

## Conference Agenda for ACBD-ISBM2019

Wednesday, December 4, 2019		
Duration	Event	Location
14:00-15:00	Biomanufacturing Division Standing Committee Meeting (生物制造工程分会常委会议)	Building 1#, Beijing Xijiao Hotel (北京西郊宾馆)
15:00-17:00	Biomanufacturing Division Committee Meeting (生物制造工程分会全体委员会议)	
15:00-18:00	Registration	Lobby, Building 5#, Beijing Xijiao Hotel (北京西郊宾馆)

Thursday, December 5, 2019				
Time	Program		Location	
07:30-08:30	Registration		2F, Building 1#	
08:30-09:00	Conference opening, welcome remark/ Group photo		3F, Building 1#/ Yard	
Plenary Session (09:00-12:20)				
09:00-12:20	Plenary Presentations		3F, Building 1#	
12:20-13:30	Lunch		Shang Yuan restaurant (赏园), Building 5#	
Parallel Session (13:30-18:10)				
13:30-15:30	<b>Session 1(Room 1)</b> Biomanufacturing and Regenerative Medicine	<b>Session 2(Room 5)</b> Bionic Manufacturing and Biomedical Implant /Devices	<b>Session 3(Room 6)</b> Tissue and Organ on-a- Chip	2F, Building 1#
15:30-15:50	Tea Break / Poster Review			
15:50-18:10	<b>Session 4(Room 1)</b> Bio-Modeling and Bio-3D Printing	<b>Session 5(Room 5)</b> Innovative Medical Devices and Biomaterials	<b>Session 6(Room 6)</b> Young Scientists Forum- Interdiscipline and Innovation	
Banquet(18:30-20:30)			Xiyuan restaurant(西园), Building 1#	

Friday, December 6, 2019					
Time	Program				Location
Plenary Session (08:30-10:00)					
08:30-10:00	Plenary Presentation				2F, Building 1#
10:00-10:20	Tea Break / Poster Review				
Parallel Session (10:20-12:20)					
10:20-12:20	<b>Session 7 (Room 1)</b> Biomanufacturing and Regenerative Medicine	<b>Session 8 (Room 5)</b> Innovative Medical Devices and Biomaterials	<b>Session 9 (Room 6)</b> Young Scientists Forum- Interdiscipline and Innovation	<b>Rapid Fire (Room 2)</b>	2F, Building 1#
12:20-13:30	Lunch				Shang Yuan restaurant, Building 5#
Parallel Session (13:30-15:30)					
13:30-15:30	<b>Session 10(Room 1)</b> Bionic Manufacturing and Biomedical Implant /Devices	<b>Session 11(Room 5)</b> Bio-Modeling and Bio-3D Printing	<b>Session 12(Room 6)</b> Tissue and Organ on-a- Chip		2F, Building 1#
15:30-15:50	Tea Break				
Closing/ Award Ceremony (16:00-17:00)					Room 6, 2F, Building 1#
Dinner (17:30-19:30)					Xiyuan restaurant, Building 1#

# Conference Schedule

December 5, 2019 (Morning)				
Time		Program		Location
07:30-08:30		Registration		2F, Building 1#
08:30-09:00		Conference opening, welcome remark/ Group photo		3F, Building 1#/ Yard
09:00-12:20 Plenary Presentations				
Location: 3F, Building 1#, Co-Chair: Zhongze Gu				
No.	Time	Authors	Title	Institute
1	09:00-09:45	Zhonglin Wang	Nanogenerators for implantable medical devices and self-powered sensors	Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences
2	09:45-10:30	Jianwu Dai		Institute of Genetics and Developmental Biology
	10:30-10:50	Tea Break: 2F, Building 1#		
3	10:50-11:35	Changyong Wang	Tissue engineering of vital organs	Academy of Military Medical Sciences
4	11:35-12:20	Zhongze Gu	Advanced fabrication and measurement methods for organ-on-a-chip	Southeast University

December 5, 2019 (Afternoon)				
13:30-15:30 Session 1: Biomanufacturing and Regenerative Medicine				
Location: Room 1, 2F, Building 1#, Co-Chair: Xin Zhao, Halim Ayan				
Invited Presentations				
No.	Time	Authors	Title	Institute
	13:30-13:50	Werner E. G. Müller	Morphogenetically active amorphous polyphosphate nanoparticles: A foundational breakthrough invention for personalized and regenerative medicine	University Medical Center of the Johannes Gutenberg University Mainz
	13:50-14:10	Tao Xu		Tsinghua University
	14:10-14:30	Xin Zhao	Photocrosslinkable materials for bone regeneration	Hong Kong Polytechnic University
	14:30-14:50	Halim Ayan	Mechanically primed stem cell guided annulus fibrosus regeneration	The University of Toledo
	14:50-15:10	Nuria Montserrat		Institute for Bioengineering of Catalonia (IBEC)
Oral Presentations				
No.	Time	Authors	Title	Institute
	15:10-15:23	Xiaofang Chen	Cell reprogramming in a predetermined manner	Beihang University
	15:23-15:36	Bin Wu	Bioprinting of hierarchical scaffold for esophagus tissue repair	Huazhong University of Science and Technology

**December 5, 2019 (Afternoon)****13:30-15:36 Session 2: Bionic Manufacturing and Biomedical Implant /Devices**

Location: Room 5, 2F, Building 1#, Co-Chair: Minjun Kim, Hee-Tae Jung

**Invited Presentations**

No.	Time	Authors	Title	Institute
	13:30-13:50	Wan Kyun Chung	Corneal suturing robot for corneal transplantation surgery	Pohang University of Science and Technology
	13:50-14:10	Minjun Kim	Magnetically actuated millibots and modular robots for self-assembling and biomanufacturing	Southern Methodist University
	14:10-14:30	Hee-Tae Jung	A new top-down lithography with high-aspect-ratio: fundamentals and applications to sensor and opto-electronics	Korea Advanced Institute of Science & Technology
	14:30-14:50	Fumihito Arai	Bridging organ and machine - organo-machine for patient simulation	Nagoya University
	14:50-15:10	Qianqian Han	The NMPA standardization progress and quality control of additive manufactured medical device	National Institutes for Food and Drug Control

**Oral Presentations**

No.	Time	Authors	Title	Institute
	15:10-15:23	Sida Liu	Fabrication of trabecular-like beta-tricalcium phosphate biomimetic scaffolds for bone tissue engineering	Beijing Engineering Research Center of 3D Printing for Digital Medical Health
	15:23-15:36	Longjian Xue	Bioinspired smart structured adhesives	Wuhan University

**December 5, 2019 (Afternoon)****13:30-15:30 Session 3: Tissue and Organ on-a- Chip**

Location: Room 6, 2F, Building 1#, Co-Chair: Chi Won Ahn, Jong-Young Kwak

**Invited Presentations**

No.	Time	Authors	Title	Institute
	13:30-13:50	Chi Won Ahn	Nanoscale control technology of nano-materials and their applications	Korea Advanced Institute of Science and Engineering
	13:50-14:10	Xiaohong Wang	Contribution of bio-artificial intelligence for the fabrication of biological and bio-functional structures by bio-3D printing applied in tissue engineering	University Medical Center of the Johannes Gutenberg University Mainz
	14:10-14:30	Jong-Young Kwak	Three dimensional coculture models of immune cell responses using nanofibrous membrane	Ajou University
	14:30-14:50	Tianzhun Wu	New technologies for high-performance retina prosthesis based on micro/nano engineering	Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences

**Oral Presentations**

No.	Time	Authors	Title	Institute
	14:50-15:03	Yun Qian	Integration molding of a graphene oxide/polycaprolactone nanoscaffold for peripheral nerve restoration and angiogenesis	Shanghai Jiao Tong University
	15:03-15:16	Zhenzhen Zhou	Tgf- $\beta$ induced epithelial-mesenchymal transition in advanced cervical tumor model by 3D printing	Tsinghua University
	15:16-15:29	Zhonghan Wang	A biomimetic intervertebral disc fabricated by assembled bioprinted technique	The second hospital of Jilin University

**December 5, 2019 (Afternoon)****15:50-17:56 Session 4: Bio-Modeling and Bio-3D Printing**

Location: Room 1, 2F, Building 1#, Co-Chair: Chengtie Wu , Chee Kai Chua

**Invited Presentations**

No.	Time	Authors	Title	Institute
	15:50-16:10	Chee Kai Chua	Print me an organ! Why we are not there yet	Singapore University of Technology and Design
	16:10-16:30	Chengtie Wu	3D printing of biomimetic bioactive materials	Shanghai Institute of Ceramics, Chinese Academy of Sciences
	16:30-16:50	Woonbong Hwang	Recent Advances in Nanoengineered Functional Structures	Pohang University of Science and Engineering
	16:50-17:10	Jerry Fuh	Electro-hydrodynamic jetting 3D PCL/PPy Conductive Scaffolds for Peripheral Nerve Injury Repair	National University of Singapore
	17:10-17:30	Haijun Yu	Stimuli-activatable Prodrug Nanoparticles for Cancer Immunotherapy	Shanghai Institute of Materia Medica, Chinese Academy of Sciences

**Oral Presentations**

No.	Time	Authors	Title	Institute
	17:30-17:43	Zhengwei You	Bioelastomers, 3D printing and their diverse applications	Donghua University
	17:43-17:56	Yixue Luo	Triboelectric Nanogenerators for Electro-assisted Cell Printing	Tsinghua University

**December 5, 2019 (Afternoon)****15:50-18:02 Session 5: Innovative Medical Devices and Biomaterials**

Location: Room 5, 2F, Building 1#, Co-Chair: Yunbing Wang, Su Ryon Shin

**Invited Presentations**

No.	Time	Authors	Title	Institute
	15:50-16:10	Yunbing Wang	Research frontier of transcatheter heart valve and stent	Sichuan University
	16:10-16:30	Gregory F. Payne	Enlisting biology's "excitable media" to create complex, dynamic and sustainable materials	University of Maryland College Park
	16:30-16:50	Kaiming Ye	Formulating bioinks for tissue biofabrication	Binghamton University
	16:50-17:10	Su Ryon Shin	Micro/nano engineered biomaterials for manufacturing biomimetic tissues and biomedical applications	Brigham and Women's Hospital, Harvard Medical School

**Oral Presentations**

No.	Time	Authors	Title	Institute
	17:10-17:23	Qiaozhen Yu	Polypyrrole/biodegradable polymer composite micro/nano fibrous nerve tissue engineering scaffolds	Jiaxing University
	17:23-17:36	Xinming Li	Basic device design for wearable healthy pressure sensing technology	South China Normal University
	17:36-17:49	Jeong-Won Lee	A biomimetic intervertebral disc fabricated by assembled bioprinted technique	Pohang University of Science and Engineering
	17:49-18:02	Liya Zhu	Biomechanical characterization of a 3D printed porous PCU polymeric implant for artificial meniscus replacement	Nanjing Normal University

**December 5, 2019 (Afternoon)**

**15:50-17:50 Session 6: Young Scientists Forum- Interdiscipline and Innovation**

Location: Room 6, 2F, Building 1#, Co-Chair: Ting Zhang, Zhou Li

**Invited Presentations**

No.	Time	Authors	Title	Institute
	15:50-16:10	Ting Zhang	Bio-3D printing technologies for engineering functional tissue models in vitro	Tsinghua University
	16:10-16:30	Daishun Ling	Dynamic Superparticles For Biomedical Applications	Zhejiang University
	16:30-16:50	Zhou Li	Self-powered medical electronics	University of Chinese Academy of Sciences
	16:50-17:10	Huayu Yang	Implication of Personalized Treatment on 3D Printed Long-Term Regenerated HCC Model	Peking Union Medical College Hospita
	17:10-17:30	Changshun Ruan	Exploring on novel functional bioinks facilitates bioprinting of 3D tissue-like constructs for regeneration medicine	Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
	17:30-17:50	Changchun Zhou	3D Printing of CaP Bioceramic with Biomimic Porosity for Personalized Skull Reconstruction	Sichuan University
	17:50-18:10	Lin Feng	The application of micro/nano-robot in biomedical field	Beihang University

December 6, 2019 (Morning)				
08:30-10:00 Plenary Presentations				
Location: 3F, Building 1#, Co-Chair: Tao Xu				
No.	Time	Authors	Title	Institute
1	08:30-09:15	Jason Z. Moore	Advancing medical tool design through improved cutting-edge geometry and force modeling	Pennsylvania State University
2	09:15-10:00	Feng Xu	Engineering Cell Mechanical Microenvironment	Xi'an Jiaotong University
	10:00-10:20	Tea Break: 2F, Building 1#		

December 6, 2019 (Morning)				
10:20-12:20 Session 7: Biomanufacturing and Regenerative Medicine				
Location: Room 1, 2F, Building 1#, Co-Chair: Daniel Chen, Jie Na				
Invited Presentations				
No.	Time	Authors	Title	Institute
	10:20-10:40	Bin Liu	医疗器械监管科学研究-新材料研究整体部署与实施	Center for Medical Device Evaluation, National Medical Products Administration
	10:40-11:00	Daniel Chen	Bioprinting Scaffolds for Tissue Engineering	University of Saskatchewan , Canada
	11:00-11:20	Jie Na	Manufacture synthetic embryos with stem cells	Tsinghua University
	11:20-11:40	Wen Feng Lu	Design and Optimization of Bioactive 3D Scaffolds for Dentin Repair	National University of Singapore
Oral Presentations				
No.	Time	Authors	Title	Institute
	11:40-11:53	Lu Feng	3D printing scaffolds with quadruple hierarchical structure for scalable stem cell culture and harmless harvest	Tsinghua University
	11:53-12:06	Jun Yin	Fabrication of polymeric nerve conduits with dry-jet wet spinning and the application in repair of peripheral nerve injury	Zhejiang University
	12:06-12:19	Yongcong Fang	Design and assessment of scaffolds integrating oriented micro-pores with branched channel networks for myocardial tissue engineering	Tsinghua University

December 6, 2019 (Morning)				
10:20-12:20 Session 8: Innovative Medical Devices and Biomaterials				
Location: Room 5, 2F, Building 1#, Co-Chair: Linhong Ji, Yongqin Lv				
Invited Presentations				
No.	Time	Authors	Title	Institute
	10:20-10:40	Linhong Ji	提升神经康复机器人临床康复效果的设计与探索	Tsinghua University
	10:40-11:00	Jürgen Groll		University Hospital Wuerzburg
	11:00-11:20	Fujian Xu	成膜型快速止血粉特性及产业化	Beijing University of Chemical Technology
	11:20-11:40	Yongqin Lv	Engineering of artificial antibody for the early diagnosis and therapy of cancer disease	Beijing University of Chemical Technology
Oral Presentations				
No.	Time	Authors	Title	Institute
	11:40-11:53	Kihwan Kim	Self-cleaning effect of superhydrophobic PDMS surface for medical application	Pohang University of Science and Technology
	11:53-12:06	Ruoyu Chen	Biomaterial-assisted Scalable Cell Production for Cell Therapy	Tsinghua University
	12:06-12:19	Yuanyuan Xu	Construction of bionic tissue engineering cartilage scaffold based on three-dimensional printing and oriented frozen technology	Tsinghua University

<b>December 6, 2019 (Morning)</b>				
<b>10:20-12:20 Session 9: Young Scientists Forum- Interdiscipline and Innovation</b>				
Location: Room 6, 2F, Building 1#, Co-Chair: Bin Li, Jin Zhou				
<b>Invited Presentations</b>				
No.	Time	Authors	Title	Institute
	10:20-10:40	Jin Zhou	Nanomaterials for Cardiac Tissues Construction and Therapy of Myocardial Infarction	Academy of Military Medical Sciences
	10:40-11:00	Bin Li	Multimodal mechano-regulation toward annulus fibrosus regeneration	Soochow University
	11:00-11:20	Haiming Fan	Engineered Magnetic Nanoparticle for Advanced biomedical application	Northwest Univerisity
	11:20-11:40	Jiankang He	Multiscale additive manufacturing for biomedical applications	Xi'an Jiaotong University
	11:40-12:00	Maling Gou	DLP-based 3D printing technology for drug delivery and therapy	Sichuan University
	12:00-12:20	Wen Zeng	Construction of small diameter tissue engineered blood vessel in vivo	Third Military Medical University

<b>December 6, 2019 (Afternoon)</b>				
<b>13:30-15:36 Session 10: Bionic Manufacturing and Biomedical Implant /Devices</b>				
Location: Room 1, 2F, Building 1#, Co-Chair: Deyuan Zhang, Bahattin Koc				
<b>Invited Presentations</b>				
No.	Time	Authors	Title	Institute
	13:30-13:50	Deyuan Zhang	The application of ultrasonic vibration in minimally invasive surgery	Beihang University
	13:50-14:10	Bahattin Koc	Biomimetic 3D bioprinting	Sabanci University
	14:10-14:30	Yonghua Chen	Artificial Muscles: Actuation Mechanisms and Designs for Robotic Applications	University of Hong Kong
	14:30-14:50	Sik Yoon	Biomimetic 3D cell culture model of ovarian cancer malignancy and progression	Pusan National University
	14:50-15:10	Huawei Chen	Bio-inspired functional surface for biointerface and bioelectronics	Bio-inspired functional surface for biointerface and bioelectronics
<b>Oral Presentations</b>				
No.	Time	Authors	Title	Institute
	15:10-15:23	Zhongwei Guo	Mussel-inspired naturally derived double-network hydrogels and its application in 3D printing	Tsinghua University
	15:23-15:36	Boyang Huang	Fabrication and characterizations of hierarchical biomimetic scaffolds for bone tissue regeneration	University of Manchester

<b>December 6, 2019 (Afternoon)</b>				
<b>13:30-15:42 Session 11: Bio-Modeling and Bio-3D Printing</b>				
Location: Room 5, 2F, Building 1#, Co-Chair: Wai Yee Yeong, Liliang Ouyang				
<b>Invited Presentations</b>				
No.	Time	Authors	Title	Institute
	13:30-13:50	Yunfeng Zhang	Robot-assisted laser metal deposition: the process planning issues	National University of Singapore
	13:50-14:10	Karen C. Yan	Mechanical milieu of cells in engineered tissue constructs	The College of New Jersey
	14:10-14:30	Wai Yee Yeong	3D bioprinting: tissues, bioinks and bioelectronics	Nanyang Technological University Singapore
	14:30-14:50	Liliang Ouyang	3D bioprinting of cell-laden hydrogels: towards generalization and simplicity	Imperial College London
<b>Oral Presentations</b>				
No.	Time	Authors	Title	Institute
	14:50-15:03	Yongxiang Luo	4D Bioprinting of Cell-Laden Constructs Using NIR-Triggered Shape Morphing Alginate/Polydopamine Bioinks	Shenzhen University
	15:03-15:16	Wenqing Tian	Facile Fabrication of hierarchical structures via	Huazhong University

			cryogenic electrospinning	
	15:16-15:29	Tiankun Liu	An integrated cell printing approach for the construction of het-erogeneous tumor models	Tsinghua University
	15:29-15:42	Weili Fu	The research progress in 3D-Printing meniscus	West China Hospital

<b>December 6, 2019 (Afternoon)</b>				
<b>13:30-15:30 Session 12: Tissue and Organ on-a- Chip</b>				
Location: Room 6, 2F, Building 1#, Co-Chair: Shengli Mi, Shery Huang				
<b>Invited Presentations</b>				
No.	Time	Authors	Title	Institute
	13:30-13:50	Josep Samitier		University of Barcelona
	13:50-14:10	Shengli Mi	A minimized valveless electromagnetic micropump for the microflu-idics actuation on organ chips	Tsinghua University
	14:10-14:30	Zaozao Chen	Development of a "Smart" System for Organs-on-a-Chip Research	Southeast University
	14:30-14:50	Shery Huang	3D layered nano- micro- fibre printing techniques for biological and electronic applications	University of Cambridge
<b>Oral Presentations</b>				
No.	Time	Authors	Title	Institute
	14:50-15:03	Jie Sun	Gliadin as template for generation of nanotopography on microfibers of electrohydrodynamic jet printed pcl scaffolds for 3D cell	Xi'an Jiaotong-Liverpool University
	15:03-15:16	Qiang Zou	Bone tissue engineering scaffolds with microfluidic channels were constructed based on reverse engineering and 3D bio-printing	Guizhou Medcial University
	15:16-15:29	Jingjing Xia	An integrated microchannel biosensor platform to analyse low density lactate metabolism in HepG2 cells in vitro	Tsinghua University

<b>December 6, 2019 (Afternoon)</b>				
Location: Room 6, 2F, Building 1#, Co-Chair: Ting Zhang				
No.	Time	Event		
	16:00-17:00	Closing & Award Ceremony		