Cancer
BTK112	Otarigho Benson, Oregon Health and Science University, USA	A Liquid Metal-Enhanced Wearable Thermoelectric Generator
BTK113	Li Haoran, Peking University, China	Effects of a Graphene Heating Device on Fatigue Recovery of Biceps Brachii
BTK114	Li Junzhi, The University of Hong Kong, China	Recent Advance of Strontium Functionalized in Biomaterials for Bone Regeneration
BTK115	Karadeniz Fatih, Silla University, Republic of Korea	Prediction of the Ibuprofen Loading Capacity of MOFs by Machine Learning
BTK116	Li Yuan, Beihang University, China	Droplet Microfluidics Enables Tracing of Target Cells at the Single-Cell Transcriptome Resolution
BTK117	Li Mengdi, Qingdao University of Science and Technology, China	Deep Learning Model for Computer-Aided Diagnosis of Urolithiasis Detection from Kidney&ndash;Ureter&ndash;Bladder Images
BTK118	Zhang Rui, Jilin University, China	Bioprocessing by Decellularized Scaffold Biomaterials in Cultured Meat: A Review
BTK119	Ida Yosuke, Sapporo Medical University School of Medicine, Japan	Challenges and Opportunities for Extracellular Vesicles in Clinical Oncology Therapy
BTK120	Zhang Zheqi, China Meat Research Center, China	Effect of Heel Lift Insoles on Lower Extremity Muscle Activation and Joint Work during Barbell Squats
BTK121	Xue Xingsi, Fujian University of Technology, China	The Physiological Functions of AbrB on Sporulation, Biofilm Formation and Carbon Source Utilization in Clostridium tyrobutyricum
BTK122	Wang Zhi, Yangzhou University, China	Anti-Tumor Secondary Metabolites Originating from Fungi in the South China Sea&rsquo;s Mangrove Ecosystem
BTK123	Liu Jia, Third Military Medical University, China	Impact of Microenvironmental Changes during Degeneration on Intervertebral Disc Progenitor Cells: A Comparison with Mesenchymal Stem Cells
BTK124	Jia Fuhao, National Center for Nanoscience and Technology, China	Effects of Shoe Midfoot Bending Stiffness on Multi-Segment Foot Kinematics and Ground Reaction Force during Heel-Toe Running
BTK125	Yang Jie, University of Macau, China	Efficient Robust Yield Method for Preparing Bacterial Ghosts by Escherichia coli Phage ID52 Lysis Protein E
BTK126	Lu Shuya, Huazhong University of Science and Technology, China	Host Immune Regulation in Implant-Associated Infection (IAI): What Does the Current Evidence Provide Us to Prevent or Treat IAI?

BTK127	Xiao Shang, East China University of Science and Technology, China	Enhancing Prednisone-Based Arthritis Therapy with Targeted IL-27 Gene Delivery
BTK128	Chang Hsiao-Yun, Taipei Medical University, Taiwan	Effect of Rho&ndash;Associated Kinase Inhibitor on Growth Behaviors of Human Induced Pluripotent Stem Cells in Suspension Culture
BTK129	Watanabe Yukio, Toyama Prefectural University, Japan	Biocompatible Nanocomposite Coatings Deposited via Layer-by-Layer Assembly for the Mechanical Reinforcement of Highly Porous Interconnected Tissue-Engineered Scaffolds
BTK130	Miyahara Yuki, Tokyo Institute of Technology, Japan	Effect of Cold-Plasma-Treated Phosphate Solution to Substitute Partial Nitrite on the Color, Texture, and Flavor of Smoked Sausage
BTK131	Lin Li-Han, National Taiwan University, Taiwan	Developing Porous Ortho- and Pyrophosphate-Containing Glass Microspheres; Structural and Cytocompatibility Characterisation
BTK132	Wang Tianjun, Westlake University, China	Continuous Supply of Non-Combustible Gas Mixture for Safe Autotrophic Culture to Produce Polyhydroxyalkanoate by Hydrogen-Oxidizing Bacteria
BTK133	Chuo Yueh, Chang Gung Memorial Hospital, Taiwan	Can We Structure Biomaterials to Spray Well Whilst Maintaining Functionality?
BTK134	Wen Hsin-Yi, National Kaohsiung University of Science and Technology, Taiwan	Accuracy of a Three-Dimensional (3D)-Printed Patient-Specific (PS) Femoral Osteotomy Guide: A Computed Tomography (CT) Study
BTK135	Cheng Xiaoyu, Beijing Academy of Food Sciences, China	A Biomimetic Electrospun Membrane Supports the Differentiation and Maturation of Kidney Epithelium from Human Stem Cells
BTK136	Zhang Wujie, Milwaukee School of Engineering, , USA	Mechanical Characterisation and Numerical Modelling of TPMS-Based Gyroid and Diamond Ti6Al4V Scaffolds for Bone Implants: An Integrated Approach for Translational Consideration
BTK137	Song Kaiwen, Jilin University, China	Development of a Prediction Method of Cell Density in Autotrophic/Heterotrophic Microorganism Mixtures by Machine Learning Using Absorbance Spectrum Data
BTK138	Fei Keyi, Sun Yat-Sen University, China	Development of Targeted Protein-Displaying Technology with a Novel Carbon Material
BTK139	Park Caroline, University of Texas Southwestern Medical Center, USA	Functional Blockage of S100A8/A9 Ameliorates Ischemia&ndash;Reperfusion Injury in the Lung
BTK140	Kostenko Anastassia, Atelerix Ltd, UK	Ensemble Learning of Multiple Models Using Deep Learning for Multiclass Classification of Ultrasound Images of Hepatic Masses
BTK141	Thanuthanakhun Naruchit, Osaka University, Japan	Fetal Arrhythmia Detection Based on Labeling Considering Heartbeat Interval
BTK142	Rittershaus Emily, Bristol Myers Squibb Company, USA	Protein Delivery to Insect Epithelial Cells In Vivo: Potential Application to Functional Molecular Analysis of Proteins in Butterfly Wing Development
BTK143	Hao Dake, University of California Davis, USA	A Cross-Sectional Study of Attitudes toward Willingness to Use Enhancement Technologies: Implications for Technology Regulation and Ethics

BTK144	Pyykkönen Ville, Natural Resources Institute Finland (Luke), Finland	Computational Screening of Approved Drugs for Inhibition of the Antibiotic Resistance Gene <i>mecA</i> in Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) Strains
BTK145	Zhao Yanli, Northeastern University, China	Spatial Scattering Radiation to the Radiological Technologist during Medical Mobile Radiography
BTK146	Zhang Junhong, East China University of Science and Technology, China	A Novel Smart Belt for Anxiety Detection, Classification, and Reduction Using IloMT on Students's Cardiac Signal and MSY
BTK147	Wu Shuaiying, Xiamen University, China	Biomechanical Effects of a Novel Pedicle Screw W-Type Rod Fixation for Lumbar Spondylolysis: A Finite Element Analysis
BTK148	Tran Nguyen Minh Hieu, Academia Sinica, Taiwan	Semi-Supervised Medical Image Segmentation Guided by Bi-Directional Constrained Dual-Task Consistency
BTK149	Tan Yujing, Guangdong University of Technology, China	Immunomodulation, Toxicity, and Therapeutic Potential of Nanoparticles
BTK150	Naghavi Seyed, Royal National Orthopaedic Hospital, Stanmore, UK	Synergistic Inorganic Carbon and Denitrification Genes Contributed to Nitrite Accumulation in a Hydrogen-Based Membrane Biofilm Reactor
BTK151	Ramos-Rodriguez David, The University of Sheffield, UK	Telehealth and Burn Care: From Faxes to Augmented Reality
BTK152	Wang Minzhen, Tianjin University, China	A Theoretical Framework for Implementable Nucleic Acids Feedback Systems
BTK153	Wei Junchao, Taiyuan University of Technology, China	The Soft Prefabricated Orthopedic Insole Decreases Plantar Pressure during Uphill Walking with Heavy Load Carriage
BTK154	Wong Chia-En, National Cheng Kung University, Taiwan	Surgical Applications of Materials Engineered with Antimicrobial Properties
BTK155	Fu Ying, Xi'an Jiaotong University, China	Performance Characteristics of a Novel 3D-Printed Bubble Intermittent Mandatory Ventilator (B-IMV) for Adult Pulmonary Support
BTK156	Lin Yanru, Beijing Institute of Technology, China	Modification of Fatty Acid Composition of <i>Escherichia coli</i> by Co-Expression of Fatty Acid Desaturase and Thioesterase from <i>Arabidopsis thaliana</i>
BTK157	Chi Qingjia, Wuhan University of Technology, China	Anaerobic Digestion of Solid Agricultural Biomass in Leach-Bed Reactors
BTK158	Vas Wollis, University College London, UK	PHF3 Technique: A Pyramid Hybrid Feature Fusion Framework for Severity Classification of Ulcerative Colitis Using Endoscopic Images
BTK159	Takahashi Fuga, University of Toyama, Japan	Review on Facial-Recognition-Based Applications in Disease Diagnosis
BTK160	Zhao Luming, Naval Medical University, China	Cuff-Less Blood Pressure Prediction Based on Photoplethysmography and Modified ResNet
BTK161	Yamamoto Osamu, Yamagata University, Japan	Therapeutic Effect of Biomimetic Scaffold Loaded with Human Amniotic Epithelial Cell-Derived Neural-like Cells for Spinal Cord Injury
BTK162	Liu Qian, Ningbo University, China	Detecting Early Ocular Choroidal Melanoma Using Ultrasound Localization Microscopy

BTK163	Zhang Zhengyi, Chinese Academy of Agricultural Science, China	Demonstrating the Potential of Using Bio-Based Sustainable Polyester Blends for Bone Tissue Engineering Applications
BTK164	Shil Sumit, Konan University, Japan	Molecular Tools and Their Applications in Developing Salt-Tolerant Soybean ( <i>Glycine max</i> L.) Cultivars
BTK165	Duan Chengchen, Oxford University John Radcliffe Hospital, UK	Finite Element Analysis and Experimental Validation of the Anterior Cruciate Ligament and Implications for the Injury Mechanism
BTK166	Gao Fei, University of Macau, China	N-1 Perfusion Platform Development Using a Capacitance Probe for Biomanufacturing
BTK167	Yang Qi, The First Affiliated Hospital of Dalian Medical University, China	Valorization of Pineapple Leaves Waste for the Production of Bioethanol
BTK168	Zhao Yongkun, Division of Human Mechanical Systems and Design, Graduate School of Engineering, Hokkaido University, Sapporo 060-8628, Japan	Evaluating the Haemodynamic Performance of Endografts for Complex Aortic Arch Repair
BTK169	Lin Bangchang, Zhejiang University, China	Bioengineering Approaches for Delivering Growth Factors: A Focus on Bone and Cartilage Regeneration
BTK170	Stecco Antonio, New York University School of Medicine, USA	Epileptic Tissue Localization through Skewness-Based Functional Connectivity in the High-Frequency Band of Intracranial EEG
BTK171	Hou Pei-Yu, Far Eastern Memorial Hospital, Taiwan	Unsupervised Learning-Based Non-Invasive Fetal ECG Muti-Level Signal Quality Assessment
BTK172	Pan Jo-Hsi, National Yang Ming Chiao Tung University, Taiwan	Biomolecular Liquid&dash;Liquid Phase Separation for Biotechnology
BTK173	Xue Songfeng, Jilin University, China	VEGF Polymorphism rs3025039 and Human T-Cell Leukemia Virus 1 (HTLV-1) Infection among Older Japanese Individuals: A Cross-Sectional Study
BTK174	Huang Shuxin, Shanghai Jiao Tong University, China	Formulation of a Simulated Wastewater Influent Composition for Use in the Research of Technologies for Managing Wastewaters Generated during Manned Long-Term Space Exploration and Other Similar Situations&dash;Literature-Based Composition Development
BTK175	Karaosmanoglu Sena, University of Edinburgh, UK	Subcritical Water Pretreatment for the Efficient Valorization of Sorghum Distillery Residue for the Biorefinery Platform
BTK176	Xue Xingsi, Fujian University of Technology, China	RVM-GSM: Classification of OCT Images of Genitourinary Syndrome of Menopause Based on Integrated Model of Local&dash;Global Information Pattern
BTK177	Chen Shanefei, The Hong Kong Polytechnic University, China	Development and Validation of a Subject-Specific Coupled Model for Foot and Sports Shoe Complex: A Pilot Computational Study



BTK178	Funato Akiyoshi, Nagisa Dental Clinic, Japan	Estimation of Caenorhabditis Elegans Lifespan Stages Using a Dual-Path Network Combining Biomarkers and Physiological Changes
BTK179	Perrault David, Stanford University, USA	Densification: Hyaluronan Aggregation in Different Human Organs
BTK180	Paulino Nuno, University of Warwick, UK	Extracellular Vesicles in Type 1 Diabetes: A Versatile Tool
BTK181	Alizargar Azadeh, National Taipei University of Technology, Taiwan	Establishment of Surgical Difficulty Grading System and Application of MRI-Based Artificial Intelligence to Stratify Difficulty in Laparoscopic Rectal Surgery
BTK182	Kanasugi Kazuya, Tokyo Denki University, Japan	Lymphatic Tissue Bioengineering for the Treatment of Postsurgical Lymphedema
BTK183	Sun Zhen, Chinese Academy of Medical Sciences and Peking Union Medical College, China	The Exciting Realities and Possibilities of iPSC-Derived Cardiomyocytes
BTK184	Otomo Kazuki, Tohoku University Graduate School of Medicine, Japan	A Benchmark Dataset for Evaluating Practical Performance of Model Quality Assessment of Homology Models
BTK185	Zheng Guodi, Chinese Academy of Sciences, China	Recent Advances in Phage-Based Therapeutics for Multi-Drug Resistant Acinetobacter baumannii
BTK186	Huang Po-Hsun, National Yang Ming Chiao Tung University, Taiwan	Gold Nanorod-Assisted Photothermal Therapy and Improvement Strategies
BTK187	Liu Xin, Dalian Medical University, China	Cell Behavioral Dynamics as a Cue in Optimizing Culture Stabilization in the Bioprocessing of Pluripotent Stem Cells
BTK188	Wang Jing, Collaborative Innovation Center of NPU, China	A Novel Phytogetic Formulation, EUBIO-BPSG, as a Promising One Health Approach to Replace Antibiotics and Promote Reproduction Performance in Laying Hens
BTK189	Huang Meng, Nanjing Medical University, China	All Trans-Retinoic Acids Facilitate the Remodeling of 2D and 3D Cultured Human Conjunctival Fibroblasts
BTK190	Zhao Jianbo, Tianjin University, China	Rylene Dye-Loaded Polymeric Nanoparticles for Photothermal Eradication of Harmful Dinoflagellates, Akashiwo sanguinea and Alexandrium pacificum
BTK191	Qin Caijie, Sanming University, China	Bond Strength and Adhesion Mechanisms of Novel Bone Adhesives
BTK192	Wang Shih-Wei, I-Shou University, Taiwan	Decellularised Cartilage ECM Culture Coatings Drive Rapid and Robust Chondrogenic Differentiation of Human Periosteal Cells
BTK193	Zhang Rongbin, Jiangnan University, China	Vascularized Co-Culture Clusteroids of Primary Endothelial and Hep-G2 Cells Based on Aqueous Two-Phase Pickering Emulsions
BTK194	Nakazawa Eisuke, University of Tokyo Faculty of Medicine, Japan	A Disease-Prediction Protocol Integrating Triage Priority and BERT-Based Transfer Learning for Intelligent Triage
BTK195	Upton Sarah, Bournemouth University, UK	Development of pH-Responsive Polypills via Semi-Solid Extrusion 3D Printing

BTK196	Singh Anusuiya, National Kaohsiung University of Science and Technology, Taiwan	Graft Diameter Should Reflect the Size of the Native Anterior Cruciate Ligament (ACL) to Improve the Outcome of ACL Reconstruction: A Finite Element Analysis
BTK197	Xu Xingyuan, Beihang University, China	A Review of Recent Advances in Microbial Fuel Cells: Preparation, Operation, and Application
BTK198	Yang Guanghuan, Shanghai Jiao Tong University School of Medicine, China	Engineering Escherichia coli for Poly-&beta;-hydroxybutyrate Production from Methanol
BTK199	Poli Jonathan, Seattle Children's Research Institute, USA	Recent Advances in CRISPR/Cas-Based Biosensors for Protein Detection
BTK200	Wang Tian-Zuo, Wenzhou Medical University, China	An Optimized Thermal Feedback Methodology for Accurate Temperature Control and High Amplification Efficiency during Fluorescent qPCR
BTK201	Zhang Hui, Tianjin University, China	The Role of Multifidus in the Biomechanics of Lumbar Spine: A Musculoskeletal Modeling Study
BTK202	Hsu Chia-Yi, National Yang Ming Chiao Tung University, Taiwan	Bioengineering for the Microbial Degradation of Petroleum Hydrocarbon Contaminants
BTK203	Hayashi Koichiro, Kyushu University, Japan	Neuroprotective Effect of Abelmoschus manihot Flower Extracts against the H <sub>2</sub> O <sub>2</sub> -Induced Cytotoxicity, Oxidative Stress and Inflammation in PC12 Cells
BTK204	Huang Ying-Ting, National Cheng Kung University, Taiwan	The Landscape of Nucleic-Acid-Based Aptamers for Treatment of Hematologic Malignancies: Challenges and Future Directions
BTK205	Liang Mengdi, Soochow University, China	Exploring the Role of Visual Guidance in Motor Imagery-Based Brain-Computer Interface: An EEG Microstate-Specific Functional Connectivity Study
BTK206	Liu Wei, China Electric Power Research Institute Limited Company, China	Engineering Advanced Drug Delivery Systems for Dry Eye: A Review
BTK207	Xia Kang, HoHai University, China	Influence of Sagittal Lumbopelvic Morphotypes on the Range of Motion of Human Lumbar Spine: An In Vitro Cadaveric Study
BTK208	Xiang Quanju, Sichuan Agricultural University, China	Rapid Diagnosis of Ductal Carcinoma In Situ and Breast Cancer Based on Raman Spectroscopy of Serum Combined with Convolutional Neural Network
BTK209	Mou Xingrui, Duke University, USA	Effect of Biodentine on Odonto/Osteogenic Differentiation of Human Dental Pulp Stem Cells
BTK210	Delakowski Axel, The College of New Jersey, USA	Microfluidic-Based Novel Optical Quantification of Red Blood Cell Concentration in Blood Flow
BTK211	Wang Si, Zhejiang University, China	EEG-Based Emotion Recognition Using a 2D CNN with Different Kernels
BTK212	Liu Shenghua, Tongji University, China	Development of Bionic Semicircular Canals and the Sensation of Angular Acceleration
BTK213	Sung Cynthia, City of Hope National Medical Center, USA	Ammonia Production Using Bacteria and Yeast toward a Sustainable Society

BTK214	Wang Yuqi, Chinese Academy of Sciences, China	The Corneal Ectasia Model of Rabbit: A Validity and Stability Study
BTK215	Li Qi, Central South University, China	Cervical and Lumbar Disc Arthroplasty: A Review of Current Implant Design and Outcomes
BTK216	Wang Boran, University of Science and Technology Beijing (USTB), China	Immunosensing for Early Detection of Rheumatoid Arthritis Biomarkers: Anti-Cyclic Citrullinated Peptide Antibodies Based on Tilted-Fiber Bragg Grating Biosensor
BTK217	Li Xin, Ningbo University, China	Optimization of Spinal Reconstructions for Thoracolumbar Burst Fractures to Prevent Proximal Junctional Complications: A Finite Element Study
BTK218	Jeong Da, Kumoh National Institute of Technology, Korea	Reduced Fibroblast Activation on Electrospun Polycaprolactone Scaffolds
BTK219	Xue Yi, Nanjing University, China	Strontium Ranelate Inhibits Osteoclastogenesis through NF- $\kappa$ B-Pathway-Dependent Autophagy
BTK220	Meng Dejuan, Chinese Academy of Agricultural Sciences, China	Broadening the Horizons of RNA Delivery Strategies in Cancer Therapy
BTK221	Lyu Feng-Juan, South China University of Technology, China	Effect of Pulse Frequency on the Microstructure and the Degradation of Pulse Electroformed Zinc for Fabricating the Shell of Biodegradable Dosing Pump
BTK222	Khoo Christina, Ocean Spray Cranberries, USA	Hand Exoskeleton Design and Human&ndash;Machine Interaction Strategies for Rehabilitation
BTK223	Lu Hongyun, Zhejiang University, China	Enhanced Effects of Iron on Mycelial Growth, Metabolism and In Vitro Antioxidant Activity of Polysaccharides from Lentinula edodes
BTK224	Song Yang, Ningbo University, China	Influence of Inlet Boundary Conditions on the Prediction of Flow Field and Hemolysis in Blood Pumps Using Large-Eddy Simulation
BTK225	Qiang Jiaqi, Peking Union Medical College, China	Rapid Identification of Chinese Hamster Ovary Cell Apoptosis and Its Potential Role in Process Robustness Assessment
BTK226	Pu Yihan, Renmin University of China, China	Mathematical Model of Blood Circulation with Compression of the Prototype's Mechanical CPR Waveform
BTK227	Isu Solomon, University of Arkansas, USA	CTS-Net: A Segmentation Network for Glaucoma Optical Coherence Tomography Retinal Layer Images
BTK228	Yuan Xun, Hunan University, China	Modelling and Analysis of Hybrid Transformation for Lossless Big Medical Image Compression
BTK229	Hsiao Po-Jen, Armed Forces Taoyuan General Hospital, Taiwan	Design and Analysis of a Deep Learning Ensemble Framework Model for the Detection of COVID-19 and Pneumonia Using Large-Scale CT Scan and X-ray Image Datasets
BTK230	Li Gang, Beijing Technology and Business University, China	Engineering CRISPR/Cas13 System against RNA Viruses: From Diagnostics to Therapeutics
BTK231	Yu Xiancheng, Imperial College London, UK	Stem Cell Therapy for Acute/Subacute Ischemic Stroke with a Focus on Intraarterial Stem Cell Transplantation: From Basic Research to Clinical Trials

BTK232	Jin Liang, Academy of Forensic Science, China	The Significant Potential of Simonkolleite Powder for Deep Wound Healing under a Moist Environment: In Vivo Histological Evaluation Using a Rat Model
BTK233	Taylor Mitchell, The University of Memphis, USA	A Systematic Review of Oral Biopsies, Sample Types, and Detection Techniques Applied in Relation to Oral Cancer Detection
BTK234	Bergiers Sean, University College London, UK	Multi-Label Attribute Selection of Arrhythmia for Electrocardiogram Signals with Fusion Learning
BTK235	Nakata Kentaro, Okayama University Graduate School of Medicine, Japan	Development of Digital Fetal Heart Models with Virtual Ultrasound Function Based on Cardiovascular Casting and Computed Tomography Scan
BTK236	Fei Xiaolu, Capital Medical University, China	Fighting Fire with Fire: Exosomes and Acute Pancreatitis-Associated Acute Lung Injury
BTK237	Zhao Tengfei, Northeastern University, China	Understanding Sex-Based Kinematic and Kinetic Differences of Chasse-Step in Elite Table Tennis Athletes
BTK238	Saini Reetu, National Kaohsiung University of Science and Technology, Taiwan	Image-Based Pain Intensity Estimation Using Parallel CNNs with Regional Attention
BTK239	Shi Xintong, Keio University, Japan	Photobiomodulation Therapy and Pulp-Regenerative Endodontics: A Narrative Review
BTK240	Huang Qiuhan, Huazhong University of Science and Technology, China	Effects of Jump-Rope-Specific Footwear Selection on Lower Extremity Biomechanics
BTK241	Woodley Joe, University of Sheffield, UK	In-Depth Bicycle Collision Reconstruction: From a Crash Helmet to Brain Injury Evaluation
BTK242	Zhao Pengxuan, Huazhong University of Science and Technology, China	Three-Dimensional Printing of Poly-L-Lactic Acid Composite Scaffolds with Enhanced Bioactivity and Controllable Zn Ion Release Capability by Coupling with Carbon-ZnO
BTK243	Chen Hui-Hsin, KLA Corporation, Taiwan	Physical Stimulation Combined with Biomaterials Promotes Peripheral Nerve Injury Repair
BTK244	Zhu Wei, Peking Union Medical College, China	Investigation of Genome Biology by Synthetic Genome Engineering
BTK245	Chui Kwok, Hong Kong Metropolitan University, China	Large-Scale Expansion of Human Umbilical Cord-Derived Mesenchymal Stem Cells in a Stirred Suspension Bioreactor Enabled by Computational Fluid Dynamics Modeling
BTK246	Ma Yi, South China University of Technology, China	Zr-Based Metal-Organic Frameworks for Green Biodiesel Synthesis: A Minireview
BTK247	Luo Yuyou, Guangdong Pharmaceutical University, China	The Existing Recovery Approaches of the Huangjiu Lees and the Future Prospects: A Mini Review
BTK248	Nakatani Sara, Keio University, Japan	The Bionic High-Cushioning Midsole of Shoes Inspired by Functional Characteristics of Ostrich Foot
BTK249	Liou Yu-Xuan, Tunghai University, Taiwan	Chinese Digital Arm (CDA): A High-Precision Digital Arm for Electrical Stimulation Simulation
BTK250	Krut Zoe, Cedars-Sinai Medical Center, USA	Recent Progress in Bioprinting: From Bioink Design to Applications

BTK251	Wang Yudong, New Jersey Institute of Technology, USA	Bioactive Scaffold Fabricated by 3D Printing for Enhancing Osteoporotic Bone Regeneration
BTK252	Inui Atsuyuki, Kobe University Graduate School of Medicine, Japan	Pan-Genome Analysis Reveals Functional Divergences in Gut-Restricted Gilliamella and Snodgrassella
BTK253	Zhang Shuang, Neijiang Normal University, China	Flavor Profile Analysis of Instant and Traditional Lanzhou Beef Bouillons Using HS-SPME-GC/MS, Electronic Nose and Electronic Tongue
BTK254	Hirota Yuki, Setsunan University, Japan	Research Progress on the Synthetic Biology of Botanical Biopesticides
BTK255	Tsugeno Yuri, Sapporo Medical University, Japan	A Rapid and Sensitive Aptamer-Based Biosensor for Amnesic Shellfish Toxin Domoic Acid
BTK256	Leong Florence, Imperial College London, UK	Recent Advances of Calcium Carbonate Nanoparticles for Biomedical Applications
BTK257	Wu Shuhui, Central South University, China	GSN-HVNET: A Lightweight, Multi-Task Deep Learning Framework for Nuclei Segmentation and Classification
BTK258	Hossain Md., Chungbuk National University, Republic of Korea	Recent Developments and Current Applications of Hydrogels in Osteoarthritis
BTK259	Wellington Ian, University of Connecticut, USA	Automatic Segmentation of Cervical Cells Based on Star-Convex Polygons in Pap Smear Images
BTK260	Kodama Yuya, Okayama Rosai Hospital, Japan	Neuromechanics-Based Neural Feedback Controller for Planar Arm Reaching Movements
BTK261	Gao Lidong, Ningbo University, China	Inhibitory Effects of the Addition of KNO <sub>3</sub> on Volatile Sulfur Compound Emissions during Sewage Sludge Composting
BTK262	Lu Zhenghui, Ningbo University, China	Nisin Variants Generated by Protein Engineering and Their Properties
BTK263	Takei Yuma, Tokyo Institute of Technology, Japan	Prediction of Pulmonary Function Parameters Based on a Combination Algorithm
BTK264	Pandey Ashutosh, Baylor College of Medicine, USA	Advances in Biomaterial-Mediated Gene Therapy for Articular Cartilage Repair
BTK265	Song Yao, Wuhan University of Science and Technology, China	Larger Medial Contact Area and More Anterior Contact Position in Medial-Pivot than Posterior-Stabilized Total Knee Arthroplasty during In-Vivo Lunge Activity
BTK266	Ma Ruiya, Beijing Sport University, China	SelfCoLearn: Self-Supervised Collaborative Learning for Accelerating Dynamic MR Imaging
BTK267	Yu Chen, Wuhan Textile University, China	Masked Self-Supervised Pre-training Model for EEG Time Series
BTK268	Sapozhnikov A.M, Shemyakin – Ovchinnikov Institute of Bioorganic Chemistry, Moscow, Russia	Chimeric proteins HSP70-barstar and barstar-HSP70 for targeted delivery of HSP70 to the surface of tumor cells
BTK269	Hye-Lan Lee, Spine & Spinal Cord Institute, Department of Neurosurgery, College of Medicine, Yonsei University, South Korea	TRACR: a new in vivo reprogramming therapeutic tool for multi-lineage fate tracing
BTK270	Lianggui Tang, School of Information & Computer, Anhui Agricultural University, China	De Novo Drug Molecular Design Based on Generative Deep Learning

BTK271	Murat Shagidulin, Federal State Budgetary Institution "Shumakov National Medical Research Centre of Transplantology and Artificial Organs" of the Ministry of Health of the Russian Federation, Russia	COMPARATIVE CHARACTERISTICS OF THE INDUCTION ACTIVITY OF APOPTOTIC BONE MARROW CELLS AND TOTAL RNA OF THESE CELLS ON REGENERATIVE PROCESSES IN THE LIVER AFTER EXTENSIVE RESECTION
BTK272	Cheng Chen, School of Information & Computer, Anhui Agricultural University, Hefei, Anhui, China	A portable method to drug-drug interaction prediction based on graph embedding
BTK273	Wen Wang, School of Information & Computer, Anhui Agricultural University, Hefei, Anhui, China	A multi-relationship interaction prediction model of phage and host based on sequence and structural features
BTK274	Brenda Berenice Trujillo Salgado, Instituto de Diagnóstico y Referencia Epidemiológicos (InDRE) "Dr. Manuel Martínez Báez", Secretaría de Salud, Mexico City, Mexico	Analysis of the genomic diversity of human papillomavirus type 31 in cervical samples reveals the presence of novel sublineages in clade C
BTK275	Muhammad Fazle Rabbee, Department of Biotechnology, Yeungnam University, Korea	In vitro antibacterial effect of metallic nanoparticles on plant pathogens of <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> and <i>Clavibacter michiganensis</i> subsp. <i>Capsici</i>
BTK276	Se-Min Hwang, Department of Preventive Medicine, Konyang University College of Medicine, Daejeon, Republic of Korea	Priority setting in contact tracing of COVID-19 by Basic Priority Rating System in South Korea: Contact classification of COVID-19 in epidemiological investigations
BTK277	N.A. Alekseeva, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Sciences, Russia	LICENSED NKG2C+ NK CELLS AS A PROMISING ORIGIN FOR HIGH EFFICIENCY EFFECTORS AGAINST SOLID TUMORS
BTK278	Hye Yeong Lee, Spine & Spinal Cord Institute, Department of Neurosurgery, College of Medicine, Yonsei University, South Korea	The reversible MAOB inhibitor KDS2010 induces mechanical allodynia analgesia via neuroregeneration and ROS scavenging

***Poster Submissions are still accepted for this session***

**Wednesday, 08<sup>th</sup> May, 2024**

**16:00– 17:00 Closing and Award Ceremony@ Ara I, Ground Floor**

### **Important Information:**

**Coffee and Snacks:** Running Tea, Coffee, Fruit Juices and Snacks will be available in the conference rooms all the day for the convenience of Attendees. No break time is allotted to save time for presenters.

**Lunch:** Lunch will be provided to all the attendees at **Restaurant** which is situated on the Ground Floor. All the attendees are requested to carry their conference ID cards to get access to the Restaurant.

**Awards:** Conference awards can be a great way for researchers to gain recognition for their work and to establish themselves as leaders in their field. They can also provide a valuable opportunity for researchers to network with their peers and to share their research with a wider audience. So, Conferences Global provides the following Awards.

- 1. Best Paper Award:** This award recognizes the paper that is judged to be the best overall contribution to the conference. This would be awarded to 3 researchers and the cash prize awarded would be 1000 USD.
- 2. Best Student Paper Award:** Like the Best Paper Award, this award recognizes the best paper written by a student. This would be awarded to 3 Students and the cash prize awarded would be 500 USD.
- 3. Best Poster Award:** This award recognizes the best poster presentation at the conference. This would be awarded to 3 researchers and the cash prize awarded would be 500 USD.
- 4. Best Presentation Award:** This award recognizes the best oral presentation at the conference. This would be awarded to 2 researchers and the cash prize awarded would be 700 USD.
- 5. Lifetime Achievement Award:** This award recognizes researchers who have made significant contributions to their field over the course of their career. This would be awarded to 1 researcher and the cash prize awarded would be 2500 USD.
- 6. Rising Star Award:** This award recognizes young researchers who are making significant contributions to their field early in their careers. This would be awarded to 1 researcher and the cash prize awarded would be 1500 USD.