# 2023 KTERNS

### 한국조직공학·재생의학회 제23차 학술대회

2023. 05. 19(금) ~ 05. 20(토) 서울대학교병원 의학연구혁신센터, 어린이병원

## Innovative Regenerative Medicine for Translation to Human

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## **KTERMS 2023**

#### PS11-08

3D Bioprinting of Diabetic Wound Healing Patch using Adiposederived MSCs-laden Placenta-derived Extracellular Matrix Bioink

<u>Hye Jin Kim</u><sup>1</sup>, Yeonggwon Jo<sup>2</sup>, Ji Hwan Kim<sup>3</sup>, Yoo-mi Choi<sup>1</sup>, Hwan Yong Choi<sup>3</sup>, Jinah Jang<sup>1,2,3,\*</sup> <sup>1</sup>Department of Convergence IT Engineering, Pohang University of Science and Technology, Republic of Korea <sup>2</sup>School of Interdisciplinary Bioscience and Bioengineering, Pohang University of Science and Technology, Republic of Korea

<sup>3</sup>Department of Mechanical Engineering, Pohang University of Science and Technology, Republic of Korea

#### PS11-09

Development of 3D Bioprinted Vascularized Respiratory Modular Assembly for Inflammatory Respiratory Disease <u>Hyoryung Nam</u><sup>1</sup>, Yoo-mi Choi<sup>1</sup>, Sungkeon Cho<sup>2</sup>, Ge Gao<sup>2</sup>, Donghwan Kim<sup>3</sup>, Jongmin Kim<sup>2</sup>, Hwanyong Choi<sup>2</sup>, Se-Hwan Lee<sup>1</sup>, and Jinah Jang<sup>1,2,3,\*</sup> <sup>1</sup>Department of Convergence IT Engineering, POSTECH, Republic of Korea <sup>2</sup>Department of Mechanical Engineering, POSTECH, Republic of Korea <sup>3</sup>School of Interdisciplinary Bioscience and Bioengineering, POSTECH, Republic of Korea

#### PS11-10

Engineering Peri-islet Niche and Cellular Organization for Stem Cell-derived Islets and Vasculatures using Bioprinting Technology

Myungji Kim<sup>1</sup>, Seungyeun Cho<sup>4</sup>, Dong Gyu Hwang<sup>1</sup>, Jinah Jang<sup>1,2,3,4,\*</sup>

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#### PS11-11

Accelerated Blood Vessel Infiltration using Platelet-Rich Plasma Bioink for Adipose Tissue Regeneration Hanan J. Mohamed, Wonwoo Jeong, Hyun-Wook Kang\*

Department of Biomedical Engineering, Ulsan National Institute of Science and Technology (UNIST), Ulsan, Republic of Korea

#### **Biomaterials**

#### PS13-01

Enhanced mechanical properties of decellularized tissue-derived adhesive hydrogel for tissue regeneration Eunseon Jeong<sup>1</sup> and Seung-Woo  $Cho^{1,2^*}$ 

<sup>1</sup>Department of Biotechnology, Yonsei University, Seoul, Republic of Korea <sup>2</sup>Center for Nanomedicine, Institute for Basic Science (IBS), Seoul, Republic of Korea

#### PS13-02

Reseatable anti-thrombotic artificial vascular graft integrated with a self-heating blood flow sensor <u>Kijun Park</u><sup>1</sup>, Soojung An<sup>2</sup>, Jihyun Kim<sup>1</sup>, Sungjun Yoon<sup>2</sup>, Jihyang Song, Daekwang Jung<sup>2</sup>, Jae Park<sup>1</sup>, Yeontaek Lee<sup>1</sup>, Donghee Son<sup>2\*</sup>, and Jungmok Seo<sup>1\*</sup> <sup>1</sup>School of Electrical and Electronic Engineering, Yonsei University, Seoul 03722, Republic of Korea

<sup>2</sup>Department of Electrical and Computer Engineering, Sungkyunkwan University, Suwon 16419, Republic of Korea

#### PS13-03

Photonic Crystal Hydrogel Patch for Continuous and visible monitoring of Wound Yonghoe Koo, Jinmyoung Joo\*

Biomedical engineering, Ulsan national institute of science and technology, Republic of Korea

#### PS13-04

Blood Coagulating Factor Conjugated Hyaluronic acid Hydrogel for Multifunctional Hemostat

Soohwan An<sup>1</sup>, Jihoon Jeon<sup>1</sup>, Seung Yeop Han<sup>1</sup>, Young Seok Song<sup>1</sup>, Seung-Woo Cho<sup>1,2,3</sup>

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